

The influence of design agencies (as a form of inbound open innovation) on organisational learning

A single case study of digital projects in the retail banking sector

by
Francesca Severoni and Natalie Muldoon
May 2019

Master's Programme in Entrepreneurship and Innovation

Supervisor: Joakim Winborg Examiner: Sotaro Shibayama

Abstract

Keywords: open innovation; design agencies; design thinking; organisational learning; barriers to organisational learning.

This thesis investigates the under-researched relationship between open innovation (OI) and organisational learning (OL). It addresses questions on how design agencies (DAs) (as a form of inbound OI) influence their client company's OL process. It also considers the main barriers companies face at each stage of the OL process and how these barriers impact OL.

To start, the literature on OI, DAs (and relatedly design thinking [DT]) and OL is reviewed. Particular attention is paid to Crossan, Lane and White's (1999) '4I Framework' which outlines OL as a process and forms the foundation of this thesis. Studies that have used the '4I Framework' to explore barriers to OL and the role of management consultancies in OL are reviewed. We conclude the literature review by examining the emerging field of research on the relationship between OI and OL.

This thesis presents a qualitative, single case study on a Swedish retail bank that has worked with a DA for three years. The DA has provided user experience (UX) and design resources as well as trained the bank in DT. Mixed methods and a hybrid grounded theory approach is adopted, combining induction and deduction.

Through our data collection and analysis we largely validated our assumption that the DA would have a large influence on the early, ideation stages of OL but a lesser influence on the later, implementation stages. This is because the DA provides individuals and teams with a method for generating and discussing new insights/ideas. However, it lacks a method for spreading new insights/ideas across the wider organisation and embedding them in the existing business. Simultaneously, as we move across the OL stages the barriers to OL become progressively larger and the DA struggles to overcome them. The dynamics between the DA's learning activities, their influence on clients' OL processes and the main barriers to OL were captured in a Grounded Theory Model.

We also made some unexpected discoveries that challenged the '4I Framework'. Rather than being separate stages, intuiting and interpreting are interdependent, combining the DA's learning activities at an individual and group level. With DAs, intuiting becomes an active search for inspiration rather than a preconscious activity.

Acknowledgements

First and foremost, we would like to thank our Supervisor Joakim Winborg for his support and guidance. With every supervision you challenged us, encouraged us to reflect and gave us direction. We would also like to thank our Examiner Sotaro Shibayama and our peers for providing us with helpful, thought provoking feedback during the Seminars. Finally, we would like to thank our families and friends for their constant support and encouragement.

Francesca and Natalie

Table of contents

Appreviations	VII
List of figures	VIII
List of tables	VIII
1 Introduction	1
1.1 Background	1
1.2 Problem Discussion	3
1.3 Purpose & Research Question	4
1.4 Company Information	5
1.5 Thesis Structure	6
2 Literature review	7
Section 1: Open Innovation (OI)	7
2.1.1 Closed Innovation (CI)	7
2.1.2 OI	7
2.1.3 Motivations	7
2.1.4 Types	8
2.1.5 OI and innovation outcomes	8
2.1.6 OI barriers	9
Section 2: Design Agencies (DAs)	10
2.2.1 Knowledge-intensive firms (KIFs)	10
2.2.2 Management consultancies (MCs) as KIFs	10
2.2.3 Design agencies (DAs)	11
2.2.3.1 DAs as KIFs	11
2.2.3.2 Design Thinking (DT)	11
2.2.3.3 DT process	12
2.2.3.4 Google Venture Design Sprints (GVDS)	13
2.2.3.5 Mainstreaming DAs and DT	14
Section 3: Organisational learning (OL)	15
2.3.1 Defining organisational learning (OL)	15
2.3.2 The '4I Framework'	16
2.3.3 Knowledge management (KM) and OL	17
2.3.4 Stages of the '4I Framework'	18

2.3.4.1 Intuiting	18
2.3.4.2 Interpreting	18
2.3.4.3 Integrating	19
2.3.4.4 Institutionalising	19
2.3.5 Barriers to OL	19
2.3.5.1 Intuiting	20
2.3.5.2 Interpreting	20
2.3.5.3 Integrating	20
2.3.5.4 Institutionalising	21
Section 4: OI and OL	22
2.4.1 Introduction	22
2.4.2 Motivations for using OI in OL	22
2.4.3 Motivations for using DAs in OL	22
2.4.4 Models for understanding OI and OL	23
2.4.4.1 Holmqvist's (2004) model of OL	23
2.4.4.2 Hamel's (1991) model of OL	24
2.4.4.3 '4I Framework' applied to management consultancies (MCs)	24
3 Methodology	26
3.1 Research Strategy	26
3.2 Research Design	26
3.2.1 Single case study	26
3.2.2 Case company (CC)	26
3.3 Trustworthiness and ethical considerations	27
3.3.1 Trustworthiness	27
3.3.2 Ethical Considerations	28
3.4 Data collection	28
3.4.1 Inductive approach	28
3.4.1.1 Sampling	28
3.4.1.2 Exploratory interviews	33
3.4.1.3 Coding the exploratory interviews	33
3.4.2 Deductive approach	33
3.4.2.1 Sampling	34
3.4.2.2 In-depth interview guide	34

	3.5 Data analysis	34
	3.6 Limitations	36
4	Findings	37
	4.1 Overall Role	37
	4.2 OL process	39
	4.2.1 Intuiting Stage	40
	4.2.2 Interpreting Stage	42
	4.2.3 Integrating Stage	44
	4.2.4 Institutionalising Stage	46
5	Analysis and discussion	48
	5.1 Grounded theory model (GTM)	48
	5.2 Role of DAs	50
	5.2.1 Overall role of DAs in OL	50
	5.2.2 Characteristics of DA's methods and outcomes	51
	5.3 Intuiting stage	52
	5.3.1 CC's typical performance	52
	5.3.2 DA's OL activities and their influence on CC's OL	53
	5.3.3 Main barriers to OL	55
	5.4 Interpreting stage	56
	5.4.1 CC's typical performance	56
	5.4.2 DA's OL activities and their influence on CC's OL	56
	5.4.3 Main barriers to OL	58
	5.5 Integrating stage	59
	5.5.1 CC's typical performance	59
	5.5.2 DA's OL activities and their influence on CC's OL	59
	5.5.3 Main barriers to OL	60
	5.6 Institutionalising stage	62
	5.6.1 CC's typical performance	62
	5.6.2 DA's OL activities and their influence on CC's OL	62
	5.6.3 Main barriers to OL	62
6	Conclusion	64
	6.1 Final considerations	64
	6.2 Limitations	67

Francesca Severoni & Natalie Muldoon | Master's thesis

6.3 Managerial implications	67
6.4 Future research	68
Reference List	69
Appendix	75
Appendix 1: Kubr (2002)'s roles description	75
Appendix 2: Active participant observation in workshops	76
Appendix 3: Interview guide - exploratory interview for CC employees	77
Appendix 4: Interview guide - exploratory interview for DA employee	80
Appendix 5: Coding exploratory interviews	83
Appendix 6: Interview guide - in-depth interview for CC employees	96
Appendix 7: Interview guide - in-depth interview for DA employee	98
Appendix 8: Cards for in-depth interview	100
Appendix 9: Coding in-depth interviews	104
Appendix 10: Data Structure with 1st order concepts with quotes	135
Appendix 10.1 Overall role	135
Appendix 10.2 Intuiting Stage	139
Appendix 10.3 Interpreting stage	145
Appendix 10.4 Aggregate dimension: Integrating stage	149
Appendix 10.5 Institutionalising stage	155

Abbreviations

BDP	Business Development Project	LP	Lean Production
CC	Case Company	MC	Management Consultancy
CCP	Case Company Presentation	MVP	Minimum Viable Product
CI	Closed Innovation	NPD	New Product Development
CJ	Customer Journey	NIH	Not-invented-here
CX	Customer experience	NPD	New Product Development
DA	Design Agency	OI	Open Innovation
DPD	DA Proposal Document	OL	Organisational Learning
DS	Design Sprint	P1IR	Project1 Internal Report
DT	Design Thinking	P2IR	Project2 Internal Report
Exp	Exploratory (interview)	PbD	Proof by Design
GTM	Grounded Theory Model	PMO	Project Management Office
GUI	Graphical User Interface	PoC	Proof of Concept
GVDS	Google Venture Design Sprint	Pol	Proof of Insights
HMW	How Might We	PoS	Proof of Solution
IP	Intellectual Property	QA	Quality Assurance
IT	Information Technology	RQ	Research Question
I.X	Interviewee (see ch.3)	R&D	Research and development
IPMD	Internal Project Management	SPS	Scandinavian PC Systems
	Document	SR	Strategic Renewal
KIF	Knowledge Intensive Firm	UX	User Experience
KM	Knowledge Management		

List of figures

Figure 1: DT Process	13
Figure 2: '4l Framework'	17
Figure 3: OL Model	24
Figure 4: Data structure development	35
Figure 5: Data structure - DA's overall role	38
Figure 6: Data structure - Intuiting stage	40
Figure 7: Data structure - Interpreting stage	42
Figure 8: Data structure - Integrating stage	44
Figure 9: Data structure - Institutionalising stage	46
Figure 10: Grounded Theory Model	49

List of tables

Table 1: Projects description	29
Table 2: List of the interviewees	31

Word count: 24'365 (incl. figures and table).

1 | Introduction

1.1 Background

In the last few decades the dominant paradigm of closed innovation (CI), where "... research in the organization's core area of expertise must stay in-house" (Linder, Jarvenpaa and Davenport, 2003, p.43-44), has shifted towards a new one: open innovation (OI). OI encourages the use of both internal and external ideas and paths to market in the pursuit of enhanced innovativeness (Chesbrough, 2003a). The underpinning motivation behind this is that no single individual or organisation possesses all relevant knowledge and skills; instead they must work together (Bianchi et al., 2016; Chesbrough, 2003a; Quinn, 2000). Based on the direction of the flow of knowledge and skills, OI can be defined as inbound, outbound or coupled (Stanko, Fisher and Bogers, 2017). Inbound OI has received the most interest in practice and academia and relates to leveraging the discoveries and competencies of external individuals and organisations (Chiaroni, Chiesa and Frattini, 2011).

Knowledge-intensive firms (KIFs) are a form of inbound OI, which refer to "professional service firms that rely on the problem solving capacity of their employees and provide tailored services to corporate clients" (Rylander and Peppard, 2005, p.550). Management consultancies (MCs) and design agencies (DAs) represent two examples of KIFs.

MCs are seen as 'knowledge brokers' (Rylander and Peppard, 2005) that transfer general, external knowledge and combine this with their clients' contextual, organisational knowledge in order to solve their problems (Hu et al., 2014; Kubr, 2002). Kubr (2002) outlines how MCs can play various roles: resource-based or process-based and as a directive or non-directive role. MCs represent the typical definition of KIFs: theory-guided knowledge, scientific problems, rational and making sense of the world verbally (Rylander, 2009).

DAs are another type of KIF that similarly seek to solve their clients' problems by acting as 'knowledge brokers' (Rylander, 2009). Yet they challenge the typical definition of KIFs as their knowledge is subjective and embodied, their problems are open-ended, they are creative and their sensemaking is visual (Rylander, 2009). DAs primarily adopt a design thinking (DT) approach, described as "a system that uses the designer's sensibility and methods to match people's needs with what is technologically feasible and what a viable business can convert into consumer value and market opportunity" (Design Management Institute, n.a.). DT's central tenets include human-centricity (Brown, 2009; IDEO, n.a.) and diverse teams that combine internal and external viewpoints (Powell, 2016) and creative and analytical thinkers

(Liedtka and Ogilvie, 2011; Roxburgh, 2016). Its processes are emergent, iterative, lack predetermined outcomes and combine thinking and doing (Rylander, 2009).

DT (and in turn DAs) has rapidly increased in popularity with the emergence of step-by-step activities such as Google Venture Design Sprints (GVDS) (Courtney, 2017; Knapp, Zeratsky and Kowitz, 2016) and with large MCs acquiring DAs and thus integrating DT into their practice (Engström, 2017; Roxburgh, 2016). Yet this rising popularity is not reflected in academia, with DT often dismissed as hype and lacking theoretical grounding (Johansson-Sköldberg, Woodilla and Çetinkaya, 2013).

Organisational learning (OL) is another concept that has grown in popularity; yet unlike DT it is accepted within the academy. OL's origins can be traced to the Organisational Behaviour School from the 1960s, so it has had time to mature theoretically (Bell, Whitwell and Lukas, 2002). 'Learning' can be defined as ".... a relatively permanent change in knowledge or skill resulting from experience" (Schilling and Kluge, 2009, p.338). OL is more than the sum of each employee's individual learning (Bell, Whitwell and Lukas, 2002; Crossan, Lane and White, 1999). Indeed, learnings are stored in systems and organisational memories that remain long after employees leave the company (Fiol and Lyles, 1985). A learning organisation can be defined as one that is "... skilled at creating, acquiring, and transferring knowledge, and at modifying its behaviour to reflect new knowledge and insights" (Garvin, 1993, p.80).

Learning is both a process and an outcome (Schilling and Kluge, 2009). Crossan, Lane and White's (1999) '4I Framework' describes the OL process and is built on four premises. First, it addresses changes in both knowledge and behaviours. Next, OL takes place across four interconnected stages: intuiting, interpreting, integrating and institutionalising (the 4Is). Third, these stages take place across three interdependent levels: the individual, group and organisation. Finally, OL is underpinned by a tension between exploration and exploitation, resulting in strategic renewal (SR).

OL is seen to promote a culture of continuous improvement, which enhances innovativeness and long-term competitiveness (Garvin, 1993; Liao and Wu, 2010). Yet, as Schilling and Kluge (2009) outline, there are also barriers to OL which vary across the four OL stages. These fall under three categories: actional-personal (related to individual cognitions and actions), structural-organisational (related to organisational strategy, technology, culture and regulations) and societal-environmental (related to markets, political-regulatory environments and technology).

Literature combining OI and OL is in its infancy (Du Chatenier et al., 2009). Most studies have instead focused on OI and knowledge management (KM) (Randhawa, Wilden and Hohberger, 2016) and treated intra- and interorganisational learning as two separate entities (Holmqvist, 2004). Incorporating external actors in the OL process is seen to help organisations gain a new perspective (Garvin, 1993) and fill 'skills gaps' (Hamel, 1991). Yet, to date, few theoretical models exploring the

relationship between OI and OL have been created (for exceptions see Hamel, 1991; Holmqvist, 2004; Hu et al., 2014).

1.2 Problem Discussion

The nature of the relationship between OI and OL is under-researched, with authors scarcely drawing links between these two bodies of literature. Starting with the OI literature, most studies have instead focused on its relationship with KM (Randhawa, Wilden and Hohberger, 2016). OL is only briefly and unreflectively listed as an outcome of OI, with discussions on causality lacking (Du Chatenier et al., 2009; Randhawa, Wilden and Hohberger, 2016). The OL literature leaves even more to be desired as it focuses on either intra- or interorganisational learning but seldom combines the two (Holmqvist, 2004). This thesis seeks to add to both bodies of literature. Its main contribution is filling the gap in the OL literature by infusing it with discussions on how OI influences OL within organisations.

This thesis studies OL as a process rather than an outcome; a perspective less frequently adopted within the literature (Schilling and Kluge, 2009). Crossan, Lane and White's (1999) '4I Framework' has provided inspiration for a number of recent studies. Yet only one study by Hu et al. (2014) has so far used the '4I Framework' to explore the role of an external actor, MCs, on the OL process. Even here they make no explicit links with the OI literature. This thesis seeks to build upon Hu et al.'s (2014) findings whilst also making a unique contribution by studying the role of DAs on the four stages of Crossan, Lane and White's (1999) framework. The authors make an assumption that this role will vary across different OI actors and they therefore look for similarities and differences between MCs and DAs.

Studies on barriers to OL largely focus on one barrier at a time and are criticised for lacking systematic analysis and theoretical grounding (Schilling and Kluge, 2009). Similar criticisms are echoed for studies on barriers to OI (Du Chatenier et al., 2009). Schilling and Kluge (2009) were the first authors to create a meta-analysis of the barriers to OL and to map them across the '4I Framework'. However, like most of the OL literature, this study has not been linked to OI. The authors therefore sought to test Schilling and Kluge's (2009) findings within a new context of a company working with a DA to see whether this had an influence on the barriers to OL, including introducing new barriers.

There is a lack of theory and cases on DAs and design thinking (DT) (Rylander, 2009). DT is often dismissed by academics as a fad and too practical to be relevant to theory (Johansson-Sköldberg, Woodilla and Çetinkaya, 2013). This thesis makes connections with relevant existing theory, for example theory on KIFs, in order to better understand the role of DAs in OL processes. It also extends Kubr's (2002) categorisations of MCs to DAs which has not been done before.

Finally, a point on research design. Most OL research is based on quantitative data and document studies (Holmqvist, 2004). "Yet, understanding the interactions of real humans in real organizations is vital to the understanding of how modern organizations learn" (Holmqvist, 2004, p.80). OI research is similarly criticised for focusing on quantitative studies based on large cross-sectional samples and ignoring the 'human side' of OI (Du Chatenier et al., 2009). This thesis seeks to fill this gap by adopting a qualitative, single case study design.

1.3 Purpose & Research Question

In order to remedy the lack of existing literature on the relationship between OI and OL, the thesis authors proposed the following research question (RQ):

RQ1: How do design agencies (as a form of inbound open innovation) influence their client company's organisational learning process?

We adopted a somewhat deductive approach, applying relevant existing theories to this emerging research field. Kubr's (2002) categorisations of MCs were extended to DAs in order to understand the overall role DA's play in OL. Next, Crossan, Lane and White's (1999) '4I Framework' was used to explore the DA's influence across the four stages of the OL process. We were interested in capturing rich insights on the specific learning activities that DA's engage in at each stage and the level of influence that this has on their client's OL.

Before starting our data collection, we made the informed assumption based on our readings that the DA could have a large influence on the client company's early OL stages (intuiting and interpreting). This is because DT provides individuals and teams with methods for developing new insights/ideas and sharing these with others through words and/or actions. However, as new ideas/insights move along the OL process they must spread across the wider organisation and become embedded within organisation-wide routines, procedures, systems, structures and strategies. For this, DAs lack methods and face stronger barriers that are difficult to overcome. This means that the DA should have a limited influence on the client company's later OL stages (integrating and institutionalising). These assumptions were tested and largely supported by the data collected; although some differences with the '4I Framework' were captured.

A second RQ was proposed to explore the barriers to OL that companies (and not DAs) face across each stage:

RQ2: What are the main barriers that companies face at each stage of the OL process and how do they impact their OL?

The authors wanted to test Schilling and Kluge's (2009) meta-analysis as well as capture new barriers not mentioned at each stage of the OL process. In Chapter 4 we captured all of the barriers to OL, whereas in Chapter 5 we applied our judgement, based on the literature and the strength of the interviewees' responses, in order to select the main barriers at each stage and conduct a more in-depth analysis. The authors were interested in determining whether the DA influenced these barriers, for better or worse. We largely validated our assumption that barriers become stronger and more prevalent as companies move along the OL process, with an overall dampening effect on OL.

1.4 Company Information

As outlined in an internal document (case company presentation [CCP]), the case company (CC) is a retail bank headquartered in Sweden, with central teams based in its Head Office and nine decentralised, national markets that are dispersed geographically. One of the central teams is Digital, which runs digital projects that are relevant to the entire CC. They provide tools and training on UX, design and customercentricity for all nine national markets. Another central team is Marketing which launches and monitors company-wide marketing campaigns.

Three years ago the Digital team started working with a small DA based in Denmark. The DA helps its clients with new digital products and services in two ways. The first and less frequent in the CC is by providing UX and graphic design resources. The second and more frequent is by teaching its clients a new approach and method based on DT called Proof by Design (PbD). When working with the Digital team the DA primarily adopts the latter role. The Digital team has drawn Marketing into many of its projects so they have also been exposed to PbD. Outside of Digital and Marketing, the DA is primarily used as a UX and graphic design resource.

PbD follows three streams of activity, as outlined in an internal document (Project1 internal report [P1IR]). First, 'Proof of Insights' (PoI) seeks to understand the problem by collecting external data and developing high-level strategy. Next, 'Proof of Concepts' (PoC) brainstorms and prototypes solutions during design sprints (DS). Here the team selects one or more customer pain points to individually brainstorm solutions to. The winning ideas are selected by the team, prototyped and user tested. Last is 'Proof of Solution' (PoS) as feasibility tests are conducted with different departments and the team works with IT to build, QA, launch and optimise a new digital product or service. Since working with the DA, the CC has conducted 300+ customer interviews, tested 150+ hypotheses, held 40+ DS, developed 100+ prototypes, launched 20+ new value propositions and 10 employees have been trained to facilitate DS (DA proposal document [DPD]).

1.5 Thesis Structure

This thesis is developed across six chapters. Chapter 1 introduces the main bodies of literature used by the authors, how this thesis contributes to the literature, the RQs and background information on the CC and DA. Chapter 2 reviews in-depth the main bodies of literature, including OI, DAs, OL and the interrelationships between all three concepts. Chapter 3 outlines the research strategy, research design and the mixed methods used. Chapter 4 presents the data collected, which is then analysed and discussed in detail in Chapter 5. We conclude with Chapter 6 summarising our findings, implications for managers and recommendations for future research.

2 | Literature review

Section 1: Open Innovation (OI)

This section provides a brief overview of the OI literature. It discusses the shift from closed to open innovation, defines OI and outlines its underpinning motivations, types, relationship with innovation outcomes and barriers.

2.1.1 Closed Innovation (CI)

"In research-intensive companies, the conventional wisdom was that research in the organization's core area of expertise must stay in-house" (Linder, Jarvenpaa and Davenport, 2003, p.43-44). Internal R&D was viewed as a source of competitive advantage that could be protected by intellectual property (IP) rights (Chesbrough, 2003b; Randhawa, Wilden and Hohberger, 2016). "Companies rarely resorted to sharing innovative results as a means to generate competitiveness" (Gassmann, 2006, p.223).

2.1.2 OI

The dominant paradigm of CI now appears 'inadequate' (Stanko, Fisher and Bogers, 2017) and 'outdated' (Gassmann, 2006) as businesses have shifted towards OI in the last few decades. Chesbrough (2003a), the preeminent author on OI, defines OI as "... a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as firms look to advance their technology" (p.547). The most common OI actors include suppliers, customers, private R&D labs and consultants (Stanko, Fisher and Bogers, 2017).

2.1.3 Motivations

Underpinning OI is the view that no single individual or organisation possesses all relevant knowledge and skills on a new product or service; instead they must come together to pool capabilities and resources (Bianchi et al., 2016; Chebrough, 2003a; Quinn, 2000). Companies must reach outside their boundaries to access the expertise that they lack internally as business models have become more specialised (Du Chatenier et al., 2009) and new technologies have become more complex (Cui et al., 2012; Gassmann, 2006). Other reasons for the shift from CI to OI include that it reduces innovation costs and risks as these are spread across multiple stakeholders (Bianchi et al., 2016; Carson, 2007; Cui et al., 2012; Moretti and Biancardi, 2018; Quinn, 2000). OI can speed up time-to-market by increasing speed of access to resources and "... avoid[ing] time delays in hiring, infrastructure development and internal resistance to new ideas" (Quinn, 2000, p.27; see also Bianchi et al., 2016; Carson, 2007; Cui et al., 2012; Linder, Jarvenpaa and Davenport, 2003; Moretti and Biancardi, 2018). There is the strategic motivation of outsourcing non-core

competencies, as companies may lack motivation or struggle to recruit experts in these areas (Cui et al., 2012; Quinn, 2000; Stanko and Calantone, 2011). Finally, Gassmann (2006) claims that "opening the firm's boundaries to external inputs in a managed way enables companies to realize radically new product innovation" (p.223).

2.1.4 Types

Based on the direction of the flow of knowledge and skills, OI can be categorised as inbound, outbound or coupled (Stanko, Fisher and Bogers, 2017). Companies can work with multiple OI types at any one time. Each company varies in breadth (the number of external partners used) and depth (the level of involvement of the external partners) (Laursen and Salter, 2013).

Inbound OI "... is the practice of leveraging the discoveries of others and entails the opening up to, and establishment of relationships with, external organisations with the purpose to access their technical and scientific competences" (Chiaroni, Chiesa and Frattini, 2011, p.35). Specific mechanisms include outsourcing, user innovation, supplier integration and consultants (Stanko, Fisher and Bogers, 2017). Inbound OI most often takes place in early ideation stages and overall "many companies report greater use of inbound open innovation" (Stanko, Fisher and Bogers, 2017, p.551).

With outbound OI, "... rather than relying entirely on internal paths to market, companies can look for external organisations with business models that are better suited to commercialize a given technology" (Chiaroni, Chiesa and Frattini, 2011, p. 35). Mechanisms such as licencing IP and spinoffs typically take place in later commercialisation stages (Stanko, Fisher and Bogers, 2017).

Coupled OI combines both inbound and outbound flows of knowledge and skills to create a more collaborative way of working across innovation partners, with mechanisms including alliances and innovation ecosystems (Stanko, Fisher and Bogers, 2017). Outbound and particularly coupled OI have received less attention than inbound OI in practice and in academia (Stanko, Fisher and Bogers, 2017).

2.1.5 OI and innovation outcomes

The relationship between OI and innovation outcomes is widely debated and lacks consensus (Moretti and Biancardi, 2018; Randhawa, Wilden and Hohberger, 2016; West and Bogers, 2014; Zobel, 2016). Some academics advocate a positive relationship; "... OI enhances the quantity, quality, and diversity of knowledge and technologies that can be utilized for developing new products" (Zobel, 2016, p.273). For others this is less clear cut, including Laursen and Salter (2013) who observed an inverted U-shaped relationship between OI breadth and depth and innovation performance. Some academics argue that the OI literature ignores failed cases and a negative relationship between OI and innovation outcomes (Stanko, Fisher and

Bogers, 2017). This includes a study of over 100 UK-based alliances by Tidd, Bessant and Pavitt (2001, cited in Du Chatenier et al., 2009) which discovered that this type of OI made new product and service development more complicated and expensive compared to internal R&D.

2.1.6 OI barriers

Various barriers to OI have been identified, including "... hidden costs related to communication and control" (West and Bogers, 2014, p.820). The diverse range of stakeholders involved in OI provides a source of creativity and innovation, but also creates barriers due to differences in communication styles and potentially geographical distance (Du Chatenier et al., 2009). There are coordination issues "... attempting to incorporate input from numerous external actors who may have disparate objectives" (Stanko, Fisher and Bogers, 2017, p.553). A lack of knowledge management systems capable of sharing knowledge within the firm and between internal and external actors is another barrier (Chiaroni, Chiesa and Frattini, 2011).

OI may reduce internal innovation competencies by negatively impacting employees' motivation or by resulting in layoffs for R&D staff (Stanko, Fisher and Bogers, 2017). Resistance to ideas developed outside of the team ('not-invented-here [NIH] syndrome') can have a particularly negative impact on employees' motivation and acceptance of OI (Burcharth et al., 2014). Lastly, OI may reduce competitiveness as companies come to rely on the same OI sources as their competitors (Stanko, Fisher and Bogers, 2017). The theoretical underpinnings and analysis of these barriers is largely absent from the OI literature and "additional research is needed to investigate how to deal with the identified challenges" (Du Chatenier et al., 2009, p.372).

Section 2: Design Agencies (DAs)

In this section we shift our focus to DAs, a particular form of inbound OI. We examine DAs through the lens of knowledge-intensive firms (KIFs) and contrast DAs' subjective, creative approach with management consultants (MCs, another form of KIF) and their rational, scientific approach. We outline the design thinking (DT) approach adopted by most DAs, including its principles, processes and activities, and conclude by discussing how DT has entered into the business mainstream.

2.2.1 Knowledge-intensive firms (KIFs)

KIFs are a form of inbound OI as they provide their clients with an outside-in flow of new knowledge and skills (Stanko, Fisher and Bogers, 2017). Since the early 1990s KIFs have proliferated in developed economies, yet their business models remain relatively under-researched (Alvesson, 1993; Sheehan, 2005). Rylander and Peppard (2005) define KIFs as "professional service firms that rely on the problemsolving capacity of their employees and provide tailored services to corporate clients" (p.550). The role of knowledge is unique to KIFs, as "rather than being embodied in the process or product, knowledge resides in experts" (Rylander, 2009, p.8). KIFs convert their highly educated employees' knowledge into intellectual capital that can be monetised and made difficult to imitate; for example business advice and patents (Rylander and Peppard, 2005).

Rylander (2009) claims that KIFs have typically been characterised in four ways: their knowledge is "... analytic, intellectual and theory-guided" (p.9), their problems are scientific, their social identity celebrates rationality and they make sense of the world verbally (distilling knowledge into discourse). These strict definitions have been critiqued for ignoring other important qualities, including embodied or tacit knowledge that cannot be verbalised (Rylander, 2009), creativity, judgment, persuasiveness, communication and interpersonal skills (Rylander and Peppard, 2005).

2.2.2 Management consultancies (MCs) as KIFs

MCs are a prominent example of KIFs and help their clients "... to achieve organizational purposes and objectives by solving management and business problems, identifying and seizing new opportunities, enhancing learning and implementing changes" (Kubr, 2002, p.10). MCs are 'knowledge brokers' (Rylander and Peppard, 2005) or 'knowledge providers' as they transfer broad, external knowledge and combine this with their clients' context-specific knowledge (Hu et al., 2014). MCs are not without criticism, as Hu et al. (2014) suggest that they do not provide new knowledge but rather repeat and legitimise existing organisational knowledge and management trends. Their lack of context-specific knowledge creates a 'burden of otherness' (Kipping and Armbrüster, 2002 cited in Kipping and Engwall, 2002). Finally, academics have ignored their "... subjective orientations and person-

bound talents ... [which are] more significant than formal knowledge and specialized work-role experiences and skills" (Alvesson, 1993, p.1005).

Kubr (2002) categorises MCs in two ways. The first is as a resource or process role. The former is when "... the consultant helps the client by providing technical expertise and doing something for and on behalf of the client" (Kubr, 2002, p.70). MCs act as a unilateral resource, sharing specialist knowledge and recommending solutions to their clients' problems. By contrast, a process role is when MCs help a client "... solve its own problems by making it aware of organizational processes ... and of intervention techniques for stimulating change" (Kubr, 2002, p.70). MCs engage in collaborative partnerships and transfer approaches and methods so that clients can diagnose their own problems and develop solutions (Kubr, 2002).

Kubr's (2002) second way of categorising MCs is by their position on the spectrum of directive to non-directive roles. All eight roles across this spectrum can be found in Appendix 1. In sum, on the far end of the directive spectrum are 'advocates' who lead the problem-solving process and persuade clients to adopt a particular solution. In the middle are 'collaborators in problem-solving' who seek to maintain objectivity and jointly define problems and weigh potential solutions. Then on the far end of the non-directive spectrum are 'reflectors' who raise questions but do not participate in decision-making (Kubr, 2002). Both of these categorisations are relevant to KIFs more generally but as of yet have not been applied outside the study of MCs.

2.2.3 Design agencies (DAs)

2.2.3.1 DAs as KIFs

DAs are another type of KIF with the "same basic premise: solving complex problems creatively under ambiguous and uncertain conditions" (Rylander, 2009, p.12). They are also 'knowledge brokers', this time on user needs, product languages and technologies (Rylander, 2009). Yet DAs challenge the strictly rational and scientific definitions of KIFs, with Rylander (2009) characterising their knowledge as subjective and practical, their problems as open-ended, their social identity as celebrating creativity and their sensemaking as visual (distilling knowledge into sketches and storyboards).

2.2.3.2 Design Thinking (DT)

DAs overwhelmingly adopt a DT approach (Rylander, 2009; Rylander and Peppard, 2005). According to Tim Brown, CEO of the world-leading DA IDEO, "design thinking is a human-centered approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success" (IDEO, n.a.). DT emerged in the early 2000s as a way of sharing design practices and competencies with a broader audience, namely those lacking academic backgrounds in design and particularly company managers (Johansson-

Sköldberg, Woodilla and Çetinkaya, 2013). DT "... may be seen as a trend toward loosening up restrictive identities in an increasingly complex and ambiguous world in which a purely rational approach is no longer tenable" (Rylander, 2009, p.15). Indeed, DT acknowledges the role of tacit knowledge, subjectivity, creativity, personal relationships and communication in new product and service development (Rylander, 2009; Rylander and Peppard, 2005).

DT is 'human-centred' (Brown, 2009), 'user-centred' (Roxburgh, 2016) and 'customer-oriented' (Engström, 2017). As Engström (2017) explains, DT's emergence coincided with major developments in digital products and services. DT helped companies to understand and take advantage of digital developments and to differentiate within crowded markets by focusing on user experience (UX). DT tests assumptions and ideas with users and bases decisions on user feedback (Gothelf and Seiden, 2016). With the mainstreaming of DT, "clients are moving from a perception that the user experience is just something pretty to an overall business transformation" (Roxburgh, 2016).

DT promotes diverse teams, combining internal and external viewpoints (Powell, 2016), creative and analytical thinkers (Liedtka and Ogilvie, 2011) and design, business and technology talent (Roxburgh, 2016). This results in more valuable, feasible and innovative ideas (Gothelf and Seiden, 2016). It also speeds up the design process as with increased competition in developed economies "companies need to be able to develop and launch a new product or service within a hundred days" (Engström, 2017, p.23).

2.2.3.3 DT process

Whereas the scientific method of MCs seeks to understand the as-is situation, DAs focus on the to-be (Rylander, 2009). Processes adopted by DAs are emergent, iterative, lack predetermined outcomes and reject "the divorce between thinking and doing" (Rylander, 2009, p.14) that is prevalent in MCs. IDEO pioneered the circular process that has come to define DT (Figure 1) (Nussbaum, 2004). This process encourages divergence, creating multiple alternatives to the current situation, then convergence, prioritising one of these alternatives (Brown, 2009).

The first stage of IDEO's process, 'observation', seeks to map the customer journey, noting customers' jobs, needs and pains (Liedtka and Ogilvie, 2011; Nussbaum, 2004). 'Brainstorming' is the next stage and focuses on clearly defining the problem and then generating solutions to this, typically during a workshop (Nussbaum, 2004). At the end of the workshop participants prioritise ideas using an effort-impact matrix (Gibbons, 2018). The third stage, 'prototyping', involves sketching, storyboarding and roughly building the prioritised idea so that customer can visualise and interact with it (Nussbaum, 2004). Next comes 'refining', when customers give feedback on the

prototype and changes are made based on this (Nussbaum, 2004). The final stage is 'implementation' when the new product or service is launched (Nussbaum, 2004).



Figure 1: DT Process. Source: own representation; Nussbaum, 2004.

2.2.3.4 Google Venture Design Sprints (GVDS)

GVDS are one way of executing DT through step-by-step activities (Courtney, 2017) and compress what usually takes months into a week-long workshop (Knapp and Kowitz, n.a.). On Monday the team interviews stakeholders in order to map the customer journey and its pain points (Knapp and Kowitz, n.a.). The focus shifts from problems to solutions on Tuesday, as the team 'dot votes' (prioritises using stickers) on pain points, with a 'decider' (project owner) given additional votes (Knapp and Kowitz, n.a.). Individuals then rephrase the prioritised pain points as questions by adding 'How Might We' (HMW) to the start of the sentence (Knapp, Zeratsky and Kowitz, 2016). Group brainstorming is perceived as ineffective, with ideation and sketching instead taking place individually (Knapp, Zeratsky and Kowitz, 2016). On Wednesday the team comes together to discuss ideas and dot vote on them, with winning ideas prototyped on Thursday (Knapp, Zeratsky and Kowitz, 2016). Friday is for interviewing customers and capturing their interactions with, and feedback on, the prototype (Knapp and Kowitz, n.a.). By the end of Friday the team should have a clear plan for future refinements to the prototype (Knapp and Kowitz, n.a.).

2.2.3.5 Mainstreaming DAs and DT

Once considered peripheral to business management, DAs and their DT approaches and methods have become increasingly mainstream. MCs have acquired DAs, including Accenture merging with Fjord in 2013 and McKinsey with Veryday in 2015 (Engström, 2017). With this, the boundaries between these two types of KIFs have been blurred, with MCs offering design expertise and DAs providing more holistic solutions (Roxburgh, 2016).

As Deichmann, Rozentale and Barnhoorn (2017) outline, DAs effectively deploy strategies to overcome resistance to their external ideas and methods within organisations. One strategy is creating "dense networks of contacts with people at all levels of the client organization instead of working with a single point of contact" (Deichmann, Rozentale and Barnhoorn, 2017, p.3). This network emerges from stakeholder interviews and a diverse project team. Another strategy is creating a project plan with interim milestones, as "such 'staging' of the innovation process increases the transparency, reduces the perceived complexity, and makes the project seem less intimidating to all the parties involved" (Deichmann, Rozentale and Barnhoorn, 2017, p. 4). Finally, they mention how DAs foster an equal sense of ownership by sourcing multiple project sponsors from across the company. To gain support, Brown (2009) recommends company-wide workshops that introduce DT, along with complementary changes to performance and incentive systems.

The rising popularity of DAs and DT is not reflected in the academic literature. There is a deficiency of theory and case studies on DAs (Rylander, 2009). DT is often dismissed as hype or a fad and "... so closely related to practice that some researchers say that there is no theoretical body" (Johansson-Sköldberg, Woodilla and Çetinkaya, 2013, p.121).

Section 3: Organisational learning (OL)

This section defines learning, OL and knowledge management (KM), highlighting the differences between each concept and justifying why OL is the focus of this thesis. It then outlines Crossan, Lane and White's (1999) '4I Framework' which explores OL as a process. Lastly, the four individual stages of the '4I Framework' and the barriers in each stage are discussed in-depth.

2.3.1 Defining organisational learning (OL)

The concept of OL emerged with Cangelosi and Dill (1965 cited in Crossan, Lane and White, 1999) and its popularity in both academic and management literature has grown exponentially over time. OL's origins can be traced to the Organisational Behaviour School (Bell, Whitwell and Lukas, 2002). Previously viewed as a 'portfolio of product-market entities', Organisational Behaviour reconceptualised organisations as a 'portfolio of core competencies' (Hamel, 1991) and as independent entities with the capacity to learn (Bell, Whitwell and Lukas, 2002).

"Although there exists widespread acceptance of the notion of organizational learning and its importance to strategic performance" (Bell, Whitwell and Lukas, 2002, p.803), there is a lack of consensus around its definitions, theories and models (Bell, Whitwell and Lukas, 2002; Crossan, Lane and White, 1999; Fiol and Lyles, 1985; Garvin, 1993). 'Learning' can be defined as ".... a relatively permanent change in knowledge or skill resulting from experience" (Schilling and Kluge, 2009, p.338). It is both a process, gathering and interpreting information based on past actions and experiences, and an outcome, resulting in changes to the learner's insights, knowledge, associations and/or skills (Schilling and Kluge, 2009). This thesis will focus on the former, learning as a process.

Learning that takes place at the organisational level is different from an individual's learning. Crucially, OL is greater than the sum of each individual's learning in a company (Bell, Whitwell and Lukas, 2002; Crossan, Lane and White, 1999; Fiol and Lyles, 1985). Organisations create and maintain learning systems and organisational memories that withstand leadership changes and employees leaving the company (Fiol and Lyles, 1985).

Definitions of OL have evolved over time, starting with OL perceived as a way of organisations adapting to, and aligning themselves with, internal or external environmental changes (Cangelosi and Dill, 1965 cited in Hu et al., 2014). This definition was later criticised for being too passive, with OL reconceptualised as a more active process (Fiol and Lyles, 1985). More recent definitions began alluding to the stages involved in OL and how these resulted in both changes to cognition and action. For example, Garvin's (1993) definition of "a learning organization is an organization

skilled at creating, acquiring, and transferring knowledge, and at modifying its behaviour to reflect new knowledge and insights" (p.80).

2.3.2 The '4I Framework'

Crossan, Lane and White's (1999) '4I Framework' built on these definitions and set the foundation for a number of studies on OL (for example Holmqvist, 2004; Hu et al., 2014: Schilling and Kluge, 2009). It has four main premises, two of which were hinted at in the previous paragraph; that cognition affects action (and vice versa) and that OL is the result of processes occurring across four interlinked stages: intuiting, interpreting, integrating and institutionalising (the 4ls). The other premises are that OL takes place across multiple, mutually dependent levels: individual, group and organisation. Put simply, employees learn as part of a team and as representatives of their company. Their learnings must be stored so that other employees can access them after they leave their company. The final premise of the '4I Framework' is heavily influenced by March's (1991) seminal study, in that OL is underpinned by a tension between exploring new learnings and exploiting existing learnings. As March (1991) states, "maintaining an appropriate balance between exploration and exploitation is a primary factor in system survival and prosperity" (p.71). Exploration takes place with learning at the individual and group level, whereas exploitation is when these learnings become embedded in organisational routines, structures and processes (Crossan, Lane and White, 1999).

Through their focus on the tension between exploration and exploitation, Crossan, Lane and White (1999) view strategic renewal (SR) as the outcome of the OL process. "[Strategic] renewal requires that organizations explore and learn new ways while concurrently exploiting what they have already learned" (Crossan, Lane and White, 1999, p.522). As depicted in the '4I Framework' (Figure 2), exploration takes place through 'feed-forward' processes, whereby new learnings from individuals and groups are institutionalised. Here, it is hard to challenge shared norms and assumptions that form the organisation's collective mindset. Exploitation takes place through 'feedback' processes, whereby institutionalised learnings influence individuals and groups. The biggest risk here is that institutionalised learnings suppress intuition and creativity. Crossan, Lane and White (1999) were the first academics to explore the relationship between OL and SR. Most authors have focused on OL in relation to new product development (NPD) (Bell, Whitwell and Lukas, 2002) or organisational innovation (Liao and Wu, 2010). A limitation of both NPD and organisational innovation is that they focus only on new learnings, so exploration (Crossan, Lane and White, 1999). This thesis will focus on SR in order to capture a more holistic view of both explorative and exploitative processes.

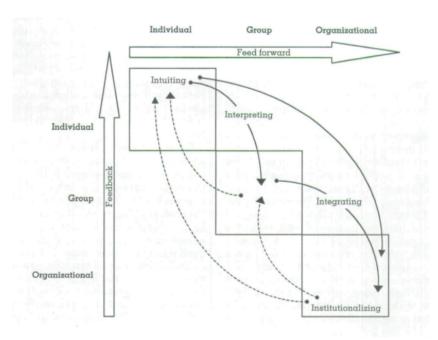


Figure 2: '41 Framework'. Source: Crossan, Lane and White, 1999.

Regardless of whether the focus is SR, NPD or organisational innovation, these are ultimately viewed as a means of improving performance. As Liao and Wu (2010) confirmed in their study, OL positively influences a company's level of innovativeness. This seems commonsensical as without learning companies will simply repeat their existing processes. A commitment to OL promotes a culture of continuous improvement, which enhances innovativeness and long-term competitiveness (Garvin, 1993). Finally, "given the increasing competition in the marketplace, many organizations attempt to learn and implement some advanced management concepts, techniques and methods ... to better meet different customer requirements" (Hu et al., 2014, p.29), which ultimately enhances performance.

Subsequent academics have explored additional features of the '4I Framework', with one being that it incorporates both 'single-loop' and 'double-loop' learning (Schilling and Kluge, 2009). 'Single-loop' learning challenges 'how things are done' (Garvin, 1993). Learning takes place through the repetition of routine behaviours in well-known contexts, with new associations and continuous improvements made (Bell, Whitwell and Lukas, 2002; Fiol and Lyles, 195; Schilling and Kluge, 2009). Contrastingly, 'double-loop' learning focuses on 'why things happen' (Garvin, 1993). It takes place in unknown contexts where complex associations for new tasks are developed (Fiol and Lyles, 1985). Whereas 'single-loop' learning is relatively localised, 'double-loop' learning affects the entire company (Fiol and Lyles, 1985).

2.3.3 Knowledge management (KM) and OL

KM and OL are two separate concepts that are often conflated. KM addresses the infrastructure and processes needed to manage knowledge within organisations (Liao and Wu, 2010). KM processes have been explored extensively, including King, Chung

and Haney's (2008) seven-step process of creation, acquisition, storage, transfer, sharing and utilisation. Similarly, to OL, KM is seen to result in organisational performance improvements (Crossan, Lane and White, 1999; King, Chung and Haney, 2008).

However, OL and KM also diverge. KM is focused on cognition, as "members of the organization are exposed to new ideas, expand their knowledge, and begin to think differently" (Garvin, 1993, p.90). It ignores action and how "employees begin to internalize new insights and alter their behaviour" (Garvin, 1993, p.90). Crossan, Lane and White (1999) do not only focus on the analytical; instead they acknowledge that OL can take place at a preconscious level. Thus, a number of academics see KM as an antecedent to OL and positively influencing it (Hu et al., 2014; Liao and Wu, 2010). As King, Chung and Haney (2008) state, KM explores the content of the knowledge and OL addresses the processes for continuously creating and revising knowledge. As this thesis is interested in processes and capturing both cognitive and behavioural changes, it will focus on OL rather than KM.

2.3.4 Stages of the '4I Framework'

Crossan, Lane and White's (1999) '4I Framework' covers four stages taking place over three levels: individual, group and organisation. "Because the processes naturally flow from one into another, it is difficult to define precisely where one ends and the next begins" (Crossan, Lane and White, 1999, p.525). Despite these crossovers, the four stages can be described separately.

2.3.4.1 Intuiting

This first stage, taking place solely at the individual level, revolves around employees developing new insights/ideas based on their personal experiences (Schilling and Kluge, 2009). "... Intuiting is the preconscious recognition of the pattern and/or possibilities" (Crossan, Lane and White, 1999, p.525) that cannot yet be articulated; instead it is merely a feeling or hunch. As no language exists yet, individuals rely on images and metaphors to develop their own understanding of the new insight/idea (Crossan, Lane and White, 1999).

2.3.4.2 Interpreting

The next stage occurs as the individual begins to explain their new insight/idea through words and/or actions to their group (Schilling and Kluge, 2009). Through these interactions the individual and group refine the insight/idea and create a shared language, meaning and course of action around it (Crossan, Lane and White, 1999). Language is critical as it helps all parties involved to learn but also preserve what is being learnt (Crossan, Lane and White, 1999). It is the outcome of dialogue, collective thinking and questioning (Crossan, Lane and White, 1999). With the shift from intuiting to interpreting, one challenge is that many insights/ideas are tacit and difficult to

articulate (Crossan, Lane and White, 1999). Even once made explicit, this does not necessarily mean that there is consensus across the group over the language, understanding and course of action (Crossan, Lane and White, 1999). Indeed, individuals interpret the same stimulus differently based on their own mindsets and experiences (Crossan, Lane and White, 1999).

2.3.4.3 Integrating

This third stage is when the group reaches a level of consensus over the meanings and actions associated with an idea/insight and reaches out to the wider organisation with them (Crossan, Lane and White, 1999). The group attempts to integrate the new learning into the organisation's existing business, resulting in mutual adjustments (Crossan, Lane and White, 1999). The new learning's meanings and actions are not static; instead they are constantly negotiated and refined (Crossan, Lane and White, 1999). They are often spread across organisations through 'communities of practice', cross-departmental groups which share common interests, knowledge and/or skills (Seely-Brown and Duguid, 1991 cited in Crossan, Lane and White, 1999).

2.3.4.4 Institutionalising

The final stage is when the new learning is embedded within organisation-wide routines, procedures, systems, structures and strategies (Schilling and Kluge, 2009). The new learning is separated from, and becomes greater than the sum of, the individual and group learnings (Crossan, Lane and White, 1999).

So far the focus has been on 'feed-forward' processes. However, 'feedback' processes also take place, as institutionalised learnings influence individuals' and groups' understandings and behaviours and potentially suppress new learnings (Crossan, Lane and White, 1999). Here we return to the concept of SR and the need to manage the tension between explorative and exploitative learning.

2.3.5 Barriers to OL

A small number of academics have explored the barriers to OL. Schilling and Kluge's (2009) study provides a meta-analysis of these barriers and guides this section. Prior to this, most studies addressed single barriers and lacked systematic analysis and theoretical grounding (Schilling and Kluge, 2009). Schilling and Kluge (2009) use Crossan, Lane and White's (1999) '4I Framework' to explore barriers within the four OL stages. They analyse three categories of barriers; actional-personal (individual cognition and actions), structural-organisational (organisational strategy, technology, culture and regulations) and societal-environmental (markets, political-regulatory environments and technology) (Schilling and Kluge, 2009).

2.3.5.1 Intuiting

Barriers at the intuiting stage are experienced at the individual level. Here, actional-personal barriers include deficiencies in employees' number of relevant insights/ideas (Schilling and Kluge, 2009), underpinned by a lack of motivation (Szulanski, 2003), a stressful environment (Elliott, Smith and McGuinness, 2000) and a fear of punishment (Edmondson and Moingeon, 1996). Structural-organisational barriers include a lack of direction due to the organisation lacking clear goals (Edmondson and Moingeon, 1996; Schilling and Kluge, 2009). "A restrictive, controlling management style and an organizational blame culture are positively related to anxiety, lack of psychological safety, hopelessness and organizational cynicism, which are all positively related to actively suppressing novel insights and ideas" (Schilling and Kluge, 2009, p.346; see also Elliott, Smith and McGuinness, 2000). Strict rules and narrow job descriptions contribute to controlling management cultures (Schilling and Kluge, 2009). Societal-environmental barriers include complex, dynamic market environments and implicit, ambiguous knowledge (Schilling and Kluge, 2009).

2.3.5.2 Interpreting

When OL is disrupted at this stage, individuals develop new insights/ideas but cannot communicate them with their team. Actional-personal barriers include the fear that an insights/idea is inadequate or fear of losing ownership (Schilling and Kluge, 2009; Sun and Scott, 2005). Individuals may lack political skills and status (Lawrence et al., 2005; Schilling and Kluge, 2009). Structural-organisational barriers include the group lacking absorptive capacity, so the ability to value, assimilate and apply new ideas/insights (Cohen and Levinthal, 1990; Schilling and Kluge, 2009). Other barriers include strong failure-avoidance norms and viewing new ideas/insights as a threat to collective core beliefs (Schilling and Kluge, 2009; Sun and Scott, 2005). Finally, a societal-environmental barrier is that the new idea/insight may be incompatible with existing occupational mindsets (Schilling and Kluge, 2009).

2.3.5.3 Integrating

Barriers at this stage create a situation where one team learns but the entire organisation does not. Actional-personal barriers include the teams' fear of disadvantage and lack of recognition; particularly if resources are unequally distributed within the organisation (Schilling and Kluge, 2009; Sun and Scott, 2005). Another barrier is other departments resisting the new idea/insight because it did not originate from them (NIH syndrome) (Zell, 2001). "In particular, if the innovation challenges structures and power relations, those key members that find the current state advantageous to them will oppose its organization-wide implementation" (Schilling and Kluge, 2009, p.351). Also in this category is top management not supporting the new idea/insight; due to a lack of interest, desire to retain a positive self-image and/or the learning conflicting with top management's knowledge and core beliefs (Elliott, Smith and McGuinness, 2000; Lawrence et al., 2005; Schilling and Kluge, 2009). Structural-organisational barriers include a lack of a learning culture (Sun and Scott, 2005) and

inadequate cross-departmental communications (Schilling and Kluge, 2009; Zell, 2001).

2.3.5.4 Institutionalising

Impediments to institutionalisation mean that OL takes place but is not implemented in routines, procedures, systems, structures and strategies. Barriers can be actional-personal, including views that the new learning is irrelevant for future use in the organisation (Schilling and Kluge, 2009; Zell, 2001). Management across all levels may not support the new learning (Beer and Eisenstat, 2000); potentially underpinned by a lack of trust in the skills and willingness of employees (Schilling and Kluge, 2009; Sun and Scott, 2005). Employees may lack the ability to implement new learnings (Zell, 2001), driven by structural-organisational factors including a lack of time, an absence of training and high employee turnover (Beer and Eisenstat, 2000; Schilling and Kluge, 2009). Other factors include a lack of clear ownership over implementing learnings, driven by decentralised structures (Schilling and Kluge, 2009; Zell, 2001). Finally, societal-environmental factors include rapid changes in technology and management trends and technical difficulties storing tacit knowledge (Nonaka, 1994; Schilling and Kluge, 2009).

Until now, these barriers to OL have not been applied to a study exploring the relationship between OI and OL.

Section 4: OI and OL

This section is the culmination of all the previous sections as it explores the relationship between OI, DAs and OL. It discusses the motivations behind using OI and DAs in OL. Then it will outline three models that have explored the relationship between OI and OL and highlight the remaining gaps within the literature.

2.4.1 Introduction

The relationship between OI and OL is particularly under-researched (Du Chatenier et al., 2009; Randhawa, Wilden and Hohberger, 2016). "While there is some focus on the role of information, knowledge (and other resource) exploitation, and transfer across networks, there appears to be no attention paid to organizational learning [in the OI literature]" (Randhawa, Wilden and Hohberger, 2016, p.760). As Holmqvist (2004) states, "... interorganizational interactions constitute a unique learning entity in their own right, and one that is partly separated from the intra-organizational learning level" (p.72). Thus, this thesis will cover new ground by analysing the relationship between OI and OL.

2.4.2 Motivations for using OI in OL

It is becoming increasingly common for organisations to use OI for learning (Chiang and Hung, 2010; Holmqvist, 2004; Zobel, 2016). Accessing knowledge, skills and experiences "... from other organizations or professionals such as customers, suppliers, management consultants, governmental advisers or other successful organizations can also facilitate organisational learning" (Hu et al., 2014, p.30). There are several motivations for this; one being that "sometimes the most powerful insights come from looking outside one's immediate environment to gain a new perspective" (Garvin, 1993, p.86). Over time there has been a trend towards specialised business models, with the result being that competencies have become more unequally distributed (Du Chatenier et al., 2009). OI helps to redistribute competencies and fill 'skills gaps' in organisations (Hamel, 1991).

2.4.3 Motivations for using DAs in OL

DAs are used in OL to help organisations think and act in different ways. Contrary to other types of KIFs and their rational, scientific approach to solving problems, most DAs endorse a subjective, creative approach (Rylander, 2009). By working with DAs, organisations can re-conceptualise what they view as appropriate forms of knowledge and sensemaking; taking into consideration more embodied, tacit knowledge and visual ways of interpreting the world (Rylander, 2009). This is particularly important in the intuiting stage when learning is at a preconscious and not analytical level (Crossan, Lane and White, 1999).

DAs encourage new ways of thinking and acting by facilitating and teaching their clients new learning activities. As Hu et al. (2014) acknowledged, organisations are constantly trying to learn new advanced management concepts and methods in order to better address customer needs. DAs teach their clients DT, using the designers' toolkit to match customer needs with what is technically and economically feasible (Design Management Institute, n.a.). A core principle of DT is that diverse teams lead to better ideas (Gothelf and Seiden, 2016). Diversity can be generated by adding the DA's external viewpoint and its creative thinkers (Liedtka and Ogilvie, 2011; Powell, 2016). DAs teach DT's iterative processes and specific activities related to conducting customer research, mapping customer journeys, holding DS, brainstorming ideas, prototyping, conducting user tests and refining prototypes (Nussbaum, 2004). They can also teach clients strategies to overcome internal resistance to new ideas/insights (Deichmann, Rozentale and Barnhoorn, 2017).

2.4.4 Models for understanding OI and OL

Few frameworks explore how "... the interlacing of intra- and interorganizational learning actually comes about in real organizational learning processes" (Holmqvist, 2004, p.70). The following section explores three theoretical models that attempt to understand this relationship.

2.4.4.1 Holmqvist's (2004) model of OL

Holmqvist's (2004) model analyses OL within but also between organisations. Like Crossan, Lane and White (1999), Holmqvist's (2004) model explores the interconnections and tensions between exploration ('opening-up') and exploitative ('focusing') learning. Companies shift from 'opening-up' to 'focusing' in an iterative way as a result of dissatisfaction with the status quo. External actors are often involved in one of two ways (Holmqvist, 2004). Either 'extension', as one organisation shares its experiences with another (generating inter-organisational learning), or 'internalisation', as an organisation embeds experiences transferred during 'extension' (generating intra-organisational learning) (see Figure 3). These external experiences must be 'translated' into a common language so that all organisation members can understand them (Holmqvist, 2004).

Intraorganization Learning Level Interorganization Opening - Up Extension Focusing Extension Opening - Up Internalization Internalization Internalization

Figure 3: OL Model. Source: Holmqvist, 2004.

Holmqvist (2004) brings this model to life using the example of Scandinavian PC Systems (SPS) and their product development alliance with the auditing firm KPMG. SPS became dissatisfied with its focus on internal exploitation, which made them incapable of addressing customer demands for more sophisticated products, so they reached out to KPMG to help with exploration and NPD; a strategy of 'opening-up extension'. The major challenge was translating each company's intra-organisational learnings into a common language (Holmqvist, 2004).

2.4.4.2 Hamel's (1991) model of OL

Hamel's (1991) model explores the motivations underpinning inter-partner learning. The first is 'substitution', whereby companies gain access to their partners' skills to fill their own 'skills gap'. It takes places when there is a low perceived pay-off in developing the skills in-house, yet it has the downside of creating a dependency on partners (Hamel, 1991). A contrasting motivation is 'internalisation', whereby companies learn skills from their partners and develop them internally. "An internalization intent will be strongest in firms which conceive of competitiveness as competence-based, rather than as product-based, and which seek to close skill gaps rather than to compensate for skills failure" (Hamel, 1991, p.87). This typically occurs when there is a high perceived pay-off, such as the ability to use skills in multiple projects (Hamel, 1991).

2.4.4.3 '4I Framework' applied to management consultancies (MCs)

To date, Hu et al. (2014) are the first and only academics to use Crossan, Lane and White's (1999) '4I Framework' to explore the role of OI, specifically MCs, on OL processes. Their case study was a Chinese metals company working with MCs specialising in lean production (LP).

They discovered that the process of intuiting is largely skipped by MCs. Using Kubr's (2002) categorisation, Hu et al. (2014) saw MCs as 'advocates', encouraging their

clients to adopt particular solutions (in this case LP). They were also 'fact-finders', conducting primary research to identify problems and improvement areas. Intuition rarely came into play; instead MCs were hired already with a proposed solution and had to demonstrate scientific methods (Hu et al., 2014).

The interpretation stage was the biggest hurdle for MCs as they had to explain their unfamiliar knowledge, skills and experiences to employees. Hu et al.'s (2014) MC initially taught LP directly to employees, yet received feedback that their training was too abstract. So, the MC switched tactics, simplifying the training course and targeting middle managers who would then teach their direct reports. This had a network effect that helped fulfill the next stage of OL, integrating (Hu et al., 2014).

As an 'advocate', MCs make a large contribution to institutionalising by proposing detailed plans and guidance on implementation. Hu et al.'s (2014) MCs were responsible for revising operating procedures, job descriptions and performance systems. "This implies that the process of institutionalizing can be led by consultants rather than managers" (Hu et al., 2014, p.36).

3 | Methodology

3.1 Research Strategy

This thesis used a grounded theory research strategy with some adaptations. Grounded theory adopts an interpretivist epistemology and constructivist ontology to explore how individuals construct and understand their social realities (Bryman and Bell, 2011). This is best expressed through qualitative data which captures social actors' thoughts, intentions and actions (Gioia, Corley and Hamilton, 2012). Grounded theory is inductive, meaning focused on generating theory from observations (Bryman and Bell, 2011; Gioia, Corley and Hamilton, 2012). It is an iterative process as "... data collection and analysis proceed in tandem, repeatedly referring back to each other" (Bryman and Bell, 2011, p.576). An inductive approach was relevant for this thesis as we sought to generate new insights on the under-researched relationship between OI and OL. However, we also wanted to test existing theoretical frameworks and concepts within a new context. Therefore, we adopted a hybrid approach combining induction and deduction.

3.2 Research Design

3.2.1 Single case study

Our thesis started as a comparative case study of different digital projects in the CC. However, since most interviewees had worked with the DA on multiple occasions, they blended insights from different projects into one, making it impossible for the authors to compare learnings across projects. Accordingly, the research design changed from a comparative study to a single case study of the CC, yet still retaining some comparison across projects as points of analysis. A single case study helped us to capture "the complexity and particular nature of the case in question" (Bryman and Bell, 2011, p.59) and to develop an intensive and holistic understanding.

3.2.2 Case company (CC)

As outlined in Chapter 1.4, the CC was a strong candidate for this thesis because it had worked with the DA for three years. Outside of the Digital team the DA acted as a resource, providing UX and graphic designers. Within the Digital team, however, it provided and trained them in PbD, a method based on DT. The Marketing team was drawn into many of these projects and so also exposed to PbD. Thus, there were many employees within both teams that had rich insights on the different learning activities that the DA engaged in and their effect on the CC's OL process. Although the DA adopted a resource role less frequently and when it did was seen to generate fewer learnings, the interviewees were still able to refer to this role.

The CC is decentralised and hierarchical, with a central team in Sweden and nine national markets. As a relatively mature company, it has many legacy systems and processes. These characteristics contributed to barriers to OL and thus made the CC an appropriate case study.

3.3 Trustworthiness and ethical considerations

3.3.1 Trustworthiness

Qualitative studies are usually evaluated based on their trustworthiness, comprised of the four criteria listed below (Bryman and Bell, 2011).

Credibility

We sought to enhance our credibility by adopting a mixed methods approach and triangulating our data to include interviews, observations and document studies. Alongside the interviews (discussed in-depth in Chapter 3.4), we attended the Digital Toolbox Workshop, a half-day DS facilitated by a UX Manager who had been trained by the DA. The authors also led a DS workshop as part of our BDP (see Appendix 2 for a brief description of both, including a list of attendees). For both DS we engaged in activities, took notes and analysed our observations. Secondary data including proposals, working documents and presentations were also collected from interviewees and analysed.

The purpose of these two supplementary methods, observations and document studies, was to compare and contrast what was said in interviews to what was observed or written. We strived towards theoretical saturation, continuing to collect data until no new insights emerged and concepts and their interrelations became well developed (Bryman and Bell, 2011).

Transferability

The question of whether single case studies are transferable or generalisable attracts much debate in qualitative research (Bryman and Bell, 2011). This thesis follows Gioia, Corley and Hamilton's (2012) grounded theory model, for which the "... corollary intent is to generalize to theory" (p.45). A case study can be transferable "... if the case generates concepts or principles with obvious relevance to some other domains" (Gioia, Corley and Hamilton, 2012, p.24). One could make an informed assumption that many retail banks and similar organisations work with DAs and so our findings will be relevant to these entities.

Dependability

This thesis is dependable as it transparently outlines all phases of the research process and justifies the main decisions taken (Bryman and Bell, 2011).

Confirmability

As interpretivist and constructionist approaches suggest that objectivity is impossible to achieve, the authors instead focused on being aware of their subjectivity (Bryman and Bell, 2011). They followed an interview guide and a set procedure for coding to limit how much their personal opinions influenced data collection and analysis.

3.3.2 Ethical Considerations

Ethics in business research is related to four main risks: harm to participants, lack of informed consent, invasion of privacy and deception (Bryman and Bell, 2011). To avoid harm to participants the authors anonymised all data collected in order to ensure confidentiality. We made sure to receive consent from all participants to record and transcribe the interviews and to take notes during our observations. We considered the interviewees' privacy and sensitivity by letting them know that they could abstain from answering any questions. We were transparent in describing our research goals and processes to participants in order to avoid deception.

3.4 Data collection

3.4.1 Inductive approach

The authors began by considering two broad field of literature: OI and OL. We drafted a first RQ on how DAs influence their clients' level of OL. There was a second RQ aimed at understanding the mediating factors that influence the level of OL. With this focus the authors conducted an initial literature review, recruited an initial sample and developed an exploratory interview guide.

3.4.1.1 Sampling

Our sample was recruited through non-probability sampling (Bryman and Bell, 2011). Snowballing sampling was adopted, whereby the authors first made contact with two internal 'gatekeepers' from the Digital team who had worked on different projects with the DA (Bryman and Bell, 2011). We talked to them about these different projects, their objectives and outcomes; including the level of OL. The 'gatekeepers' helped us to identify three projects where the outcome of OL was perceived to vary. They also shared with us contact details for potential interviewees who had worked on these projects from the CC's Digital and Marketing teams and the DA. Table 1 outlines the three projects and Table 2 includes a complete list of interviewees.

Names	Roles
Project1	 Description Started as a stand-alone customer journey mapping project. Led to a new app for different customer segments. Owners: Digital team. End users: Swedish market.
	Learning (method) PbD Proof of insights External research UX/design audit Customer interviews Customer journey mapping Strategy development Proof of Concept Design sprints User testing
	Learning (outcome) PbD Proof of insights Insights on markets, trends and competitors UX/design benchmarked against competitors Insights on customer journey (jobs, needs and pain points) KPIs and hypotheses developed Proof of Concept Pain points prioritised HMWs developed and prioritised Ideas brainstormed and prioritised Ideas brainstormed and prioritised Prototype developed Insights on customer feedback Final outcome A new app in the Swedish market.

Project2	 Description Banking app for Millennials. Owners: Digital team. End users: Swedish market.
	Learning (method) PbD • See above.
	Learning (outcome) PbD See above. Final outcome App never launched.
Project3	Description Re-platforming banking websites in two markets to make them load faster. Eventually rolling out to all markets.
	Learning (method) • Agile development sprint methodology (not PbD).
	Learning (outcome) • Fast website in two countries. Not rolled out to other markets due to resistance in CC.

Table 1: Projects description. Source: own representation; P1IR, P2IR, I.A, I.C, exp, I.F, I.G.

Names	Roles	Projects	Interviews		
'Gatekeepers' / interviewees					
Interviewee A (I.A)	UX Manager, Digital, CC	Project1 and Project2	30 minute 'gatekeeper' interview 27/02/19 CC head office 1 hour in-depth interview 10/04/19 CC head office		
Interviewee B (I.B), resp. (I.B, exp)	CX Manager, Digital, CC	Project3	30 minute 'gatekeeper' interview 11/03/19 CC head office 1 hour exploratory interview 14/03/19 CC head office 1 hour in-depth interview 11/04/19 CC head office		
Interviewees					
	Head of Digital, Digital, CC	Project1, Project2 and Project3	2 hour exploratory interview 13/03/19 and 19/03/19 CC head office 1 hour in-depth interview 10/04/19 CC head office		

Fable 2: List of the interviewees. Source: own representation.				
Total			CC head office 15.5 hours	
Interviewee J (I.J)	Digital Store Manager, Marketing, CC	Project1	1 hour in-depth interview 17/04/19	
Interviewee I (I.I)	Product Owner, Marketing, CC	Project1	1 hour in-depth interview 17/04/19 CC head office	
Interviewee H (I.H), resp. (I.H, exp)	Account Manager, DA	Project1, Project2 and Project3	1.5 hour exploratory interview 21/03/19 DA office 1 hour in-depth interview 24/04/19 DA office	
Interviewee G (I.G)	CX Manager, Digital, CC	Project3	1 hour in-depth interview 11/04/19 CC head office	
Interviewee F (I.F)	CX Manager, Digital, CC	Project3	1 hour in-depth interview 11/04/19 CC head office	
Interviewee E (I.E)	Senior Brand and Marketing Project Manager, Marketing, CC	Project1	1 hour in-depth interview 10/04/19 CC head office	
(I.D, exp)	Market Lead CRM, Marketing, CC	Project2	1 hour exploratory interview 13/03/19 CC head office	

3.4.1.2 Exploratory interviews

Four exploratory interviews were conducted over four weeks. These were semi-structured and followed an interview guide to ensure that all participants received the same context of questioning (Appendix 3 and 4) (Bryman and Bell, 2011). From these initial interviews we gained a holistic understanding of the relationship between the CC and DA and more precisely the influence of the DA on the CC's OL. Overarching questions included the reasons for hiring the DA, their role and ways of working. Questions on whether the interviewees were able to learn from the DA and, if so, what and how were also asked. The interview guide for the DA's Account Manager was adapted slightly to capture the DA's perspective and more context on PbD (as the DA's own method). Both interview guides contained only open questions so that respondents could answer freely using their own words (Bryman and Bell, 2011). For a more detailed justification of the development of the interview guides, please refer to the appendices.

3.4.1.3 Coding the exploratory interviews

Each exploratory interview was recorded, transcribed and coded (Appendix 5). The authors started by highlighting quotes that they felt were important for answering the initial RQs and subsequently grouped these quotes under main categories. These categories were the general role played by the DA, the overall OL process undertaken by the DA (PbD), its evolution over time and barriers to OL.

During these interviews we realised that interviewees struggled to define levels of OL. For example, a project that was prematurely cancelled might be perceived as having a low level of learning, yet through this failure the project team actually learnt a lot. Focusing on the level of OL also detracted from rich discussions on the DA's learning activities. When discussing our first round of coding with our Supervisor we realised that our categories were focused on OL processes rather than outcomes. Ultimately, the authors decided to pivot and address the broader topic of OL processes. We returned to our literature review and soon discovered Crossan, Lane and White's (1999) framework and related studies.

3.4.2 Deductive approach

Following this pivot, the authors refined both RQs and shifted from an inductive to deductive approach. Crossan, Lane and White's (1999) '4I Framework' helped the authors revise their first RQ from focusing on outcomes to process. Then Schilling and Kluge (2009), which used the '4I Framework', helped to narrow down the second RQ from mediating factors to barriers to OL. By relating these theoretical concepts to the findings from the exploratory interviews, we were able to identify patterns, areas to delve into deeper and gaps in the literature, which ultimately led to the next round of more specific, semi-structured interviews.

3.4.2.1 Sampling

The authors returned to interview three of the four exploratory interviewees (the fourth, interviewee D, was unavailable due to time constraints). Then we used snowball sampling to recruit an additional five interviewees; all within the Digital or Marketing teams and having worked on at least one of the three projects.

3.4.2.2 In-depth interview guide

The interview guide was based on the main concepts introduced by Crossan, Lane and White (1999), Kubr (2002) and Schilling and Kluge (2009) (Appendix 6 and 7). To help the interviewees understand these concepts, the authors used cards with definitions and relevant examples during the interviews (see Appendix 8).

The interview guide started with the overall goal of our research. Next, the concepts 'learning' and 'OL' were presented using Schilling and Kluge's (2009) definitions. This was followed by a presentation of Crossan, Lane and White's (1999) four stages of OL. The interviewees could answer referring to their learnings based on the outcomes or methods of the projects that they had worked on with the DA.

The first set of questions aimed to understand the overall role played by the DA in the specific project(s). Interviewees were asked whether they thought the DA had played a resource or process role and a directive or non-directive role, according to Kubr's (2002) categorisations. Interviewees were then asked about the innovativeness of the ideas/insights and methods used during the projects, relating back to Crossan, Lane and White's (1999) discussion on the tension between exploration and exploitation.

Moving to the specific stages of the '4I Framework', one at the time, interviewees were asked to assess the performance of the CC without intervention from the DA. They were then asked to evaluate the involvement of the DA in that specific stage and if they made the stage better or worse, specifying why and how. A final question was then related to the potential barriers at each stage. Interviewees could answer based on the barriers suggested by Schilling and Kluge (2009) or add new ones.

Similar questions were posed for the interviewee from the DA; yet rephrasing the question from the DA perspective. They were asked additional questions on the overall strategy with the CC, including the initial plan and its current status. For more links with the theoretical concepts and the development of the interview guide, please refer to the appendices.

3.5 Data analysis

A qualitative content analysis "... comprises a searching-out of underlying themes in the materials being analysed" (Bryman and Bell, 2011, p.560). With this purpose in mind, the in-depth interviews were transcribed, then all relevant quotes for answering the new RQs were highlighted. These quotes were moved into a large table which follows the main categories of the interview guide (Appendix 9). This table was completed by conducting a second round of coding for the exploratory interviews and then adding in relevant quotes from this.

Finally, a third iteration of coding was conducted; this time following the systematic inductive approach to content analysis advocated by Gioia, Corley and Hamilton (2012). The 1st-order analysis of all data refers to broad categories based on informant-centric terms (Gioia, Corley and Hamilton, 2012). The 2nd-order analysis represents a first clustering and introduces the authors' concepts (Gioia, Corley and Hamilton, 2012). The data structure was completed with a second clustering leading to the aggregate dimensions. This resulted in a visual representation of the relationships between data, concepts and aggregate dimensions (Gioia, Corley and Hamilton, 2012) (see Figure 4).

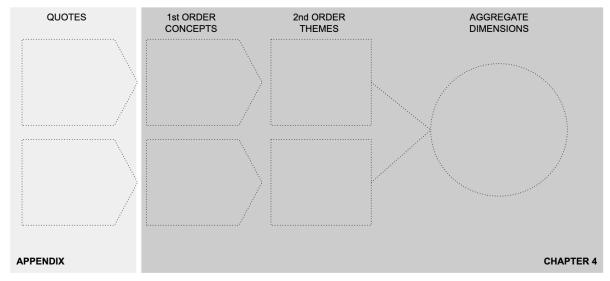


Figure 4: Data structure development. Source: own representation; Gioia, Corley and Hamilton, 2012.

The 1st order concepts presented in Chapter 4 are a summary of the quotes extrapolated from the interview transcripts, from the gathered secondary data and from the authors' observations. The complete table of quotes can be found in Appendix 10.

Since the present study followed a mixed approach (from inductive to deductive), the authors followed a procedure which reflects elements of both. Particularly, the use of aggregate dimensions is deductive, with Kubr (2002) for the overall role, Crossan, Lane and White (1999) for the stages and Schilling and Kluge (2000) for the barriers. Yet the authors allowed for openness in the answers, for example on the DA's specific learning activities and on new barriers to OL, which is more inductive.

The static insights of the data structure served then to create the grounded theory model presented in Chapter 5, which is a dynamic representation of the concepts and aggregate dimensions (Gioia, Corley and Hamilton, 2012).

3.6 Limitations

The authors faced several limitations during the data collection. A general limitation was that the CC interviewees lacked the time to be interviewed. As all representatives from the DA had to be paid by the CC for their time, we were able to interview only one representative, the Account Manager, for 2.5 hours. Although this Account Manager did have the broadest knowledge on the projects, being able to interview other roles in the DA would have enriched our data. Alongside the two DS we observed, it would have been beneficial to also observe a DS led by the DA. This way we could have made a comparison to see if learnings on facilitating DS had been accurately transferred from the DA to CC.

While coding we noticed that some interviewees misinterpreted the '4I Framework' and referred to a learning outcome or method at the incorrect stage (i.e. talking about integrating activities during the intuiting stage). These misunderstandings are probably attributed to the complexity of the topic being researched. If the authors thought that this had taken place then during the analysis they moved the quote to the appropriate stage. Similarly, when barriers emerged in more than one stage, the authors selected the stage where the barrier was most important (based on the literature and interviewees' statements) and moved the quotes so that barriers were discussed only once. Some interviewees contradicted themselves, either between the exploratory and in-depth interviews or during one interview. With the benefit of time, we would go back for a third round of interviews and clarify their opinions. Instead we applied our own judgements to their data when necessary.

4 | Findings

The following Chapter introduces the data collected during the exploratory and indepth interviews, observations of DS and document studies of secondary data. The authors built the data structure according to the approach outlined in Chapter 3, following the sequence of questions in the in-depth interview guide. Chapter 4.1 presents the aggregate dimension on the DA's overall role in the OL process. Chapter 4.2 addresses the aggregate dimensions corresponding to each of the OL stages from Crossan, Lane and White's (1999) '4I Framework'.

The authors developed the data structure first by selecting relevant, important quotes from the interviews, observations and document studies. For brevity, we then summarised these quotes as statements in the 1st-order concepts; keeping true to the informants' terms as much as possible. The complete table of quotes can be found in Appendix 10.

4.1 Overall Role

Figure 5 describes the overall role played by the DA in the OL process. First, quotes related to the broad categorisation of roles by Kubr (2002) (process vs resource role) were clustered (see Appendix 10.1) and summarised as 1st-order concepts. Then these were distilled into 2nd-order themes. The same approach was followed for the quotes referring to the second categorisation of Kubr (2002) (spectrum from directive to non-directive role) and for the quotes related to the innovativeness of the DA's outcomes and methods.

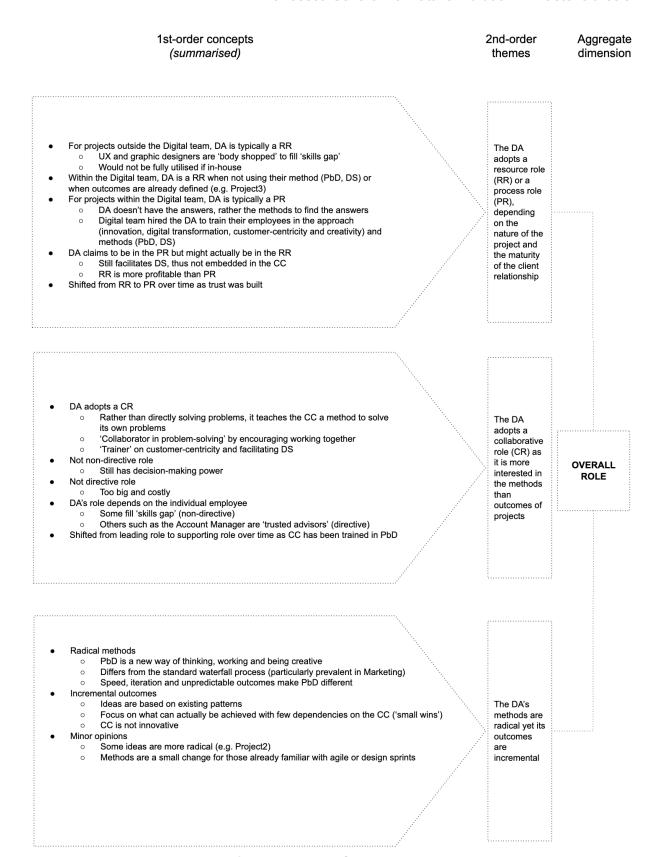


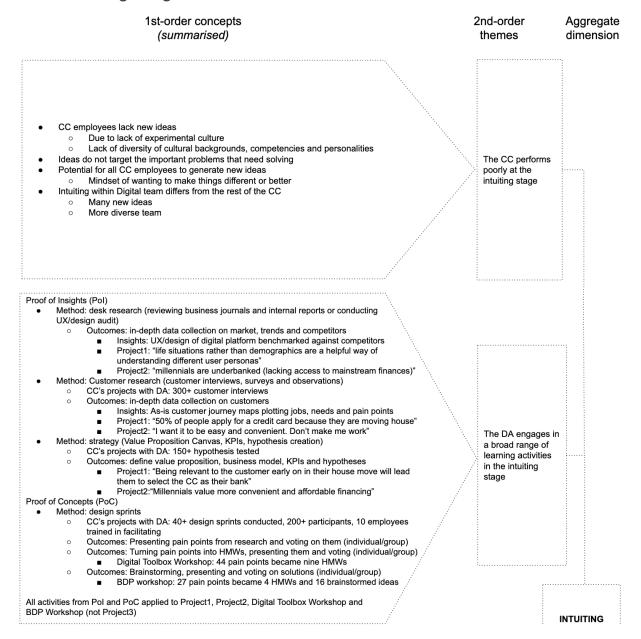
Figure 5: Data structure - DA's overall role. Source: own representation.

4.2 OL process

The following sections present the data structures referring to the four OL stages introduced by Crossan, Lane and White (1999). Similarly, to the process outlined above, quotes were first clustered (see appendices 10.2-10.5) and then summarised as 1st-order concepts. These summarised statements were then distilled as 2nd-order themes.

The data structures at each stage are written in the same order. First, they show the employees' opinion on the CC's performance at the OL stage without intervention from the DA. Second, the contribution of the DA in terms of specific learning activities is presented. In particular, methods and corresponding outcomes and insights are described and related to specific projects. Next, data related to the influence of such activities on the CC's OL process is presented. Finally, each data structure ends with an outline of the barriers to OL encountered by the CC at the particular stage. Here, whereas the 1st-order concepts entail all the barriers mentioned by the interviewees, the corresponding 2nd-order themes contain only the main barriers. This is based on our judgement of the literature and the strength of the interviewees' responses. Chapter 5 contains an in-depth discussion of the main barriers only.

4.2.1 Intuiting Stage



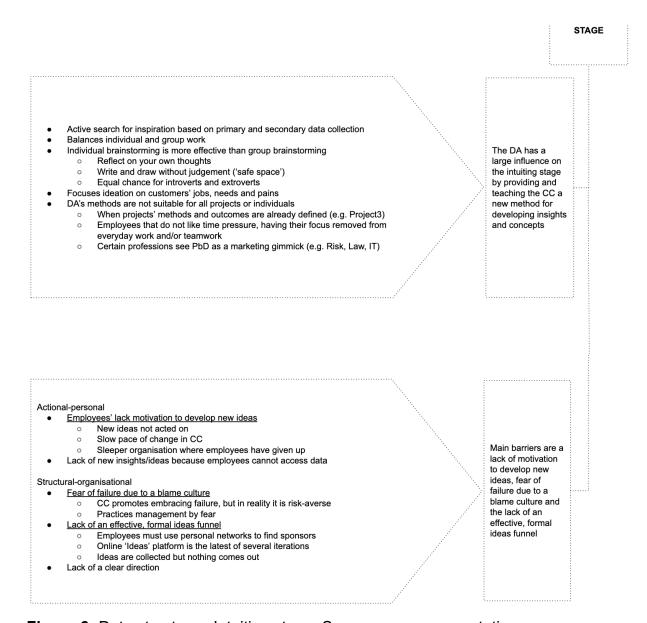
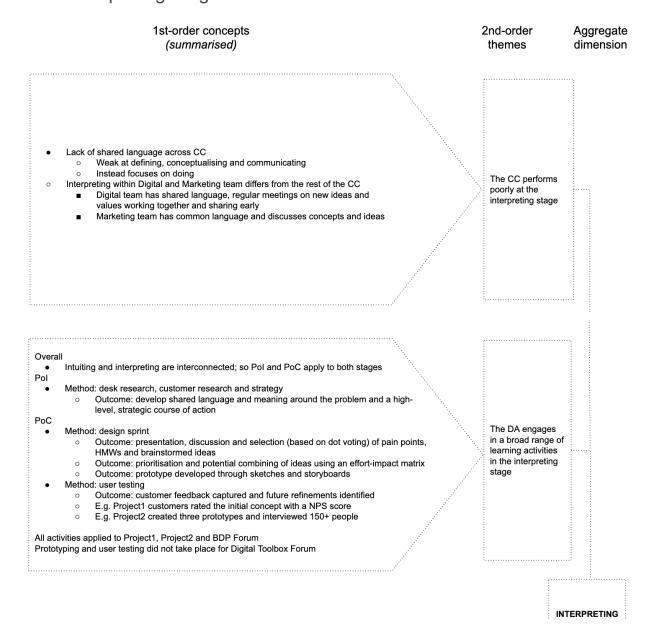


Figure 6: Data structure - Intuiting stage. Source: own representation.

4.2.2 Interpreting Stage



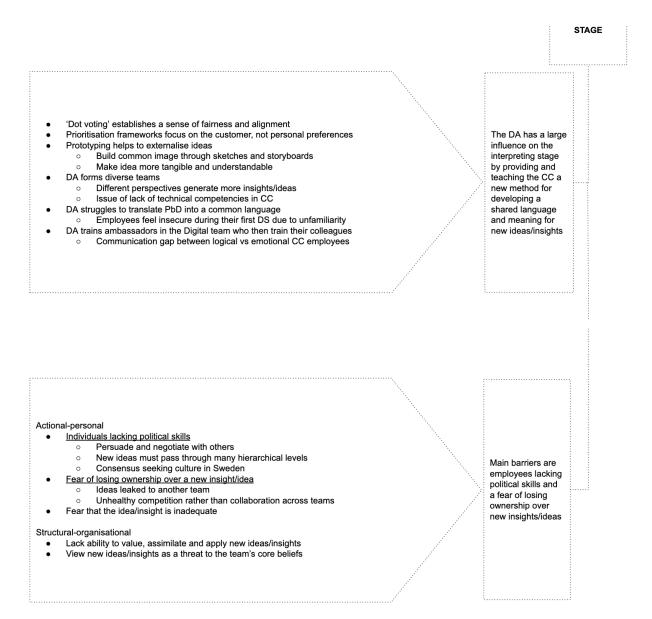
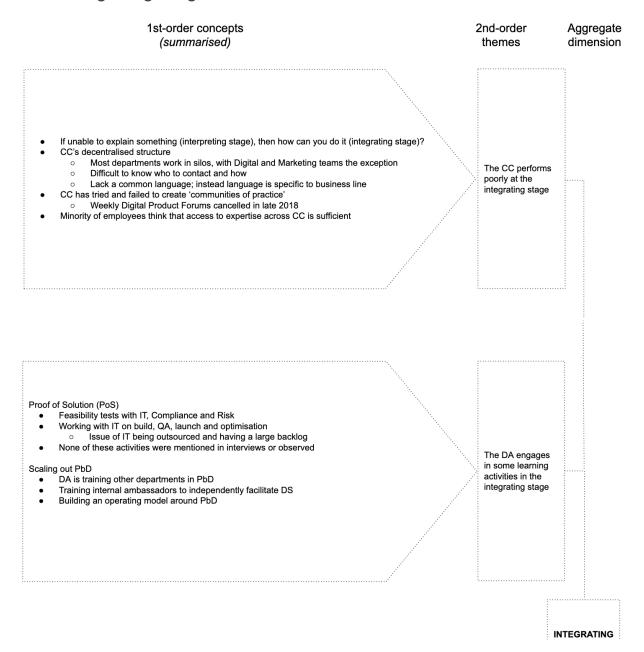


Figure 7: Data structure - Interpreting stage. Source: own representation.

4.2.3 Integrating Stage



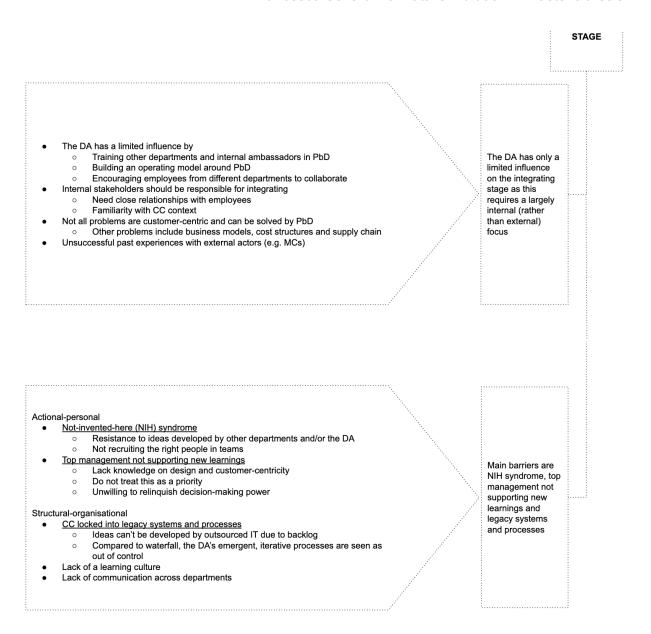
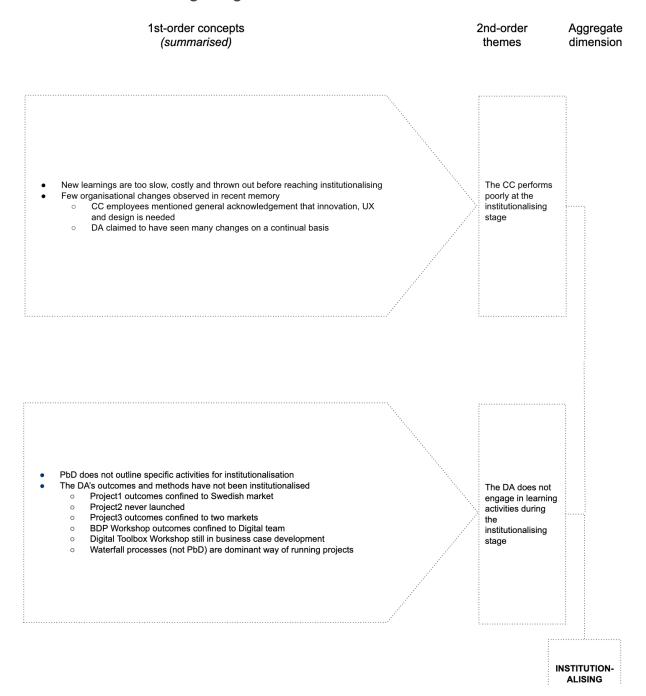


Figure 8: Data structure - Integrating stage. Source: own representation.

4.2.4 Institutionalising Stage



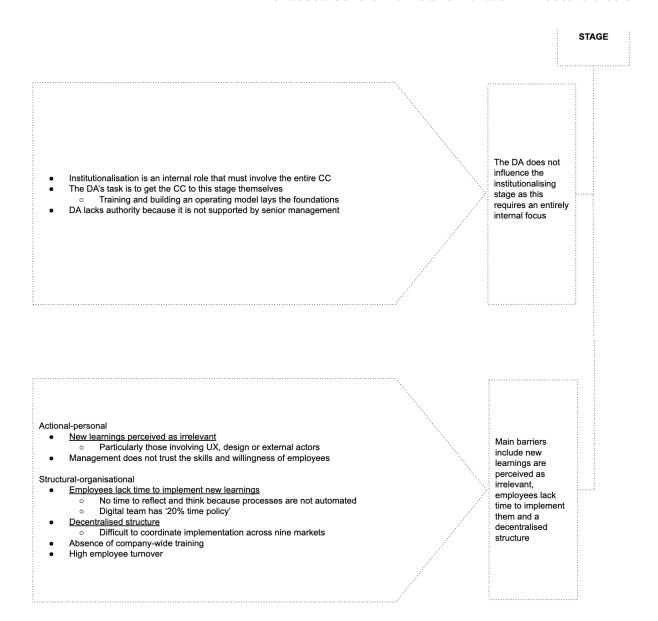


Figure 9: Data structure - Institutionalising stage. Source: own representation.

5 | Analysis and discussion

5.1 Grounded theory model (GTM)

The following GTM generalises the findings of our data collection and analysis. It is built upon Crossan, Lane and White's (1999) '4I Framework' and shows how the DA's learning activities, their influence on clients' OL processes and the main barriers to OL interact dynamically. Contrary to the '4I Framework', the intuiting stage does not occur solely at the individual level, rather it involves both individuals and groups. Thus intuiting and interpreting stages are highly interconnected (see Chapter 5.3 and 5.4).

At each stage the green circles show the DA's activities (dark green) and the corresponding effects (light green). The red circles represent the main barriers. Across the four stages the DA's learning activities and their influence on clients' OL processes decreases. Conversely, the size and strength of the barriers to OL increase over time. As Chapter 5 will discuss, the DA can overcome some smaller barriers in the early stages, but is unable to address larger, unyielding barriers in the later stages. This corroborates with our initial assumption that DAs play an important role in the intuiting and interpreting stages, but have only a limited influence on the interpreting and institutionalising stages. Ultimately, DAs lack methods for the later stages and face more barriers that are difficult to overcome.

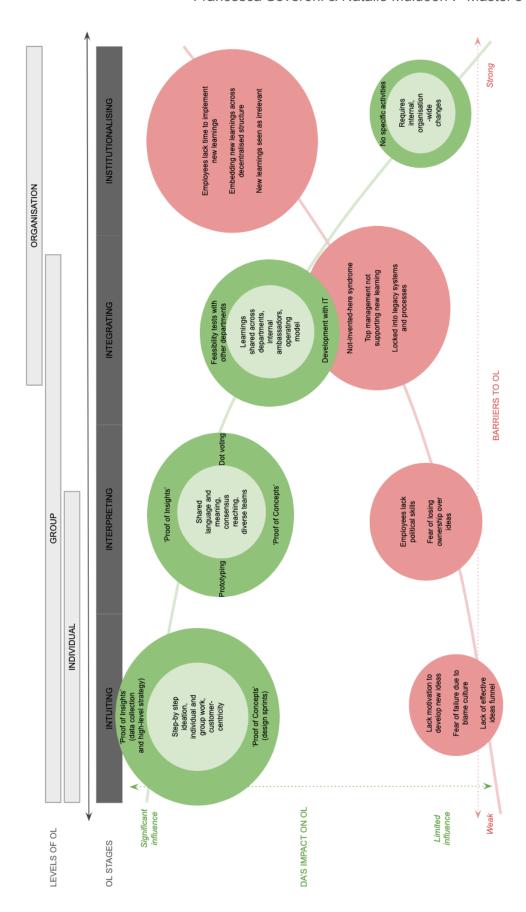


Figure 10: Grounded Theory Model. Source: own representation.

5.2 Role of DAs

5.2.1 Overall role of DAs in OL

The type and amount of OL generated by client companies will vary depending on the role adopted by DAs. This role, in turn, is shaped by the nature of the project and evolves over time with the maturing relationship between DAs and their clients. As Chiaroni, Chiesa and Frattini (2011) suggested, inbound OI contributes to OL as recipients leverage the discoveries and specialist competencies of external actors. This changes the recipients' knowledge and behaviours to varying degrees, depending on the role adopted by the external actors.

Outside of the projects ran by the Digital team, the DA typically adopted a resource role, providing UX and Graphic Designers at a daily rate. This includes "... big projects, [ran by] the real PMO. And they say, I want 40 hours of UX ... it's kind of like a 'body shop' ... and [the DA] provides that" (I.C, exp). Occasionally the Digital team hired the DA purely as a resource when a project was not using DS; for example Project3 which used agile development sprints instead. Directly influencing the client company's OL process is not the goal for DAs acting in a resource role. They do not teach their clients; instead they provide knowledge and skills on their behalf (Kubr, 2002). The resource role does not meet Garvin's (1993) definition of OL. Knowledge is acquired but not actively created or transferred; instead it largely remains in-situ within a project. Behaviour at the individual, group or organisational level is not modified in response to this new knowledge.

According to Hamel's (1991) framework, here the underpinning motivation is 'substitution', whereby clients use DAs to fill their own 'skills gaps'. UX and design are viewed as non-core competencies by most of the CC, much to the dismay of the Digital team; with a UX Manager lamenting that "they think it's irrelevant, they don't see the benefits" (I.B). There is not enough demand to develop these competencies in-house as internal resources would be utilised only "... 30-40% of the time" (I.C, exp). Thus there is a strategic motivation to outsource non-core competencies (Cui et al., 2012; Quinn, 2000; Stanko and Calantone, 2011).

The DA adopted a process role in most projects ran by the Digital team (which were the focus of our data collection). Here they taught new approaches and methods to the CC so that they would become self-sufficient in diagnosing and solving their own problems (Kubr, 2002). As the DA's Account Manager stated, "so we don't have all the answers. We have a way of gathering all the answers that the clients have" (I.H). This process is PbD and draws heavily on DT to help enhance clients' innovation, digital transformation, customer-centricity and creativity (DA proposal document [DPD]). In

the three years working with the CC, the DA had piloted PbD, proven its value and "... transitioned into a more process-type role including training" (I.C).

As the DA was more interested in the processes than the outcomes of projects, interviewees typically positioned them along the central, collaborative section of Kubr's (2002) directive-non-directive spectrum. Hu et al. (2014) found that MCs often adopt directive roles, as 'advocates' persuading clients to adopt certain solutions and as 'technical experts' using their specialist knowledge and skills to influence decision-making. Yet with DAs "it's absolutely not that they come like consultants and give you some advice and then 'bye bye' ... [they] help people to think in a new way, so that we can solve the problem ... But they can't actually make the solution" (I.E). Interviewees labelled the DA as a 'collaborator in problem-solving' that encouraged 'working together' (I.A, I.C, I.H) and a 'trainer' that designed and led learning experiences "... to be more customer-centric ... [and] run the workshops" (I.C, exp). The relationship has changed over time, with the DA's Account Manager acknowledging that they were "... in the leading role in the projects beforehand, but now they [CC] already know the stuff themselves and so now we have just more a supporting role" (I.H).

The aim of the process (and collaborative) role is to shape the client company's OL. Its underpinning motivation is 'internalisation', whereby clients learn new knowledge and skills in order to bring them in-house and close a 'skills gap' (Hamel, 1991). Thus the difference between the resource and process role can be compared to the proverb: "give a man a fish and you feed him for a day; teach a man to fish and you feed him for a lifetime". Yet the DA's Account Manager acknowledged that the process role is "... bad business for us, because we have a kind of 'goal' not being relevant anymore" (I.H, exp). To remain relevant, DAs "... live at the cutting edge" (I.C, exp) and continuously gain new design knowledge and skills that are desirable for their clients.

5.2.2 Characteristics of DA's methods and outcomes

DAs teach their clients radical methods, yet for our specific CC this resulted in only incremental outcomes; potentially due to barriers preventing more radical outcomes. A key premise of Crossan, Lane and White's (1999) framework is that OL involves a tension between exploration (assimilating new learnings) and exploitation (utilising existing learnings); with a balance between the two leading to SR. One could argue that DAs are primarily hired by companies dissatisfied with existing learnings and looking to utilise the knowledge, skills and experiences of DAs to generate new learnings; what Holmqvist (2004) refers to as a strategy of 'opening-up extension'.

The DA's method, PbD, was seen as "... the largest change" (I.J) and "more radical, it's a different way of thinking, it's a different way of working" (I.E). This sense of newness was particularly embodied by all four interviewees from the Marketing team who contrasted their typical waterfall processes with PbD's "... quick launch, change, quick launch, change" (I.E) method. One Marketing team member emphasised how

"...it was very inspirational to do something where you can't see the end result" (I.D, exp). This echoes Rylander (2009) who highlights how DA's emergent, iterative methods and lack of predetermined outcomes are markedly different from other KIFs (such as marketing firms). One might assume that such exploratory methods would lead to equally exploratory outcomes.

Yet despite these new methods, their outcomes (ideas/insights) were seen as incremental rather than radical and "... based on the patterns that we already know exist" (I.H). One comment from a UX Manager in the Digital team was particularly revealing; "... they lead us into things that we can actually achieve, maybe the smaller stuff, the small wins, with less dependency [on the rest of the CC]" (I.B). Indeed, while PbD initially encourages unrestricted brainstorming, it must then prioritise ideas that are feasible within the CC, with barriers preventing PbD from achieving more radical outcomes. As Crossan, Lane and White (1999) alluded to, explorative 'feed-forward' processes can be suppressed by exploitative 'feedback processes', which include institutionalised learnings and existing shared mindsets, systems and processes. This interplay between OL and barriers will now be explored more in-depth within each of the OL stages.

5.3 Intuiting stage

According to Crossan, Lane and White (1999) this first OL stage takes place at the individual level and entails employees developing new ideas and insights based on their preconscious recognition of patterns and possibilities. No language exists to describe the idea/insight so individuals rely on images and metaphors to develop their own understanding.

5.3.1 CC's typical performance

Setting the context, without the DA the CC performs poorly at the intuiting stage; although this varies across teams. Only one interviewee thought that across the CC "... many people here have really good ideas" (I.I). Instead most argued that employees were deficient in new ideas because they lacked the experimental culture (I.A), diversity of cultural backgrounds, competencies and personalities (I.H) and "... we're not that innovative of a company" (I.G). One interviewee argued that "... we throw a lot of ideas without regard to who's problem you're really solving" (I.C). The Digital team was viewed as somewhat exceptional in the CC; "...in our team there's new ideas all the time ... throughout the company, I think it's lower" (I.B). This was attributed to the team having a more diverse composition (I.H), which is correlated with innovativeness and creativity (Gothelf and Seiden, 2016). This poor performance suggests that there are a myriad of barriers at the intuiting stage that DAs might struggle to overcome.

5.3.2 DA's OL activities and their influence on CC's OL

The remainder of this chapter analyses the learning activities and influence of DA's adopting a process role, as it is this role (and not a resource role) where OL is actively generated. Validating our initial assumptions, we found that DAs have a large influence on the intuiting stage by providing and teaching their clients a new method for developing insights and concepts. This can enhance clients' intuiting and help them to overcome some barriers. One consideration is that our data collection focused on projects ran by the Digital team which was viewed as atypical and already able to generate more ideas/insights than other teams. Therefore, this team may have been more positive about, and responsive to, the DA's new method than other teams in the CC.

Inbound OI most often takes place in early ideation stages (Stanko, Fisher and Bogers, 2017). This might be because ideation stages have an external rather than internal focus, for example on markets, trends, competitors and customers, so external actors can more easily contribute. As outlined by an internal document (Project1 internal report [P1IR]), the DA provided and taught the CC a new method, PbD, which covered two streams of activity at the intuiting stage that were previously lacking in the CC. The first was 'Proof of Insights' (Pol) which sought to collect external data and develop high-level strategy. One method was desk research, including reviewing business journals and internal reports or conducting UX/design audits, resulting in detailed data collected on markets, trends and competitors. This was either outsourced to the DA (e.g. Project2) or the project team was taught by the DA how to conduct desk research (e.g. Project1) (I.C, exp). As well as learning new methods, the project team also gained new insights/ideas. For Project1, a UX audit helped the CC to benchmark its app's UX against competitors (P1IR). Desk research for this project led the CC to realise that life situations (e.g. getting married) were a more effective way of grouping customers than demographics (e.g. age) (P1IR). Lastly, the Project2 team learnt that Millennials were 'underbanked', so lacking sufficient access to mainstream finances (Project2 internal report [P2IR]).

A second method for Pol was customer research, so customer interviews, surveys and observations that resulted in customer journey maps, noting jobs, needs and pains (P1IR). The CC was trained in these methods and collaborated with the DA, including conducting over 300 customer interviews together (DPD). Insights gained from Project1's customer survey included that many people applying for a credit card were moving house (P1IR). The Project2 team learnt from customer surveys that convenience and affordability were the most important factors for Millennials (P2IR). A final method was distilling data into strategy, including defining the value proposition, KPIs and hypotheses (P1IR). Over 150 hypotheses were tested by the DA and CC (DPD), including "being relevant to the customer early on in their house move will lead them to select the CC as their bank" (P1IR) and "Millennials value more convenient and affordable financing" (P2IR), which were both validated.

In a marked departure from Crossan, Lane and White's (1999) framework, we can observe that DA's OL activities at the intuiting stage involve not only individuals but also groups. Relatedly, ideas/insights do not emerge from a preconscious recognition of patterns and possibilities based on an individual's past experiences. Instead they emerge from an active search for inspiration based on primary and secondary data collection. One could argue that DAs demystify the intuiting stage as it no longer has to be spontaneous and subliminal but rather can be planned for and follow step-by-step, transparent activities.

The second stream of activity that the DA engaged in at the intuiting stage was 'Proof of Concepts' (PoC) which revolved around teaching and facilitating DS (P1IR). Since working with the DA the CC has held over 40 DS, with 200 participants and 10 employees trained in facilitating (DPD). DS entail three main stages: pain points are presented and voted on, HMWs are constructed, presented and voted on, and finally brainstorming is held, presented and voted on (P1IR). For the BDP workshop we witnessed 27 pain points become four HMWs and 31 brainstormed ideas.

In DS tasks pendulate between the group and individuals, with individual brainstorming perceived by interviewees as particularly beneficial to learning. This is a time for reflection without fear of judgement or the discussion being dominated by one person. "So you sit by your own and nothing's wrong. You could just draw what you think or you could just write some words" (I.J). "It creates a safe space ... and loud people shut up for a little bit. Which maybe encourages the creativity or allows you to focus and be more efficient" (I.C, exp). After discussing and voting on four HMWs in the BDP workshop, we observed six participants brainstorm 31 different ideas in only 30 minutes. Like Knapp, Zeratsky and Kowitz (2016), interviewees agreed that group brainstorming was ineffective. However, group tasks were still needed to align the team on goals, concepts and decisions.

Underpinning all these activities, DAs teach their clients to become more customercentric; a central tenet of DT (Brown, 2009; Engström, 2017; Gothelf and Seiden, 2016; Roxburgh, 2016). Instead of having a predefined outcome, DAs encourage an open-ended process based on understanding the customer. As a UX Manager explained, "it was the process of not knowing, the process of discovering and find a pain and solving a pain for a customer, and that ended up with a new idea" (I.A). "So it's a much more focused conversation ... It brings efficiency" (I.C) as when there is disagreement the team can base decisions on what is best for the customer.

While DAs make a large contribution to OL at the intuiting stage, their methods do not suit all projects or individuals. Some projects' outcomes and methods were already defined so the DA played only a resource role (e.g. Project3). One interviewee referred to their colleague who did not like DS "... because it's time limited ... you have to come up with ideas about things you don't really think of on a daily basis ... [and he] likes

work on his own" (I.J). Finally, employees in more analytical professions like Developers or Lawyers were predisposed to view PbD as "... marketing mumbo jumbo" (I.C, exp).

Our findings are in contrast to Hu et al.'s (2014) study which found that MCs have only small influence on their client's intuiting stage. As 'advocates', they often undertake the intuiting stage on their clients' behalf, using their specialist knowledge, skills and experiences to persuade them to adopt a certain solution (Hu et al., 2014). This is in stark contrast to DAs which teach their clients a method so that they can intuitively generate their own insights/deas.

5.3.3 Main barriers to OL

The main barriers faced by both the DA and CC at this stage have been selected based on the strength of the interviewees' responses and the academic literature. They are a combination of actional-personal and structural-organisational, with societal-environmental barriers viewed as less significant across all stages.

The largest barrier to intuiting is actional-personal and employees' lack of motivation to develop novel insights/ideas (Schilling and Kluge, 2009; Szulanski, 2003). Many interviewees gave anecdotal evidence of sharing new ideas with their managers or as part of a formal process but none of them being acted on. "So you get to a stage where you think, 'I'm gonna stop suggesting things because it only gets so far and then it gets stopped" (I.I). The sentiment that employees had 'given up' (I.A, I.G, I.F) was not only related to intuiting but a more general feeling in the CC attributed to the slow pace of change. A Product Owner described the CC as "... a sleeper organisation, where you just go to work and go home again ... you don't have the passion into it anymore." (I.F). DAs can overcome this barrier as they help clients to develop new products and services quickly (Engström, 2017; Knapp and Kowitz, n.a.); with DS compressing months' worth of design activities into one week. Experiencing the fast pace of change and rapid progression from an idea to tangible prototype will motivate employees to develop their own ideas/insights. It is suggested that OI can negatively impact employees' motivation by resulting in layoffs for R&D staff (Stanko, Fisher and Bogers, 2017). Yet this was not the case for the DA as they were either training employees in PbD (process role) or filling skills gaps within the CC (resource role).

The other two main barriers at this stage are structural-organisational. First, a blame culture means that employees fear failure and suppress new insights/ideas (Elliott, Smith and McGuinness, 2000; Schilling and Kluge, 2009). Whereas the CC promoted corporate values of 'embracing failure', in reality the organisation was "... very risk-averse" (I.G) and had a "... high fear of loss, fear of failure" (I.C) which trickled down to employees. "There's definitely a lot of people in this company that practice management by fear ... and that just kills the idea generation" (I.F). The ultimate threat wagered against employees is that if they made a mistake "... we're gonna lose our

banking license" (I.F). DAs can weaken this barrier by creating a non-judgemental space for employees to develop ideas during DS. Yet the Head of Digital questioned whether "... people are able to fully get rid of that fear. You know, truly be non-judgemental" (I.C).

The final barrier was not captured in Schilling and Kluge's (2009) meta-analysis and is a lack of effective formal processes for submitting new ideas. Interviewees agreed that "we don't really have a good idea flow" (I.I) and that employees must navigate personal networks to find their own sponsors, which dampens their motivation. Many interviewees were unaware of an online platform where any employee could submit their ideas. The 'Ideas' platform was the latest of several iteration of an ideas funnel and "... people [had] started to lose interest in putting in the idea, because they've seen nothing coming out" (I.G). DAs can overcome this barrier as they have a proven, effective method for funneling new ideas.

5.4 Interpreting stage

Here, the individual starts sharing their new idea/insight through words and/or actions with the team (Crossan, Lane and White, 1999). Together they refine the idea/insight and develop a shared language, meaning and course of action for it (Crossan, Lane and White, 1999).

5.4.1 CC's typical performance

Similarly to the last stage, without the DA the CC is weak at interpreting; yet this varies across teams. Members of the Digital team claimed that "... we have a high level of shared language ... [and] the culture of sharing early" (I.F). There were regular meetings to present new ideas, "... but we are fairly unique in that sense" (I.G). Similarly, the Marketing team claimed that "... all people in the team are digital and have a common language" (I.J) and that "... this might be special for marketing, but I mean we often discuss concepts and ideas" (I.E). Interviewees did not view their teams as representative of the CC, which was "... very bad at defining things, at communicating things ... [and experiences a] lack of conceptualisation ... we tend to have people who focus on doing stuff" (I.C). This suggests that there are several barriers at the interpreting stage that the DA might struggle to address.

5.4.2 DA's OL activities and their influence on CC's OL

Our findings validate our initial assumption that DAs have a large influence on the interpreting stage by providing and teaching their clients a new method for developing a shared language, meaning and course of action for a new insight/idea; which helps them to overcome barriers. Again, we must consider issues of representativeness as our data collection focused on projects involving the Digital and Marketing team which were more open to sharing and building on new ideas/insights than the rest of the CC.

Because Pol and PoC swing between individual and group tasks, the intuiting and interpreting stages are largely interconnected. Revisiting the activities from the previous stage, Pol (collecting external data and developing high-level strategy) helped the team to understand, discuss and reach consensus on a high-level problem and course of action. During PoC (more specifically DS) the team was responsible for evaluating and voting on pain points. HMWs and brainstormed ideas. Every team member was given an equal number of dot votes except for the project owner who had the deciding vote in moments of indecision (P1IR). Dot voting or 'dotmocracy' (Knapp, Zeratsky and Kowitz, 2016) helps to establish a sense of fairness and alignment; "... that everyone in the design sprint are kind of equal ... and it's actually the group together that decides the solution we're going for" (I.E). DAs also teach their clients prioritisation frameworks to cut through personal preferences and help team members to agree on decisions (P1IR), such as the 'effort-impact matrix' (Gibbons, 2018) which selects ideas based on their feasibility for the organisation and desirability for the customer. As a UX manager described, the DA helped with interpreting by introducing "... the process and the ability to focus on the customers, not yourself ... it's not like 'your idea is bad, mine is better' ... it becomes more about the customer and everyone needs to help" (I.A).

DAs teach their clients prototyping, which helps employees to externalise their ideas through sketches and storyboards (P1IR). Prototypes "... make the ideas more tangible ... more understandable for the wider audience" (I.F). They are usually built as part of small teams during DS and refined through group discussions. As one UX Manager suggested, prototyping helps the team become "... in sync ... everybody has a common image on what we're trying to do" (I.B). However, as we observed during the BDP workshop, there is a risk in these smaller team that individuals with their own vested interests steer the initial idea in a particular direction, away from what the wider team expected. Here, an initial idea for a simple UX guidebook grew into a complex prototype for an online database of existing projects and a chat forum. Prototypes are then tested with users and their feedback helps the team to determine future refinements.

The diverse teams which DAs promote are critical for interpreting. As the literature suggests, diverse teams help to generate more customer-centric and practical yet innovative ideas (Gothelf and Seiden, 2016) and refine them more effectively (Engström, 2017). "... If you have people with the same background you would probably come up with the same idea, therefore diversity is the key" (I.H, exp). Project1 and Project2 teams both contained DA members co-facilitating DS and providing UX and design expertise. From the CC there were Digital, Marketing, Compliance and Risk employees. Each offered a different perspective and suggested potential improvements or issues. A limitation "... is that we don't have any technical competences in this company" (I.F), instead IT is outsourced, so this perspective is lacking.

Because MCs typically adopt a resource role, transferring existing knowledge, skills and experiences to their clients (Hu et al., 2014; Kubr, 2002), their main challenge is ensuring that these transferred learnings are correctly translated and interpreted. Hu et al.'s (2014) case study found that employees being trained by MCs in LP failed to develop a common language or shared understanding because the concepts used were too unfamiliar and abstract. Similarly, in Holmqvist's (2004) study of SPS and their product development alliance with KPMG, translating each company's OL into a common language was the main challenge.

Although DAs act largely in a process role, teaching a method rather than transferring ideas/insights, they too struggle with translating their methods into a shared language. The terminology surrounding PbD and its associated frameworks (DT and GVDS) were unfamiliar to many employees; "... the first times [in a DS] you're really insecure with what will happen ... it takes a few times before it gets comfortable" (I.I). The DA had trained ambassadors within the Digital team to help train their colleagues. However, one employee observed a communication gap "... where the team is so logical, objective, and (I.A) is very emotional, relationship" (I.C). Therefore translating methods from the DA to their clients remains challenging.

5.4.3 Main barriers to OL

The main barriers faced by both the DA and CC at this stage were entirely actionalpersonal. Overall fewer barriers were articulated by interviewees at this stage than at others. The first is individuals lacking political skills (Lawrence et al., 2005; Shilling and Kluge, 2009). Due to the absence of an effective ideas funnel (a barrier at the intuiting stage), employees must navigate personal networks and persuade others to support their ideas. Because the CC is a "... hierarchical organisation, instead of having a flat organisation" (I.F), new ideas must be endorsed and pass through many organisational levels, which requires effort by the idea owner (Schilling and Kluge, 2009). Unique to Sweden where "... we have a big consensus [culture]" (I.A), employees must socialise their idea widely. "... If you don't know who to talk to ... it might be difficult and your idea would stay just in your own" (I.E). DAs replace this reliance on personal networks and persuasion with a formalised ideas funnel. DS and their diverse teams create a network of people across the company that are aware of (and likely support) the new idea (Deichmann, Rozentale and Barnhoorn, 2017). Yet as the DA's Account Manager acknowledged, if you are heavily embedded in their new methods "... then you can maybe lack navigating the old, hierarchical ... politics" (I.H). Therefore it is important that employees maintain contact with the old and new.

A second barrier at the individual and group level is a fear of losing ownership over a new insight/idea (Schilling and Kluge, 2009; Sun and Scott, 2005), related to a lack of trust and unhealthy competition. As a Product Owner in the Digital team described, there were three cases of insights/ideas from his team being 'leaked' to another team. He had also shared an idea on machine learning with another team and asked to work

together on it, only for them to then 'steal it'. "... That is really scaring, because that means that you cannot talk loud about creative ideas, you cannot share early, and that destroys the culture" (I.F). There is no guarantee that ideas developed with DAs will remain confined to one team while they mature. In fact, one of the central tenets of DT is sharing early across organisations and capturing feedback (Brown, 2009). This fear of losing ownership can therefore only be resolved by the company creating a culture of collaboration over competition.

5.5 Integrating stage

At this stage the group reaches agreement over the shared language, meanings and practices associated with an idea/insight and starts integrating them into the existing business; resulting in mutual adjustments to both (Crossan, Lane and White, 1999).

5.5.1 CC's typical performance

The CC typically performs poorly at this stage for several reasons. One reason is its shortcomings in the previous interpreting stage; "... if I cannot explain the thing I want, how am I telling people 'do this thing'" (I.C). Other reasons are related to the CC's decentralised structure. While interviewees from the Digital and Marketing teams claimed to collaborate frequently with other departments, they criticised many employees within teams that "... are very strictly just hanging out with each other" (I.G); which results in siloed learning. The CC's decentralised structure made it difficult to know who to contact in other departments and how. Interviewees lamented that there are "... many positions in many teams who don't have clear roles" (I.I) and "... it's not that we don't want to share them, but we don't know how we should do this" (I.E). Relatedly, there were challenges establishing a common language, with "... financial language, the [CC] language, and then there's the business line language, and we don't have common things there" (I.F). Lastly, the CC attempted but failed to create 'communities of practice', such as weekly Digital Product Forums that were cancelled in late 2018 (I.G). This outlines just some of the barriers that DAs must overcome.

5.5.2 DA's OL activities and their influence on CC's OL

As predicted, DAs play progressively less of a role in the later stages of OL because integration and institutionalisation require more of an internal focus which DAs (as external actors) lack. Most interviewees (including the DA's Account Manager) thought that internal stakeholders were responsible for integration, as this requires "... know[ing] the names of everybody" (I.B) and the DA "... can't do anymore either, because it's all then based on how we choose to prioritise in the bank" (I.I). Interviewees also caveated that "... we have more problems than just customercentricity" (I.C) and therefore PbD is not suitable for all departments, for example Risk and Compliance. One interviewee questioned whether it was worth investing in scaling out PbD when the CC had "... a long history of spending a shit of money on external professionals ... and not getting out any real change" (I.G) due to unyielding barriers.

The DA claimed to provide a range of activities in the third stream of PbD, 'Proof of Solution' (PoS), that help to integrate new insights/ideas into the wider organisation. These included feasibility tests with IT, Compliance and Risk departments alongside working with IT on build, QA, launch and optimisation. Yet, IT was outsourced and had a "... huge backlog of for example compliance and legal stuff" (I.I) which meant that all projects hired local IT agencies instead. None of our interviewees mentioned PoS, which suggests that it is less integral to DAs.

Nevertheless, interviewees did mention some ways that DAs can have a positive influence on integrating. Their DS are "... a new way to work [with] people from different departments ... making people come together in a new way" (I.E) and breaking down silos. When the DS ends and employees return to their departments they transfer new ideas/insights. "And now they are interested in doing these activities" (I.H), with the DA acting as a 'trainer' (Kubr, 2002) and teaching PbD to the Marketing and Swedish teams. This supports Deichmann, Rozentale and Barnhoorn's (2017) claim that DAs strategically create dense contact networks across companies in order to overcome resistance. The DA also trained ten members of the Digital team as ambassadors who can independently facilitate DS in other departments, creating a multiplier effect and a greater reach than the DA could achieve alone. When the MCs from Hu et al.'s (2014) study realised that their LP training was not being successfully integrated by employees, they pivoted their strategy, training only ambassadors who "... were then expected to deliver the training course with the common language to supervisors or operators" (p.36). These ambassadors, who like the CC came largely from middle management, had closer relationships with employees, more familiarity with the company context and thus helped MCs to overcome the 'burden of otherness' (Kipping and Armbrüster, 2002 cited in Kipping and Engwall, 2002).

Finally, the DA is taking "... a leading role in the scaling up" (I.H, exp) and is in the initial stages of building an operating model around PbD with new procedures, structures and KPIs to help embed and protect it within the CC. Some interviewees interpreted this as the DA attempting to transition from a DA to MC; giving weight to Roxburgh's (2016) suggestion that the boundaries between these two forms of KIFs are becoming increasingly blurred.

5.5.3 Main barriers to OL

In the later stages of OL the barriers become progressively larger and more challenging for companies and DAs to overcome. The main barriers to integrating are mostly actional-personal and take place at the organisational level. The first is resistance to ideas developed by other departments and/or DAs because they are viewed as undermining or challenging structures and power relations (NIH syndrome) (Burcharth et al., 2014; Schilling and Kluge, 2009; Zell, 2001). Project1 was owned by the Digital team working alongside the DA. The prototyped outcome of this project was

deemed most suitable for the Swedish team, which had not been involved in the project. One team member described the Swedish team's reaction as: "... 'here would you like this?'. And there was 'what's this? We don't want this'" (I.J). Indeed, whilst DAs might build diverse teams, they do not necessarily recruit the right people. For this particular DA their outcomes were incremental and thus more easy to integrate into the CC. Yet this was counterbalanced by their more radical methods which were resisted by some employees. Additional strategies to overcome resistance outlined by Deichmann, Rozentale and Barnhoorn (2017) could have been considered, including transparent project plans and multiple project sponsors from across the CC.

Another barrier was top management not supporting new learning (Beer and Eisenstat, 2000; Elliott, Smith and McGuinness, 2000; Schilling and Kluge, 2009). Lawrence et al. (2005) claim that top management support is crucial for overcoming structural-organisational barriers. Rather than actively not supporting PbD or its outcomes, "... it's a lack of knowledge" (I.A) and "... not on my radar" (I.C) in the CC. As the Head of Digital stated, "customer-centricity is super important ... But in the current management team, it occupies like 5% or 10% of their conversations" (I.C). Another barrier was top management not willing to 'let go' (I.A) and 'not take all the decisions' (I.F). This is problematic for DAs as their methods flatten hierarchies through 'dotmocracy' and require employees to give up some control and embrace emergent, undefined outcomes. Because of this lack of support from senior management the DA was perceived to lack legitimacy, with one Product Owner stating "... top management [pause] since we are building an hierarchy, they don't believe in a service design agency, they can do this with McKinsey or BCG" (I.F).

A structural-organisational barrier absent from Schilling and Kluge's (2009) meta-analysis is being 'locked into' (I.I) legacy systems and processes. Particular to the CC were issues around outsourced IT and waterfall processes. Interviewees shared examples of projects abruptly stopping after DS: "... the stop is mostly like on our side, we can't develop it" (I.I) and "we couldn't get it into production" (I.J) because of a large backlog of existing work. Project1 was specifically chosen "... because we wouldn't have to integrate it with our legacy systems" (I.A). DAs cannot influence organisational decisions such as outsourcing IT; they can only provide their own Developers as an (albeit more costly) alternative. Interviewees felt that in the CC "... you are rewarded for the method, not for the outcome" (I.F) of projects and high priority was placed on adopting waterfall (i.e. sequential, stage-gate) processes. The DA's more emergent, iterative methods were met with resistance internally and "... deemed as someone had lost control" (I.C, exp). It is challenging for the DA to overcome this preference for waterfall processes as this is a part of its deeply embedded risk-averse and hierarchical culture.

5.6 Institutionalising stage

In this final stage new learnings are embedded within organisational routines, procedures, systems, structures and strategies (Crossan, Lane and White, 1999). Learnings are removed from their individual and group origins and start to guide the thoughts and actions of organisational members (Crossan, Lane and White, 1999).

5.6.1 CC's typical performance

Like all previous stages, the CC "... perform really bad" (I.B) at institutionalising. The CC was "... too slow" (I.E) and impatient: "we've had a lot of very good initiatives, and then after not long enough we threw them out ... So we never really get to institutionalising" (I.G). Most interviewees had observed few organisational changes in recent memory. Only the DA's Account Manager stated "I've seen so many organisational changes the past three years" but when pressed to give an example he struggled "... because they've done it continuously" (I.H). He may have had a vested interest in promoting the CC and linking organisational change to the work of the DA.

5.6.2 DA's OL activities and their influence on CC's OL

DAs have a very limited influence on their client's institutionalising stage due to their lack of internal knowledge and authority. PbD does not outline any specific activities for institutionalisation and all interviewees agreed that no learnings derived from the DA (methods or outcomes) have been embedded across the CC. Waterfall is still the dominant method for running projects, with PbD adopted by only a minority. One example of an outcome is the app from Project1 which remains confined to the Swedish market and plays only a minor role in the customer journey. Like the previous stage, DAs cannot play a large role in institutionalisation "because it's so much, only internal" (I.I) and should "... involve the whole company" (I.E). The DA's Account Manager agreed, stating that "... it's a design agency task to get them to go to this state themselves" (I.H). Therefore, steps taken to integrate (i.e. training, building an operating model) should lay the foundation for internal actors to institutionalise new learnings. Lastly, the DA "... do[es]n't have authority' (I.B) primarily because they lack direct support from senior management.

By contrast, the MCs studied by Hu et al. (2014) played a large role in directly embedding LP within their client's company by preparing an implementation plan and restructuring operating procedures, job descriptions and performance systems. This confirms that, as a resource role, MCs focus on transferring and implementing their technical knowledge, skills and experiences. Whereas as a process role, DAs focus on training their clients in ideation and sharing new learnings in a team.

5.6.3 Main barriers to OL

The barriers at the institutionalising stage are the most difficult for organisations and DAs to overcome as they are rooted in deeply embedded cultures, structures and

systems; thus largely structural-organisational barriers. This includes employees being unable to implement new learnings due to a lack of time (Beer and Eisenstat, 2000; Schilling and Kluge, 2009; Zell, 2001). In the CC "I think everyone wants to learn some new things. It's just it doesn't fit in the day" (I.J). Employees lack time because most processes are not automated. Some roles are more time poor than others, such as Customer Operations staff that "... have their time that they need to be on the phone" (I.I). There were exceptions, as the Digital team adopted Google's '20% time policy' so that everyone had "... one day a week ... where you are not booked, to do anything, just read and think about new things" (I.F). While DAs can introduce time efficient activities such as DS, they cannot transform employees' routines to free up time. Employees also struggle to implement learnings due to an absence of training (Beer and Eisenstat, 2000; Schilling and Kluge, 2009). Whereas Brown (2009) recommends company-wide training on DT, "we don't have any educational programme [in the CC] ... so we don't have a culture of learn new things" (I.F). The ambassadors alone will not be able to train all employees in PbD.

One structural-organisational barrier, mentioned in the integrating stage but also relevant here, is a decentralised structure (Schilling and Kluge, 2009; Zell, 2001). The CC, which has a central team and nine market-based teams, would struggle to ensure that PbD is correctly taught and that its learnings are sufficiently captured and shared across all teams. While the central Digital team, which has the most experience with PbD, could lead in implementing it across the CC, it "... has very little formal control over the countries [markets]. The countries do whatever they want" (I.C). DAs are not able to change their clients' organisational structures and would struggle to coordinate across vast numbers of teams.

An actional-personal barrier includes new learnings being perceived as irrelevant for future use in the organisation (Schilling and Kluge, 2009; Zell, 2001). Some interviewees thought that all new learnings from external actors were seen as irrelevant: "... we spent a lot of money on expensive consultant agencies to help us build strategies ... [then] we throw it out" (I.G). Others claimed that UX and design were perceived as 'irrelevant' (I.B) and "... colours and fonts ... the good shit is in the numbers or the, even worse, the core systems" (I.C). UX and design are not part of the CC's core values, which can lead to "... specific difficulties in finding appropriate ways to adopt and communicate it" (Schilling and Kluge, 2009, p.353). DAs struggle to change culture; to do so requires buy-in from senior management and employees.

One frequent barrier which is not an issue for DAs is their institutionalised learnings suppressing individual and group insights/ideas (Crossan, Lane and White, 1999). This is because DAs teach a new method for ideation, so they in fact encourage rather than suppress new learnings.

6 | Conclusion

6.1 Final considerations

The overarching goal of this thesis was to generate new and meaningful insights on the under-researched relationship between OI and OL. Turning to the existing OI literature, this has largely focused on the relationship between OI and KM. At best, OL is only briefly and unreflectively listed as an outcome of OI. This thesis focused on DAs, a form of OI, and their DT approach. Both DAs and DT have been critiqued by academics as fads and lacking theoretical grounding. With regards to the existing OL literature, this has focused on either intra- or interorganisational learning and infrequently combined the two. Therefore, this thesis sought to make contributions to, and linkages across, three main bodies of literature: OI, DAs and OL.

Our first RQ explored how DAs (as a form of inbound OI) influence their client company's OL process. Crossan, Lane and White's (1999) '4I Framework' made a key contribution to the literature on OL as a process (rather than an outcome) by analysing it over four distinct stages. To date, only Hu et al. (2014) have used the '4I Framework' to explore the role of an external actor, MCs, on the OL process. Through the lens of the '4I Framework', we captured rich insights on the specific learning activities that DAs (a different type of external actor) engage in at each stage and the level of influence that these have on their clients' OL.

Our second RQ was related to our first and examined the main barriers companies face at each stage of the OL process and how they impact their OL. Most studies on barriers to OL focus on one barrier at a time. Schilling and Kluge's (2009) meta-analysis is an exception and the first study to map barriers across the '4I Framework'. The authors sought to test Schilling and Kluge's (2009) findings on a new subject matter: companies working with DAs, to see whether this context had an influence on the barriers. Having captured all barriers, we then applied our judgement based on the literature and the strength of the interviewees' responses to select the main barriers at each stage.

After answering these two questions we arrived at a Grounded Theory Model that combined the DA's learning activities, their influence on clients' OL processes, the main barriers to OL and how said barriers interact dynamically with the DA's learning activities and the clients' OL processes.

According to our findings, the nature of the project influences the DA's overall role, which, in turn influences the type and amount of OL generated by companies. The authors applied Kubr's (2002) categorisations of MCs to DAs in order to understand their overall role in OL. Outside of the projects ran by the Digital team, the DA was typically required for UX and Graphic Designers; thus, adopting a resource role. The

underpinning motivation was 'substitution', as the DA provided knowledge and skills on the CC's behalf, rather than training them. By contrast, in most projects ran by the Digital team the DA taught the CC a new approach and method called PbD that would help them to become self-sufficient in diagnosing and solving their own problems. The motivation behind this was 'internalisation', whereby clients learnt new knowledge and skills in order to bring them in-house. PbD, based on DT and its emergent, iterative methods and lack of predetermined outcomes, was perceived by employees as radical. Yet this resulted in only incremental outcomes, likely due to barriers within the CC.

Turning to the OL stages, the data collected validated our initial assumption that the DA would have a large influence on the CC's OL in its early ideation stages (intuiting and integrating). This is because early stages have an external (rather than internal) focus so external actors can more easily contribute. Here the DA provided and taught individuals and teams a method for developing new insights/ideas and sharing these through words and/or actions. Yet the DA had less influence on the later implementation stages (integrating and institutionalising) as its lacked a holistic method for spreading learnings across the wider organisation and embedding them in organisation-wide routines, procedures, systems, structures and strategies.

At the intuiting stage, without the intervention of the DA the CC typically performed poorly (as it did across all four stages). The DA had a large influence on the intuiting stage by providing and teaching the CC a new method for developing insights and concepts. PbD's first stream of activity, PoI, taught the CC to collect external data and develop high-level strategy. The second stream, PoC, included step-by-step activities for individual brainstorming. All activities were underpinned by a focus on customercentricity. Some findings challenged the '4I Framework', including that the DA's learning activities did not only focus on the individual but also the group level. Additionally, rather than being based on a preconscious recognition of new patterns, such learning activities encouraged an active search for inspiration.

At the actional-personal level, a key barrier to intuiting was employees lacking motivation to develop new ideas because they were rarely acted on. The DA could help to overcome this barrier by speeding up the time in-between an initial idea and a tangible prototype. Of the two structural-organisational barriers, one included a fear of failure due to a blame culture, which the DA could lessen by creating a non-judgement space for individuals to brainstorm ideas during DS. The other was the lack of an effective formal process for submitting new ideas, which again the DA could overcome through PbD; a proven method for funneling new ideas.

Similarly to intuiting, the DA had a large influence on the CC's interpreting stage. The activities proposed during Pol and PoC helped to develop a shared language, meaning and course of action around new insights/ideas. Specifically, the data collected and high-level strategy developed helped teams to discuss and agree on a specific

problem. Using dot voting and prioritisation frameworks during DS created a level playing field and prevented personal preferences and dominant personalities shaping decisions. Prototyping helped individuals to externalise their ideas and build a common understanding across the team. The diverse teams brought together by the DA generated more customer-centric and practical yet innovative ideas.

Compared to the previous stage, the DA was less effective at overcoming barriers to interpreting. The two barriers to emerge were both actional-personal, with one including individuals lacking political skills. While the DA replaces a reliance on personal networks and persuasion with a formalised ideas funnel, employees must still return to the hierarchical politics in order to scale up their ideas. The other barrier was fear of losing ownership over a new insight/idea, related to a lack of trust and unhealthy competition. A shift in company culture from competition to collaboration could only be achieved by internal actors.

From the integrating stage onwards the DA had less influence on the CC's OL as this required more of an internal focus which the DA (as an external actor) lacked. The DA claimed to provide a range of learning activities in the third stream of PbD, 'Proof of Solution' (PoS), to integrate new insights/ideas into the wider organisation; including feasibility tests and new product/service development with other departments. Yet no interviewees mentioned PoS, suggesting that it was less integral. The DA's main contributions were seen as bringing together employees from across departments, training other departments and ambassadors, and building an operating model around PbD.

The DA failed to overcome the larger and more unyielding barriers to integrating. Two barriers were actional-personal, including NIH syndrome and top management not supporting new learnings. On the former, the DA might lessen resistance by building diverse teams, yet they often fail to include the right people in teams. On the latter, the DA was perceived to lack legitimacy and so struggled to alter senior management's knowledge and support. An organisational-structural barrier was the CC being locked into legacy systems and processes. Again, the DA was unable to influence large organisational decisions on, for example, outsourcing IT and waterfall processes, which are both rooted in organisational culture.

The DA had virtually no influence on institutionalising. No learning activities were discussed because the DA lacked the internal knowledge and authority to influence this stage. This final step in the OL process must be undertaken by internal actors.

The barriers at the institutionalising stage were deeply rooted in culture, structures and systems and thus the most difficult to overcome. Two structural-organisational barriers included employees being unable to implement new learnings due to a lack of time and difficulty embedding learnings in the decentralised structure. An actional-personal barrier was new learnings related to OI, UX and design being perceived as irrelevant.

The DA could not address these barriers as they were unable to change employees' routines, the CC's structure or culture.

Overall, these findings validate our initial assumption that different OI actors vary in their influence on the OL process, based on a comparison between MCs and DAs. Whereas DA's adopt a process-based and collaborative role, MCs often take resource-based and direct roles, using their expertise to persuade clients to adopt certain solutions. In contrast to the DA's decreasing influence on the CC's OL across the stages, MC's play an increasing role; particularly at institutionalising as they prepare implementation plans and restructure clients' systems and processes. Both DAs and MCs struggle with issues of translating learnings so that clients can correctly interpret them.

6.2 Limitations

As mentioned in Chapter 3, there were several limitations to data collection. Due to a lack of funding we were able to interview only one representative from the DA (the Account Manager) for a total of 2.5 hours. This Account Manager was strategically chosen as he had the most knowledge on the projects between the CC and DA. Yet being able to interview other roles would have enriched our data on the DA.

While we were able to observe two DS facilitated by CC employees and ourselves, it would have been beneficial to also observe a DS led by the DA. This way we could have compared the two to see if learnings on facilitating DS had been accurately transferred from the DA to CC.

During the data analysis we noticed that some interviewees potentially misinterpreted questions and referred to an OL stage at the wrong time in the interview. Some interviewees contradicted themselves during the interview or between the exploratory and in-depth interviews. With more time we would have undertaken an additional round of clarifying interviews. Instead we acted pragmatically by moving quotes in the analysis to where they best fit.

Furthermore, when analysing the data we realised that most of our interviewees consistently described their teams (Digital and Marketing) as outperforming the rest of the CC in the early OL stages. Therefore, they may have been more positive about, and responsive to, the DA and PbD. With the benefit of time we would address this issue of representativeness by extending our sample to employees from other CC departments.

6.3 Managerial implications

Our finding that different OI actors influence OL at different stages should encourage managers seeking to enhance OL to work with OI. However, they must first consider

what they wish to achieve through the collaboration as this will inform their selection of an OI actor. Managers should select a MC if they want to substitute expertise and have work completed on their behalf (resource role) and a partner that will lead on problem solving and endorse a particular solution (directive role). By contrast, if they want to internalise new approaches and methods so that their company can diagnose its own problems and develop solutions (process role) and a partner that maintains objectivity and jointly defines problems and weighs potential solutions (collaborative role) then a DA should be selected. The same applies for the OL stage: if intervention is needed at the later stages (implementation) then choose an MC, whereas if help in the early stages (ideation) is needed then select a DA.

The influence of the DA was ultimately impeded by their lack of internal knowledge, authority and inability to overcome large barriers. Internal actors and particularly managers must therefore play a much larger role in scaling out and implementing learnings generated by DAs. They have closer relationships with employees and more familiarity with the company context. Moreover, only internal actors can address large barriers rooted in culture, structure and systems. These will require an entire programme of change management activities and cannot be addressed through a single intervention. One example from the CC is its barrier of UX and design being seen as irrelevant. Bringing in a DA is not enough to change the CC's core values and prioritise UX and design. Instead many changes are needed to reinforce this, including UX and design being endorsed by senior management, included in corporate strategy and added to project management processes.

6.4 Future research

This thesis has started a stimulating discussion on the previously under-researched relationship between OI (specifically DAs) and OL (specifically OL process). Further research is now needed to validate the representativeness of our study and our ability to generalise results. By comparing the DA studied in this thesis with one or more other DAs we can determine whether its approach, methods, learning activities and influence on the CC was reflective of the wider industry. Similarly, we can better understand the representativeness of the CC, its relationship with the DA and its barriers to OL by comparing it to one or more different retail banks.

Exploring the relationship between OI and OL more broadly might deliver interesting results. With Hu et al.'s (2014) study of MCs, and now with this thesis and its focus on DAs, academics can investigate other OI actors, including customers, suppliers and private R&D labs, and their influence on OL processes.

Reference List

Alvesson, M. (1993). Organization as Rhetoric: Ambiguity in knowledge-intensive companies, *Journal of Management Studies*, vol. 30, no. 6, pp.997-1015

Beer, M. and Eisenstat, R.A. (2000). The Silent Killers of Strategy Implementation and Learning, *Sloan Management Review*, vol. 41, no. 4, pp.29–40

Bell, S.J., Whitwell, G.J. and Lukas, B.A. (2002). Schools of Thought in Organizational Learning, *Academy of Marketing Science*, vol. 30, no.1, pp.70-86

Bianchi, M., Croce, A., Dell'Era, C., Di Benedetto, C.A. and Frattini, F. (2016). Organizing for Inbound Open Innovation: How external consultants and a dedicated R&D unit influence product innovation performance, *Journal of Product Innovation Management*, vol. 33, no. 4, pp. 492–510

Brown, T. (2009). Change by Design, New York: Harper Business

Bryman, A. & Bell, E. (2011). Business Research Methods 3rd edn, Oxford: Oxford University Press

Burcharth, A., L., Knudsen, M., P., Mette and Søndergaard, H., A. (2014). Neither Invented Nor Shared Here: The impact and management of attitudes for the adoption of open innovation practices, *Technovation*, vol. 34, no.1, pp.149-161

Carson, S., J. (2007). When to Give Up Control of Outsourced New Product Development, *Journal of Marketing*, vol. 71, no. 1, pp. 49-66

Chesbrough, H. (2003a). Open Innovation: The new imperative for creating and profiting from technology, Boston: Harvard Business Press

Chesbrough, H. (2003b). The Era of Open Innovation, *MIT Sloan Management Review*, vol. 44, no. 3, pp. 35-41

Chiang, Y. and Hung, K. (2010). Exploring Open Search Strategies and Perceived Innovation Performance from the Perspective of Inter-organizational Knowledge Flows, *R&D Management*, vol. 40, no. 3, pp.292-299

Chiaroni, D., Chiesa, V. and Frattini, F. (2011). The Open Innovation Journey: How firms dynamically implement the emerging innovation management paradigm, *Technovation*, vol. 31, no.1, pp. 34-43

Cohen, W. M., and D. A. Levinthal. (1990). Absorptive capacity: A new perspective on learning and innovation, *Administrative Science Quarterly*, vol. 35, no. 1, pp.128–52

Courtney, J. (2017). Design Thinking vs Design Sprints, what's the difference?, Available online:https://medium.muz.li/design-thinking-vs-design-sprints-whats-the-difference-47f490402077 [Accessed 11 March 2019]

Crossan, M.M., Lane, H.W and White, R.E. (1999). An Organizational Learning Framework: From intuition to institution, *Academy of Management Review*, vol. 24, no. 3, pp.522-537

Cui, Z., Loch, C. H., Grossmann, B. and He, R. (2012). How Provider Selection and Management Contribute to Successful Innovation Outsourcing: An empirical study at Siemens, *Production and Operations Management*, vol. 21, no. 1, pp.29-48

Design Management Institute (n.a.). What is Design Thinking?, Available online: https://www.dmi.org/page/WhatisDesignThink [Accessed 3 March 2019]

Deichmann, D., Rozentale, I. and Barnhoorn, R. (2017). Open Innovation Generates Great Ideas, so why aren't companies adopting them?, *Harvard Business Review*, Available online: https://hbr.org/2017/12/open-innovation-generates-great-ideas-so-why-arent-companies-adopting-them [Accessed 23 March 2019]

Du Chatenier, E., Verstegen, A.A.M.J., Biemans, H.J.A., Mulder, M., Omta, O. (2009). The Challenges of Collaborative Knowledge Creation in Open Innovation Teams, *Human resource development review*, vol. 8, no. 3, pp. 350-381

Edmondson, A. and Moingeon, B. (1996). From Organizational Learning to the Learning Organization, *Management Learning*, vol. 29, pp.5-20

Elliott, D., Smith, D. and McGuinness, M. (2000). Exploring the Failure to Learn: Crisis and the barriers to learning, *Review of Business*, vol.21, no. 3/4, pp.17–24

Engström, J. (2017). When Consultancies Acquire Design Agencies: Fjord and Veryday, *Swedish Design Research Journal*, no.1, pp.22-25

Fiol, M.C. and Lyles, M.A. (1985). Organizational Learning, *Academy of management review*, vol. 10, no. 4, pp.803-813

Garvin, D.A. (1993). Building a Learning Organization, *Harvard Business Review*, vol. 71, no. 4, pp.78-91

Gassmann, O. (2006). Opening Up the Innovation Process: Towards an agenda. *R&D Management*, vol. 36, no. 3, pp. 223-228

Gibbons, S. (2018). Using Prioritization Matrices to Inform UX Decisions, Available online:

https://www.nngroup.com/articles/prioritization-matrices/ [Accessed 11 March 2019]

Gioia, D.A., Corley, K.G., and Hamilton, A.L. (2012). Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology, *Organizational Research Methods*, vol. 16, no. 1, pp.15-31

Gothelf, J. and Seiden, J. (2016). *Lean UX: Design Great Products with Agile Teams,* Sebastopol, US: O'Reilly Media, Inc.

Hamel, G. (1991). Competition for Competence and Interpartner Learning within International Strategic Alliances, *Strategic Management Journal*, vol. 12, no. 1, pp.83-103

Holmqvist, M. (2004). Experiential Learning Processes of Exploitation and Exploration Within and Between Organizations: An empirical study of product development, *Organization Science*, vol. 15, no. 1, pp.70-81

Hu, Q., Found, P., Williams, S. and Mason, R. (2014). The Role of Consultants in Organizational Learning, *Journal of Management Policy and Practice*, vol. 15, no. 4, pp.29-39

IDEO (n.a.). Design Thinking, Available online: https://www.ideou.com/pages/design-thinking [Accessed 8 March 2019]

Johansson-Sköldberg, U., Woodilla, J. and Çetinkaya, M. (2013). Design Thinking: Past, present and possible futures, *Creativity and Innovation Management*, vol. 22, no. 2, pp.121-146

Kipping, M. and Engwall, L. (eds) (2002). *Management Consulting: Emergence and dynamics of a knowledge industry*, Oxford: Oxford University Press

King, W. R., Chung T.R. and Haney, M.H. (eds) (2008). Knowledge Management and Organizational Learning, *Omega*, vol. 36, no. 2, pp.167-172

Knapp, J. and Kowitz, B. (n.a.). The Design Sprint, Available online: https://www.gv.com/sprint/ [Accessed 11 March 2019]

Knapp, J., Zeratsky, J., Kowitz, B. (2016). *Sprint: How to Solve Big Problems and Solve New Ideas in Just Five Days*. Simon and Schuster, New York.

Kubr, M. (ed) (2002). *Management Consulting, A guide to the profession 4th edn*, Geneva: International Labour Office

Laursen, K. and Salter, A.J, (2013). The Paradox of Openness: Appropriability, external search and collaboration, *Research Policy*, vol. 43, no. 1, pp.867-878

Lawrence, T.B., Mauws, M.K., Dyck, B. and Kleysen, R.F. (2005). The politics of Organizational Learning: Integrating power into the 4I framework. *Academy of Management Review*, vol. 30, no. 1, pp. 180–191

Liao ,S.H. and Wu, C.C. (2010). System Perspective of Knowledge Management, Organizational learning and organizational innovation, *Expert systems with applications*, vol. 37, no. 2, pp.1096-1103

Liedtka, J. and Ogilvie, T. (2011). Designing for Growth: A design thinking tool kit for managers, New York: Columbia Business School Publishing

Linder, J.C., Jarvenpaa, S. and Davenport, T. (2003). Toward an Innovation Sourcing Strategy, *MIT Sloan Management Review*, vol. 44, no. 4, pp.43-49

March, J.G. (1991). Exploration and exploitation in organizational learning. Organization Science, vol. 2, no.1, pp.71–87

Moretti, F., and Biancardi, D. (2018). Inbound Open Innovation and Firm Performance, *Journal of Innovation & Knowledge*, https://doi.org/10.1016/j.jik.2018.03.001

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation, *Organization Science*, vol. 5, no. 1, pp.14–37

Nussbaum, B. (2004). The Power of Design, *Business Week*, Available online: https://www.ideo.com/post/the-power-of-design-in-businessweek [Accessed 1 March 2019]

Powell, A. (2016). How IDEO Designers Persuade Companies to Accept Change, *Harvard Business Review*, Available online:

https://hbr.org/2016/05/how-ideo-designers-persuade-companiesto-accept-change [Accessed 4 March 2019]

Quinn, J.B. (2000). Outsourcing Innovation: Engine of growth, *Sloan Management Review*, vol. 41, no. 4, pp.13-28

Randhawa, K., Wilden, R. and Hohberger, J. (2016). A Bibliometric Review of Open Innovation: Setting a research agenda, *Journal of Product Innovation Management*, vol. 33, no. 6, pp.750-772

Roxburgh, H. (2016). Why Big Consultancies Buy Design Agencies. Campaign Asia-Pacific, Available online:

http://ludwig.lub.lu.se/login?url=http://search.ebscohost.com/login.aspx?direct=true& AuthType=ip,uid&db=bth&AN=116349792&site=ehost-live [Accessed: 10 March 2019]

Rylander, A. and Peppard, J. (2005). What Really is a Knowledge Intensive Firm? (Re)framing research in the 'knowledge economy', *Royal Institute of Technology*, vol. 10, pp.1-28

Rylander, A. (2009). Design Thinking as Knowledge Work: Epistemological foundations and practical implications, *Design Management Journal*, vol. 4, no. 1, pp.7-19

Schilling, J. and Kluge, A. (2009). Barriers to Organizational Learning: An integration of theory and research, *International Journal of Management Reviews*, vol. 11, no. 3, pp.337-360

Sheehan, N.T. (2005). Why Old Tools Won't Work in the 'New' Knowledge Economy, *Journal of business strategy*, vol. 26, no. 4, pp.53-60

Stanko, M. A. and Calantone, R. J. (2011). Controversy in Innovation Outsourcing Research: Review, synthesis and future directions, *R&D Management*, vol. 41, no.1, pp.8-20

Stanko, M. A., Fisher, G. J. and Bogers, M. (2017). Under the Wide Umbrella of Open Innovation, *Journal of Product Innovation Management*, vol. 34, no.4, pp.543-558

Sun, P.Y.-T. and Scott, J.L. (2005). An Investigation of Barriers to Knowledge Transfer, *Journal of Knowledge Management*, vol. 9, no. 2, pp.75–90

Szulanski, G. (2003). Sticky Knowledge: Barriers to Knowing in the Firm, Thousand Oaks (California): Sage

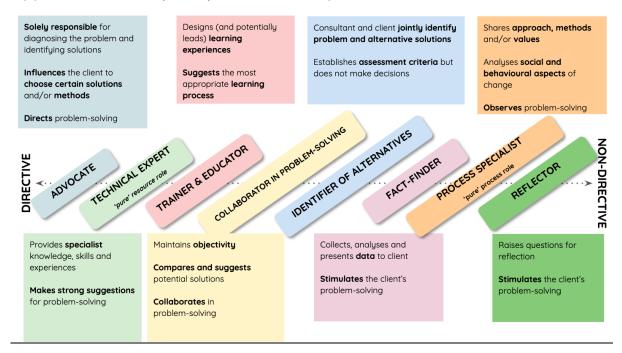
West, J. and Bogers, M. (2014). Leveraging External Sources of Innovation: A review of research on open innovation, *Journal of Product Innovation Management*, vol. 31, no. 4, pp.814–831

Zell, D. (2001). Overcoming Barriers to Work Innovations: Lessons learned at Hewlett-Packard, *Organizational Dynamics*, vol. 30, no.1, pp.77–86

Zobel, A. (2016). Benefiting from Open Innovation: A multidimensional model of absorptive capacity, *Journal of Product Innovation Management*, vol. 34, no. 3, pp.269-288

Appendix

Appendix 1: Kubr (2002)'s roles description



Source: own representation; Kubr, 2002.

Appendix 2: Active participant observation in workshops

Name	Objectives	Activities	Details
UX Toolbox Forum	Share limitations of current UX toolbox Review best practice examples of UX toolboxes Feed into business case for a new UX toolbox	'Lightning demos' of best practice UX toolboxes Long-term goal setting for UX toolbox Brainstorming problems 'How might we?' and dot voting	21/02/19 CC office No. of attendees: 8 -External Communication Specialist - UX Manager, Digital - CX Manager, Digital - Digital Store Manager, Marketing - UX/UI Designer, Digital - IT Manager - LU Student, Thesis' author - LU Student, Thesis'
Design Sprint Workshop (part of business development project workshop)	Gain a thorough understanding of users involved in digital projects at the company and their pain points Define the problem and brainstorm as many ideas as possible to tackle this Prototype an idea, test it with users and capture their feedback	Dot voting on pain points 'How might we?' and dot voting Prototyping, pitching and dot voting	22/03/19 CC office No. of attendees: 8 - UX Manager, Digital - CX Manager, Digital - Team Lead, Digital - Digital Store Manager, Marketing - UX/UI Designer, Digital - Product Owner, Digital - LU Student, Thesis' author - LU Student, Thesis'

Appendix 3: Interview guide - exploratory interview for CC employees

Note:

- If interviewee has worked on multiple projects, ask them to answer the question for each case and draw comparisons
- DA employees have a separate interview guide

The design of this interview guide intentionally seeks to focus first on the project and then gradually introduce the concepts of DAs and OL. In doing so, the researchers build a gradual understanding of the project and seek to avoid biasing interviewees by implying that there is a relationship between DAs and OL within the specific project.

Project

The following section seeks to gain a general overview of the context in which the project was developed. In particular, the questions aim to understand the goals, the people involved (incl. management) and the timeframe.

Overview

What was the goal of this project?

(if there was one) Did this goal stay the same across the entire project?

Who initiated the project?

Who was the project owner?

When did the project start and finish?

At what stages were you involved?

What is the current status of the project?

Was there buy-in from senior management?

Was the project known across the company?

Roles/skills

Who else from [case company] was involved?

(If there were other people) At what stages were each of these involved?

What were the main roles/skills needed for the project?

Were these easy to find within [case company] (or was there a 'skills gap')?

Working with DA

The purpose of the Master's thesis is to investigate the relationship between DAs (as a type of OI) and OL. Therefore, the following section will touch upon their relationship from different perspectives.

Overview

The following questions allow the researchers to understand what was the main reason for the CC to hire the DA and when it was important to have them onboard. This information can give important insights on the DA's impact on the company's projects and whether OL was a factor for bringing in the DA.

Who selected DA?

What was the reason for bringing in DA?

At what stages were they involved?

Wavs of working

This subsection aims to understand the ways of working of the DA (i.e. its methods and tools, which rely on DT methodology) and if these have been well accepted by the employees of the CC or not. Resistance and the receptivity of the team to new ways of working constitutes a mediating factor that has been addressed in the literature (Hamel, 1991) [First version of RQ2: mediating factors]

How did you work with DA (i.e. sprints)?

How did you communicate with DA (i.e. type of communication, frequency)? Do you think there was any resistance within the team towards working with DA?

Roles/skills

On the path to understanding whether the DA effectively influences the organisational learning of the CC, it is valuable to figure out what roles and skills were needed for each project and particularly if these were accessible in-house or not. Ultimately, the comparative study (i.e. differences across the three projects and differences across the stages of each project) will allow the researchers to understand whether certain skills (e.g. ability to focus on customer's needs) have been built/improved in the company or not. [First version of methodology: comparative study]

What were the main roles/skills of people from DA? Were they filling in 'skills gaps' within [case company]?

Experience

Here a general assessment of the working relationship is asked. As the aim of the explanatory interview, the interviewees were asked to assess their experience with the DA on a general level (i.e. whether this was positive or negative).

Since this is a comparative study, in order to figure out why and how a project has been more successful (i.e. higher organisational learning) than others, the interviewees were also asked if they were already familiar with the DA's working style or not. [First version of RQ1: OL levels] Had you worked with them previously?

How would you describe your experience working with DA?

Relationship (not collaboration/partnership)

The ultimate goal of this section is to better understand the nature of the relationship between the DA and to infer the extent of the knowledge flow from the DA to the company.

Was DA taking a leading role or a supporting role in this project?

How much creative freedom did you give them in their work?

How would you describe the relationship between DA and [case company] (unilateral/contractors or bilateral/partnership)?

Learning

With the following questions the researchers aim to understand whether the employees were able to learn from the relationship with the DA (particularly regarding the DT methodologies) and if yes, through what learning mechanisms.

Here the authors are interested in understanding whether there are any mediating factors which influence the relationship between the DA and the company's organisational performance, and in particular the influence of the former to the latter. [First version of RQ2: mediating factors]

The questions are posed both on a personal and an organisational level. *The second round of interviews (in-depth interviews) will focus more on this part.* Moreover, as one of the goal of the DT methodology is to break the silos within the organisation and let employees from different department start collaborating and share information and ideas, the researchers purposively asked them if this was the case.

What (if anything) did you personally learn from DA?

(if yes) How did you learn this?

(if yes) Have you applied these learnings since in another context?

What (if anything) do you think [case company] as a whole learnt from DA?

(if ves) How did they learn this?

(if yes) Have you seen [case company] apply these learnings since in another context? Do you think [case company] encourages its employees to learn?

Do you think [case company] encourages its employees to use new knowledge and skills?

Did you learn from the other [case company] employees brought into the team?

Design agencies

On a more general level, this section seeks to understand what are the features of DAs that motivate the CC to collaborate with them. Moreover, the researchers would like to understand if the ultimate goal is to bring such features in-house (i.e 'internalise') or to continue working with the DA in the future (i.e. 'access') (Hamel, 1991).

Why does [case company] choose to work with design agencies?

What makes DA different from other external partners?

Do you think there is a goal to eventually develop DA's skills in-house?

Creativity and innovativeness

Since the organisational learning is primarily linked to the DT methodology, with the first question the researchers want to understand from people actually involved in creative and innovative projects whether they think it is possible to learn to be more innovative and creative or if it something that is innate.

Since the current literature is lacking a clear answer (Michelino, Lamberti, Cammarano and Caputo, 2015 cited in Stanko, Fisher and Bogers, 2017; Moretti and Biancardi, 2018), the second question aims to understand how the CC can measure the changes in innovation performance made by the DA.

Do you think individuals and companies can learn to become more creative and innovative? How can [case company] measure changes in creativity and innovativeness, at an individual-and company-level?

Conclusion

As for the purpose of the snowball sampling method (referred to in Chapter 3), at the end of every interview the researchers were asked if there was any additional stakeholder (internal or external), who had worked on the project(s) and who would be useful for the purpose of this research.

Is there anyone else that we could talk to who was involved in the project?

Appendix 4: Interview guide - exploratory interview for DA employee

This interview guide has been built with the same purpose as the previous one. Of course, this interview guide aims to gain the DA's point of view and therefore focuses more on their perspective.

As it was the first time the researchers had met the interviewee, questions on their role, background, team, duration at the design agency and working with the CC were first asked. More details about their strategies, ways of working, methods and tools (i.e. PbD) were asked. Company-specific questions which the DA would lack knowledge on have been omitted, whereas references to multiple case studies which the interviewee had oversight of were added in.

DA

Role

Could you explain your role?

What is your background?

Are you based in a particular team?

How long have you been at DA?

How long have you worked with [case company]?

How many [case company] projects have you worked on?

DA

What types of projects do you work on with your clients?

What concepts, theories and methods are DA most strongly anchored to?

How receptive are your clients to these concepts, theories and methods?

Why do you think clients choose to work with DA and not other design agencies?

How would you describe your typical client relationships?

Short vs long term

Transactional vs collaborative

Leading vs supporting

Working with [case company]

Overview

Who first contacted you from [case company] about the projects?

[Project3] -

[Project1] -

[Proiect2] -

What was the reason for bringing in DA?

[Project3] -

[Project1] -

[Project2] -

At which stages were DA involved?

[Project3] -

[Project1] -

[Project2] -

At which stages were you personally involved?

[Project3] -

[Project1] -

[Proiect21 -

Is DA still actively involved in any of these projects?

[Project3] -

[Project1] -

[Project2] -

How would you describe your experience working with [case company]?

[Project3] -

```
[Project1] -
       [Project2] -
Roles/skills
What were the main roles/skills of people from DA?
       [Project3] -
       [Project1] -
       [Project2] -
Were they filling in 'skills gaps' within [case company]?
       [Proiect3] -
       [Project1] -
       [Project2] -
Ways of working
How did you work with [case company]?
       [Project3] -
       [Project1] -
       [Project2] -
Could you describe how the design sprint / 'proof by design' process works?
Has this process been customised for [case company] or is it the same for all your clients?
How did you communicate with [case company]?
       [Project3] -
       [Project1] -
       [Project2] -
What factors (if any) enhanced your work with [case company]?
What factors (if any) hindered your work with [case company]?
Do you think there was any resistance within the team towards working with DA?
       [Project3] -
       [Project1] -
       [Project2] -
Relationship
Was DA taking a leading role or a supporting role in this project?
       [Project3] -
       [Project1] -
       [Proiect2] -
How much creative freedom were you given in your work?
       [Project3] -
       [Project1] -
       [Project2] -
How would you
                    describe the relationship between DA and [case
                                                                                   company]
(unilateral/contractors or bilateral/partnership)?
       [Project3] -
       [Project1] -
       [Project2] -
Is it important for you to have this kind of relationship, and why?
Learning
What (if anything) do you think [case company] as a whole learnt from DA?
       [Project3] -
       [Project1] -
       [Project2] -
       (if yes) How did you teach this?
              [Project3] -
              [Project1] -
```

[Project2] -

(if yes) Have you seen [case company] apply these learnings since in another context?

[Project3] -

[Project1] -

[Project2] -

Is it important for your clients to learn from you, and why?

Compared to your other clients, has [case company] learnt more or less? Why?

Do you think [case company] encourages its employees to learn?

Do you think [case company] encourages its employees to use new knowledge and skills?

Do you think [case company] employees learnt by working in mixed teams?

[Project3] -

[Project1] -

[Project2] -

Design agencies

Do you think [case company]'s goal is to keep working with DA or to eventually develop DA's skills in-house?

Creativity and innovativeness

Do you think individuals and companies can learn to become more creative and innovative? How can companies measure changes in creativity and innovativeness, at an individual- and company-level?

Appendix 5: Coding exploratory interviews

Anonymisation list

[IT consultancy(1)]: outsourced IT consultancy

[IT consultancy(2)]: small IT consultancy

[IT consultancy(3)]: digital document services

Markets(X): besides Sweden the case company operates in other 8 different countries

Projects description:

Project Name	Description
Project 1	Started as a stand-alone customer journey mapping project. Led to a new app for different customer segments.
Project 2	Banking app for Millennials.
Project 3	Re-platforming banking websites for two markets

	4		
-vni	aratori	/ Intor	VIOWE
-851	oratory	HILLEIN	V 1 C VV 3

Contextual
factors

Interviewees

[Interviewee H]: In collaboration (project lead) with [case company] since the beginning (i.e. 2 ½ years); 2-year contract, renewed.

[Interviewee C]:

[case company]: been at [case company] for 4 years

[Interviewee D]:

In the Global [case company's main partner] at the time of the [project 2] project, until end of 2017. Year off, and then back into the [case company] SE.

[Interviewee B]:

[case company]: Been at [case company] for 2 ½ years

Projects

[project 2]

PO: [Interviewee C]/[interviewee A]

T: Q2 2017

[project 1]

PO: [interviewee A]

T: 2018

[project 3]

PO: [interviewee F] T: Q2-Q4 2018

For the goals of each project see the transcripts

For the current status of each project see p. 4 [Interviewee C]

Projects Process

Initiators of the projects/ideas

[project 2]:

[I.C]: "... it came from the board but they, this is classic [case company], but they bypassed the

executive team. So the board talked to us, and we naively accepted, and then the CEO and CFO found out later. So they were a little upset about it."

[I.D]: "... it was the global [case company's main partner] Team and the Digital Team. [interviewee A] was just starting to work with the Design Sprints, so we decided to pick up [case company's main partner] as one of the things to do."

[project 3]:

[I.C]: "For [project 3] it was essentially a market that had a need and I wanted to make an experiment and [interviewee F] had an idea of how we could do this." (in the lab called 'Spaces') [I.B]: "No he's not in the business any longer. But he kinda sparked the idea and he talked about what he had done in his previous companies that were very traditional and how he opened up spaces or labs and this idea. That kind of I think sparked that. I mean we have thought about it for a long time but now we saw that it could actually be possible. We were piloting this new way of

working." [project 1]:

[I.C]: [Interviewee C] giving instructions to [interviewee A]

Buy-in from managers

[project 2]:

[I.D]: "Yes, I would say it was [support by the management]. Jessica, she was my manager at the time and she was member of the management team of the bank ... I think we were supported doing it, but more to try something new. Maybe not with the focus that whatever you come up with, we are gonna do. I think it was more of 'ok, let's elaborate and try this and see if we can do something different'."

[I.D]: Project conducted 'by side', no milestones given by the management, really flexible and experimental.

[project 3]:

[I.C]: "... the CEO liked it and the CFO liked it, but the CEO forgot to mention it to the board and we didn't anchor it in the rest of the organisation, so it created a lot of antibodies within the organisation. So we got killed because the board didn't know, because the CEO forgot to tell the board."

[I.B]: "Yeh I mean we had what we wanted. We didn't need anymore. We had it covered. What I could see from a financial point of view. Now I'm speaking for myself. There might be things I don't know. But from my point of view everything was covered."

[project 1]:

[I.C]: "[project 1] had a stakeholder in Sweden and usually whatever Sweden wants get done ... Here also, in this company, the central, I mean the executive management has very little formal control over the countries. The countries do whatever they want and especially Sweden."

All:

[I.C]: [would you say you had oversight throughout all of them?] "Yeh again I would say, I mean, people who run these things work for me. I had different types of involvement and the key one was getting money to get it done and to ensure that they fit within our portfolio of initiatives that we have ... for [project 2] I would say I was super involved end-to-end. [project 3] and [project 1], I started them, I ensured there was money for them, I approved their kick off and then I had to keep track of them and review budgets. You know whenever there's a change in direction. But you know in my team we always catch up every week for status updates. On top of that, every month I have a one-on-one and every month we have a deep dive on issues that are important for the team."

In general a good way to get the buy in from management is to create KPIs that can measure creativity, customer-centricity/value and innovation that are understandable by the CFOs to get buy-in ([Interviewee H], p.16-17)

Skills and capabilities needed for the projects

[project 2]:

[I.C]: "So we had [interviewee A] who is the customer centricity advocate. So yeh, credit, compliance, IT architecture. [interviewee A] kind of project managed it. I was the product owner. Then it was [design agency] that provided a UX designer, GUI designer and the facilitator of the sprint methodology that we used. They provided these three resources. By the way, we also had [case company's main partner] people, so the end customer was involved in this."

[I.D]: mentioned also legal and risk

[I.D]: "... we tried to involved people at the time that we needed to pick their brains, because we didn't want anything to limit the thinking. Since we wanted to do something that it was new and a bit outside of what we do, outside the box, whatever you wanna call it, we involved people when we needed the competence and when we needed to do some different thinking I would say."

[I.D]: People participating at the sprints - "We had a core team and then it was added people depending on the expertise."

[project 3]:

[I.C]: "The other, so **[project 3]**, we had a UX designer, he's more of a GUI person actually. Then a product owner, [interviewee F]. Then the countries, the commercial representative, so the marketing manager in [Market 5] and [Market 3]. And then developers, so front end and back end."

[project 1]:

[I.C]: Similar set up to [project 2]

Methods used

[project 2]: Design Sprints

[I.D]: "... a few spread out in a period of time [instead of one big 5-day Sprint."

[project 3]:

[I.C]: "... there was sprints but development sprints [instead of design sprints]. It was more of a, a little bit more technocentric."

[I.B]: "Yeh that's another thing as well. A completely different way of working, using small product team. We had [interviewee F] as a [pause] we were following like the Silicon Valley way of working. So we had a product owner, a product designer which was me, and then we had two developers and one visual designer. So that was a small end to end team. Super agile."

[project 1]: Design sprints.

DA's overall role

Method

Working together on customer-centricity

[I.C]: "[design agency] said, when they came in, you want innovation? We don't know, you know, we don't know what's gonna work. But we think we need to work together. And the way to make innovation relevant is to involve the customers so that we can test whether or not the damn thing is relevant quickly. And this is the method."

[I.C]: "They said 'we have a methodology that allows us to find things together and for you to learn how to understand your customer'. So we're working together towards a goal and we feel like we're constantly upskilling ourselves."

[I.H]: "We are really focused on the 'working together' part."

Undefined outcomes

[I.D]: "...It was very inspirational to do something where you can't see the end result. Because often, when you do something otherwise you know ... you know what the goal is gonna be and

how you get there, so I think it was kind of interesting to do just something new and work with different methods."

[I.B]: "So [design agency] is really good at finding the direction. So for the [project 1], we didn't know anything, was it gonna be an app or something else? That's what they're really good at."

Customer journey mapping

[I.H]: "And we also try to make the customer journey the tool that you use to break down silos in the company. So everyone takes ownership of the full customer journey, and everyone can contribute to make the full customer journey better. That's really the core to us. We do a lot of customer journey mapping with [case company] as well, to make sure that we look at the customers' needs and look at the real problems to solve instead of something being inside-out"

Design sprints and customer-centricity

[I.C]: "The reason why I brought them in is the way they worked. You know they worked in a way that I thought developed us. So they had a methodology that was fun, I mean the first thing about design sprints is that they're a lot of fun. And then it enforces customer relevance in the process. ... So it doesn't allow us to get in our bubble and do things just because we want them. You know, the customer also has to want it."

[I.C]: "Well they introduced us to the design sprint methodology and I think that has been super valuable because it's such a marketable tool. It is so easy to explain and also what I really like is the fact that it arrives at a prototype that you can test with users ... So it is a very structured way to do something that is inherently creative. Ahh, and also it gets rid of a lot of the paperwork and the crystallisation of your ideas are the prototype. And you get customer feedback from it directly. So it's ummm yeh the design sprint has been the centre piece by which we market customer centricity in this company at this moment and it's been reasonably successful given the circumstances."

Concept and discovery stage

[I.B]: "I see them [[design agency]] as the most valuable when they are working in [pause] in the concept stage and discovery stage"

[I.B]: Without [design agency], [case company] "It doesn't do it at all. Nothing ... they don't have the knowledge. They don't know about it ... They don't think about this kind of stuff at all."

Diverse teams

[I.C]: "...you know like people who aren't so deeply into the business usually come with the freshest perspectives. Like [project 2] was a really good example from the perspective that it tested super well, the users liked it, they got it ... One thing I've learnt from design sprints actually, well no in general, is that the good ideas usually come from the less senior people. The more senior someone is the more useless they are."

[I.H]: Importance of bring different people together and break down the silos - "It's critical, and if you have people with the same background you would probably come up with the same idea, therefore diversity is the key, core to make innovation happen."

Be more creative and innovative

[I.C]: "... what design thinking does is it doesn't make you more creative necessarily, but it just makes your creative process more efficient. So it's a way to make creativity efficient ... people don't think before they talk. So it forces you to think as creative as you may or may not be. It forces you to use your neurons to create and then to have it sort of in writing so that you remember what you've created ... It creates a safe space and you're not judgemental and loud people shut up for a little bit. Which maybe encourages the creativity or allows you to focus and be more efficient ... But at least what this thing does is help you be more efficient with whatever creativity you have."

- [I.B]: "... that kind of activities [design sprints] is very rare here, which I really would like to see more of ... I think everybody can do it [be creative and innovative] It's just forcing yourself to do it. And people get surprised when they talk, talk, talk and write, write. Then all of a sudden they need to put all this writing into a screen that they can actually see and I think that that kind of thinking, putting your thoughts on a real prototype. That sparks a lot of kind of creativity and another way of thinking than just looking at requirements."
- [I.D]: "Yeah, it was a good learning ... I definitely think that there is something to be picked up ... maybe even more to think outside of the box and outside of what we are doing. And think on new ways of doing things I would say."
- [I.D]: "Yes, I think if you can allow yourself to let go, I think you can do so. It was difficult sometimes [working with [design agency]'s method], but I enjoyed doing it, and I think it was a new experience as I said to me, and I think you just need to try not put what you already know into this; I remember we talked about something 'ok if we set it up like this and then being like 'I know this can't work in some markets because you have the legal and whatever it could be' [pause] but just let it go and just try to think forward anyways."
- [I.H]: "I think everyone has a level of creativity in them, but I think it's hard for them to kind of come up with the procedures and processes that they are 'locked' into today, so if you come in with a again way of working that 'unlocks' the potential, than you unlock the creativity in people as well, and that is why we bring everyone in, the diversity, and then IT back in development come with the best concept for a visual design."

Skills gap or method

Skills gap

- [I.C]: "It depends ... Because there's the big projects, the real PMO. And they say, I want 40 hours of UX and then they go, hey [design agency] can deliver this for 40 hours. That's pretty unilateral I think."
- [I.C]: "... [project 3] was different. It was more, we need hours, we need a designer ... we have a deadline and it has to be done in three weeks. So give us three weeks of designer."
- [I.H]: "Very often a project needs a designer or a GUI person so we work with [design agency]. But then it's kind of like a bodyshop, we just need someone for a few hours and [design agency] provides that. We sometimes do that as well, we have a specific thing which requires these many hours for someone to draw boxes and what not."
- [I.D]: For [project 2] [case company] and [design agency] reached the perfect level of team variety "[[design agency] contributed mainly with] the user experience and how to present or how to show and interact with the users. But they did the full journey, the full digital journey."
- [I.D]: Reasons for bringing [design agency] "I think it had to do with the resources and I also think it had to do with the expertise at the time."
- [I.B]: Visual designer (x2) from [design agency] in [project 3]

Collaboration

- [I.C]: "... [For] [project 2], we had a brief from the board to provide something and we went through the whole process to find what it is that we're providing a solution. So they were partners in finding out what it is that we should provide. Then finally you have something like [project 1] which is actually super organic ... 'you know what, we have no idea about the customer journey'."
- [I.D]: "I split the ones that we worked with in suppliers or partners and this was more of a partnership I would say, we work together more than just suppliers ... Because you bring the business forward together, or the idea, as with the agencies I would say."

[I.H]: "More collaborative. Everything it's collaborative. We try to go and sit at the customers' offices as often as possible, also we invite customers here, we have space for customers coming in, in this space, doing workshops. We like being really close to them. So always together. The three most important things are always together, customer-centricity and looking at problems."

[I.H]: "So in the beginning it was more like a normal client-design agency relationship, telling us 'can you help us with this product[pause]', but then when we saw that we were on the same path, they got more and more into the process and wanted to learn more."

Supporting vs leading role

[I.C]: "It depends. I think in the beginning they seemed to be taking more of a leading role because it was a new methodology for us. But then eventually as we grew comfortable I think they were happy to step back and take a more supportive role and our people were more comfortable taking a leading role. So it depends. The thing I think about, you know the [design agency], they're pretty good but this [Interviewee H] guy is really good. So then I, what I see is that he steps up when needed, he steps back when needed. So if there's a vacuum that needs filling and nobody's stepping up, he will fill it for you. When he needs to step back he does."

[I.C]: "So I brought them in a little bit to train my team to be more customer-centric. So then in that context they had a leading role because they were training us to do this. By the time we're kind of done then essentially we can run the workshops the way they run them. We're ready. But we still use them because we still need the resources and you know, sometimes you do need someone a little more familiar or like, you know, like maybe we have a less well trained facilitator in which case they need to step up. So it depends. But now, more and more, we run the workshop."

[I.D]: [project 2] - Leading role but "I think the first one [workshop] was just [design agency], and then I think [interviewee A] started to work in the same methodology, so I think she ran a few of the workshops for [project 1]."

[I.H]: "... it has moved, because we have the capability trainings and so on, so I think we were in the leading role in the projects beforehand, but now they already know the stuff themselves and so now we have just more a supporting role. So it has changed along the way, but then you can see us maybe again being more for a leading role in the scaling up the methodology, because we need to have everyone on board that is not on board yet. So in some of the projects being leading, where they haven't tried before."

[I.B]: For the [project 3] project [Interviewee H] had more a supporting role

[I.B]: OAM (Online Account Management) - Design sprints in Oslo with [design agency] (which took a leading role)

Long vs short-term relationship - in-house or not?

Yes in-house

[I.C]: "... I wanna work this way and by working this way I wanna show some results that hopefully creates a pull for change. Rather than me going and evangelizing and that sort of stuff. That said, [interviewee A] is more of an evangelizer, trying to be a change agent by teaching people. Like I wanna be a change agent by providing things that succeed."

[I.B]: "... [interviewee A] is doing a lot of co-facilitating with [Interviewee H] so she has that experience. And I think the ideas that we will just spread out, so we don't need [design agency] to facilitate over this ... [interviewee A] is doing a really good job of spreading this. I mean, she's doing design sprints round the company. Everybody's participating. I think they learn a lot. Hopefully that type of activities, hopefully will spread across the company."

[I.B]: OAM - "I co-facilitated some of the activities in the design sprint in [Market 4]. So I learnt a lot there." → stated that the method was clear and "I think some of the activities we do in design sprints we can do in a smaller way."

[I.H]: "So it has been a journey, also for us, come in, being focused on product and services, going to the methodology, teaching capabilities and now how can we scale this methodology in the company. As kind of next job to be done."

[I.H]: ".... maybe I would say 60-70% of our customers come with small tasks, but if we have done good, they ask us if we can be their kind of - like [case company] - their service design agency and build a contract and then continue to innovate and then also it becomes teaching capabilities in the company."

[I.H]: But "... I think it's bad business for us, because we have a kind of 'goal' not being relevant anymore."

No in-house

[I.H]: "... so what we have done is also teaching the capabilities and now we have like ten people that can facilitate design sprints at [case company], and they have their own UX designers, so they are doing a lot of stuff on their own now as well. But sometimes also, because you do a lot of stuff inside the company, can be really good if there is an external facilitator"

[I.C]: "I don't foresee that scenario [bringing their skills in-house] taking place because agencies exist for a reason and that is, they live at the cutting edge. On the brand side, you hire for resources that will be fully utilised. And then, you know, the resources at the cutting edge are usually never fully utilised. We use them 30-40% of the time. And also it's riskier or it's difficult to recruit or these are people who like to be agency side ... So I don't see that scenario happening. In fact, Apple hires designers from design agencies. If Apple does it then who are we kidding."

[I.C]: "... they rebrand themselves [[design agency] is continuously learning] and they have multiple clients. I don't see, unless things change a lot, how I'm gonna be at the cutting edge of some areas and the constant reinvention. Because we need to be a little bit more risk averse than how they are by nature. And also, again, there's the resource utilisation issue. You don't need 40 hours of certain resources all the time. So what to do? You hire an agency and use them 30% of the time. So that won't change."

[I.D]: It's a hard question, I would say, to me it would be more of a long-term relationship, because as I said before, I think we don't, and we also came to the conclusion, that we don't need to have everything in-house, we don't have to know and do everything on our own. So long-term relationship I would say. Also because if you wanna bring this in-house you also need to figure out they way of working with it and going forward and how you can gain the new knowledge that is needed in this area."

[I.B]: "I would say long-term. We were thinking of the long-term. That is one thing that is not a project-driven thing. And also, [Interviewee H], which is our Key Account Manager, usually, in my experience anyways, having that kind of role is quite special if you look at the relationships with [case company] and the agency. And that he can, I mean we get strategic advice, ummm they have a lot of knowledge of driving stuff. So, we also get, or I get that feeling that they also wanted to be long-term. They also wanted [pause]. I get the feeling that they want us to really succeed, not that taste that they're doing everything to maximise their money and time."

[I.B]: He would love to bring everything in-house though (he doesn't think to gain something by collaborating with external partners) but currently there is a budget constraint that impedes building a in-house team "... it takes resources. It's easy to say that but it can disappear so fast. People

leave. I mean we don't have a sustainable anchorage for these type of questions. The closest is [interviewee A] as an ambassador for this, but we don't have like a real stable design team. I mean with UX. Doing this kind of stuff, you need UX designers and visual designers."

Working relationship [design agency]

[I.C, I.D]: Informal communication, mostly through [interviewee A]-[Interviewee H] → [interviewee

A] in constant contact with [Interviewee H], [Interviewee C] involved every 4-6 decisions.

Communication tools: Trello, phone, emails.

[I.H]: "talking together 5 times a day, emailing 20 times a day (ahah), so it has been really close. I think I have spent like three or four days [per week] at [case company] in the past three years."

[I.H]: "They are really engaged [case company] as a client]! But I think it has been important for us not just come and say 'we have this methodology, we have this toolbox, we have this process, take it, it will solve all problems', because it won't. So what was core to us was that we wanted to proof that this was the right way to work, so we kind of took in a few steps, so we just took some small projects, did some small pilots, and we used the methodology without actually saying that this was the methodology - just mentioned 'we have this methodology called Proof by Design - it's a process, it's a toolbox and an excellent operating model to make this process work inside the companies" [E,J]: Working on site (geographical closeness super important)

Barriers

Lack of funding

[I.C]: "So working with [design agency] has never been a problem, budget wise, until this year. This year funding is a problem."

[I.C]: "The problem is that our budgets are very limited, very squeezed. So everybody has budget envy and says that money should be used to address my needs because I'm more important than everyone else."

[I.C]: Not involving customer testing in the early phases - "I think it's a lack of awareness. The lifeblood of everything is budget. And if you don't budget for it, then you don't have budget. And very often people don't budget for user testing so then it doesn't happen and you didn't think about it until the very end. And then it's really embarrassing to ask for more money, so people would rather not be embarrassed and deliver something more iffy."

[I.B]: "Yeh that's what [case company] talks about [experimenting]. But when it comes to paying for it, it doesn't match. We hear a lot but I don't see a lot basically. So I think they encourage it but as soon as someone needs to pay for it, they can't cover it."

[I.C]: "I think that we are so stressed and so, sometimes cost consciousness can be, you know. So design sprints look quite wasteful sometimes. Seven people. Five days. Full time. Buying lunch. And an agency to facilitate on top of it. Some people don't like it because of that."

[I.C]: "... the fact that [project 3] was closed ... It was a governance issue where people in powerful positions needed to optimise budgets and we were collateral damage ... it was purely governance and budget reasons."

Misalignment with pre-existing processes (Waterfall)

[I.C]: "It [project 3] was shut down because it did not follow the pre-existing processes and it was deemed as someone had lost control of things. It wasn't waterfall enough and we didn't follow. The

problem with the waterfall processes in the bank is that it focuses on inputs in money and time and it doesn't focus on results."

[I.C]: "The processes that are built today are about, how can we push this thing in a way that is controlled and how can we measure how many hours are spent. And the measuring costs more than the doing. I did that at Sony before, by changing the way things work, everything costs one-tenth of what it did before. What [project 3] showed was exactly that. Stuff that took us two years and still wasn't released took us three weeks. Ahhhh, but we killed it because the powers that be said that this is out of control and didn't follow the process. But it cost nothing. So we closed it. Everything went to the existing process. By the way, the existing process couldn't handle it ... So in the end, after closing it down and spending horrendous amounts of money on determining what to do next, in the end we gave it to the same people who built it. But on a maintenance role. So ok you're only allowed to keep it alive, not develop it further, which is another decision that's a little insane."

[I.C]: "I think some of them [PMO] think, deep in their heart, that they're doing what's right for the company. That you know it's about control, predictability and discipline. And that used to work, you know. If you boiled things down into the lowest common denominator, then you could hire less skilled people and save money that way. If something is repeatable the whole time, then yeh, it'll take a few years to get established but once it gets going it'll start churning out work and cost you little to do. That's not the business we're in. If we need to innovate, and every innovation is different from the last one, then that model doesn't work."

[I.D]: "... sometimes limit ourselves within the bank in what we can do and what we can't do, maybe system-based sometimes, but also the limitation is - I shouldn't say thinking - but the way we work." [I.B]: [project 3] - "I have my speculations but that's just internal politics. You kinda wanna protect a little bit. It was [pause] controversial. Since the way our development model did exclude some of the, or a lot of the roles that existed in [case company]. So if we were to go ahead then we would have a lot of redundant people. So it was, you can say it was BAs [business analysts] that in our model didn't have that much to do actually. And also project managers. That's kind of those two roles that didn't really fit in. Or I mean not as heavily as it is today."

[case company] doesn't encourage learning

[I.C]: "... it's actively discouraging it. And without knowing, unwittingly. [case company] used to be a very entrepreneurial place in the beginning. And Ingvar is you know the patron saint of entrepreneurs in some ways. But the way [case company] innovates is slightly different. So we are not technologists, in [case company] there's few technologists, and people are inherently uncomfortable with technology. So then when people are asked to do things that are outside their comfort zone, they recoil."

[I.D]: Learning in terms of set up training programs or rotation teams - "I think we could see more of that, but I think the company let you, but I would have wished that it would have been more talk about it than it is."

Incremental innovation over radical innovation

[I.C]: "... [case company] is like a sales organisation. We sell stuff and we are, how should I put it, a low cost copier. So we copy commodities. So that's always been our modus operandi. So we used to innovate by just getting commodities and doing it slightly differently. Actually no that's not really right, we have a monopoly still, with [case company's main partner]. So we would get whatever works and then say to [case company's main partner], hey we'll provide it for you because we're family. Then the entrepreneurship came on the sales side. Ok, how do we

opportunistically sell to other people what we sell to [case company's main partner] . The model worked as long as there wasn't much disruption in the market. Because [case company's main partner] gave us some sort of scale and helped to push costs down. Now when the model is about how to differentiate and how to innovate, then we're not equipped for these type of things. The type of people you need for this are technologists and innovators for lack of a better words." (continue with c-c: see misunderstanding on customer-centricity)

[I.C]: [project 2] - "... it was so weird. It was so different. That's not how we do this, that's not how a loan works, we've never seen a loan like this before. And so, you know, unfortunately many learnings aren't applicable because they're so counterintuitive to some people."

Customer-centricity misunderstood or seen as unimportant

[I.C]: "For us in the company, the word customer-centric means I'm a salesperson and whatever the purchasing person in our B2B relationship (which is [case company's main partner]) tells us to do then we will do it. While for me customer centricity is to actually understand the processes by which you elicit what the customers need. And there's a methodology for it, you know there's customer journeys. By the way, we always look at the business case and the numbers, but you need to remember that the customer makes decisions based on emotions right? I mean when you move with your girlfriend or boyfriend because you're in love, it's different from when you have to move because your spouse died. And that changes the whole customer journey. But we don't look at it like that. We don't have that understanding in the bank. So what it results in is when we try to approach things this way, by looking at technology differently or by looking at the customer to drive the business case (rather than the other way around). We usually start these conversations with our APRs are going down, our margins are going down or we have this product which has lower market share. How do we sell more or increase the margin? We're coming from the other side. I think that's what kills innovation."

[I.C]: "... I don't think we proactively say no to design sprints. But there is the cost-side and there is also this, but that's just UX. But that's just design. But that's just testing. You know. The difficult part is the technical things, the business cases ... So that's the problem we have and that gets dismissed, not because they are saying we don't like it. It's because there's not enough awareness to understand that actually if you're not building it for the user then who are you building it for. We build it for the business case first and foremost."

Organisational structure and political issues

[I.C]: "Then we have no clear accountability, so everyone does what everyone wants. Then it's coupled to a super strict command and control. The result of which is everyone does a lot of things, anyone can say no to stuff and kill initiatives. Very few people can say yes, let's do it in the end. Very few people have the mandate to take it all the way. That combination just kills the innovations that could happen in different places. And it drains the money away because people do things half away, then someone is going to kill it eventually. So it is a difficult environment in which to innovate." [I.C]: "The problem is usually involving the wider stakeholder set. So it gets really, ahhh. It's a very difficult balance, you know. What's the saying, if you want to go fast go alone, if you want to go further go in a group. We've typically emphasised speed ... So good work conceptually, and things that actually work, are usually the result of someone thinking alone. Then things that get accepted are usually things that everyone gets involved in. Then the sprint methodology is about marrying both. You want to bring the individual thinking, the deep thinking, the hard work of conceptualising things in detail, with an anchoring that is kind of socially acceptable. I think this is my mistake, that I tend to overemphasise the intellectual rigour and the logic of things, and I missed out a couple of

times the need of political allies. I tend to think ok, facts will work and numbers and results will speak for themselves. That's not true. It's political. And people will make decisions not knowing the data. And very many people in positions of power. Especially in a company where it's very easy to veto and very hard to say yes. So any person who has a negative opinion has the ability to kill an initiative but very few people have the ability to end-to-end drive something. Very few people have the mandate to do it. I think that was an issue we encountered."

Work in silos and lack of communication

[I.B]: [project 3] well known throughout the company? - "yes but maybe not in the way that would benefit the project [laughs]. I think there were a lot of rumours going around. Ummm, I mean we were transparent. We had, we had our backlog on the whiteboard openly. So everybody could go and see what we were doing. But we didn't actively, I mean, we have the news channel on the intranet. Normally we don't do a lot of project updates there so [pause]." → about the rumors "We don't really have a really accessible way of knowing exactly what people are doing inside the projects."

[I.D]: Difficult to bring forward ideas if you don't have a proper network "... if you know how to bring your ideas forward, and how you can move something and how you can have the networking internally, who can ask, who can explore with, who can give the idea to, and.. I think it's allowed [be creative and innovative] but I think it could be difficult if you don't have the basic network."

Resistance to [design agency]'s working style

Personality

[I.C]: "resistance to different bits I think. So some people are more technical and prefer, and like to be technical. Some people also like to work alone. Some people like to work with other people."

[I.D]: "I think it has to do with the people also, so I don't think all has to do with the areas and the way they work, because I think it has to do with what you are open with exploring."

Skepticism

[I.C]: "... we used to have the Labs team, the Spaces team, where we had a lot of engineers. And they were super skeptical of this. They thought it was marketing mumbo jumbo."

[I.D]: "... there is always a certain approach from risk people or legal people."

Resistance to give control away

[I.C]: "Now there's people who actually like to participate in these things as long as it's not their own product. When it's their own product, they're like 'no you shut up. I know. Don't you come and tell me what to do'."

[I.H]: "What you see is that when you come in with a practice like this, you do something that is completely different from what they [clients] are used to. Because, they think they know everything the customers want and we come in with a practice that says 'we don't know anything, we need to find out and the customers will tell us along the way'. So we cannot say what we are gonna make in the end, but we need to go and ask the customers and this is the process for it. So they buy into a process and don't buy into an outcome, which is a bit difficult for companies."

Project types

[I.D]: "... I'm not sure that the methodology [design agency]'s is working in all areas. I think it depends on the way is fitting in the organisation and what you wanna do and if you do have something that is external to the customers [pause] yeah"

Risk-averse

[I.H]: "...everything that is not really close to how things are today, and something that seems really new, people kind of get a bit scared. That's of course because they need to change something that is core, something that is a rule, something that is risk-aversity."

[I.H]: Of course [Because case company is a Bank], and I think it's evident that the compliance are looked after [pause] so we need to be aware of compliance, but we need to challenge it as well."

[I.H]: [project 2] → not legal in Sweden at that time (see p.8)

Proof by Design:

[I.H]: "...if we could combine our experience with doing design with the processes coming out of design thinking with lean startup, and combining design thinking with lean startup and our experience and all the activities that we have been using for the past 18 years and combine them into one methodology and kind of 'wander' it toward services and products. That was what Proof by Design came out from. So design thinking and lean startup and our experience combined into one process and then the toolbox filled with different activities that we do. So these different activities is something that we do a lot of times before, when you do insights, which differs in the Proof by Design methodology; it can be desk research as we all know, it can be interviews and it can be customer journey mapping and it's all these small activities that we all have combined into one thing. This is our inside phase. What comes out from the inside phases is a purpose. This purpose goes then into the next phase, which is the conceptualisation phase. So, the conceptualisation phase exists of things that we have also have done before, we have just structured it in a way that makes sense in this process, so it can be for example the design sprints, it can be high fidelity prototyping, it can be making sure that we actually create customer value. But one thing in the conceptualisation phase is that if we create customer value we also need to make sure that we create value for the business. So, what this includes is also a feasibility track. The feasibility track is where you take your prototype, which comes out from the concept in the visualisation phase, and you carry around the business and you say 'ok IT, can we do this? can we create a business model around this? can we ask the legal that this is ok? Do we need to do it in a Sandbox? etc.'. So, what comes out is that we have this high fidelity prototype, that we know customers want, and then we have feasibility track proving that this creates value to the business. And then we can go into a agile methodology to build the stuff. That is kind of the core practice of the Proof by Design. That's how we create services and products. So, it's not something that [pause] we didn't invent something completely new, we've just combined a lot of activities into a proven way to do stuff in the right way."

[I.H]: "Proof by Design is the toolbox, is the process and then is the operating model ... and we come in with another process and we think these things [existing processes, i.e. waterfall processes] can actually coexist [pause] but let them coexist in a way that we are sure about the operating model: where this creates value and which teams need to use this. So that's where the operating model comes in ... So we have respect for how big companies are structured and how they actually do things. Because there is a reason why you need some documents to fill out, legal stuff to be done along the way, and this process is maybe a bit more for - you know - things that are not exactly core to the business"

[I.H]: [project 1] as one of the best examples showing that you start without having in mind an outcome "It is simply just driven by insights ... What is really core is to really go into what is the real problem, keep challenging 'why, why, why, why, why', we have these 5 whys activities that it was used as well. So make sure that you do something that actually solve a real problem."

Scaling up process

[I.H]: "I think this is the toughest job to do [scaling up]. Because one thing is that it maybe took a year for us just to do pilots and products and services, and, in the back of mind, I knew that we have used this process, but again you need to prove to the rest of the business, that this is the right way to work, instead of just saying 'now it works like this' and it needs to be involved, to feel that this can change, how we do stuff, and that this actually creates value for the customers but also for the business. So, as we have proven our way in the small team, we need to prove our way in the company as well."

HOW?

[I.H]: "So, I think one thing that works for us is actually that starting out with the people that can actually want to change, to work in a new way. Because that it gets the way easier. Then you get some 'ambassador' for this way of working, and they were kind of, you know, influenced themselves. And then maybe make sure that everyone is aware that this is not the answer for everything, there is some things that work better for other projects [pause] so it's not a core strategy, it's just making people use it, then making people that was using it the ambassadors, and then making sure that they are aware of doing what it makes sense."

Learning from clients ([design agency] from its clients)

[I.H]: "... what we have seen also for the operating models to scale is that the operating model of how to scale the practice inside the company has been formed for the last 2-3 years and it has changed 100 times, because there was always something that worked but that needed to change and get better, etc. and it comes the best practice of doing things. And companies change as well, so we need to change operating model along the way."

Idea Generation within [case company]

[interviewer]: "....with the developing ideas and generating new concepts, do you think there is much guidance currently in the company around that, or is it a kind area where people aren't really sure how to deliver and develop new ideas within the company?

[I.D]: I would say it is a vague area. And I would say the ones that are doing things in that area or segment are the ones that are getting inspired by doing so or [pause] Yeah, it is really difficult to pinpoint but we have, I mean [pause] there are some people in the organisation, that really like developing things and finding new things we can explore or do, and I would say those are the ones that are in the forefront. It's not the bank I would say, but it's the people that are inspired by it ... The digital team maybe, like the people with the entrepreneurship background or just that want to explore and that maybe are not fully satisfied with what we are doing."

Appendix 6: Interview guide - in-depth interview for CC employees

This semi-structured interview guide for the in-depth interviews refers more specifically to specific frameworks and categories within the literature review. It leads on from an analysis of the exploratory interviews which helped to identify the most important topics within the literature review that would benefit from more specific questioning.

Introduction

Process and rules

- May we record the interview? It is anonymised. [let interviewee know that transcripts will be anonymised]
- Sometimes we will be using slightly conceptual language, so we will be aiding you with cards to explain these concepts and help you to visualise them

Goals of our thesis

• To better understand how DAs influence [case company]'s organisational learning [show cards with definition of learning and organisational learning]

The point of defining learning and organisational learning is to give interviewees a clear definition of the main concepts of interesting and also to stress how the two are different. This is because interviewees may not have their own existing definition or may have one that is significantly different from the literature.

The definition of learning presented was "learning is the development of knowledge and skills based on previous experience". The notion of "development" was taken from Fiol and Lyles' definition (1985, p.811) to stress that learning is an ongoing process. "Knowledge and skills based on previous experience" was taken from Schilling and Kluge's definition (2009, p.338) to stress that learning is both a cognitive (i.e. knowledge) and behavioural (i.e. skills) process. This is one of the main premises of Crossan, Lane and White's (1999) framework: "Premise 4: Cognition [understanding] affects action (and vice versa)" (p.523).

The definition of organisation learning presented was "a collective learning process, across different levels (individual \rightarrow group \rightarrow organisation), seeks to improve organisational performance and/or goals, more than the sum of each individual's learning, it becomes embedded and preserved in the organisation (i.e. routines, processes, structures, behaviours and norms)". This was underpinned by Schilling and Kluge's definition (2009, p.338). Crossan, Lane and White (1999) stress that "Premise 2: Organizational learning is multi-level: individual, group, and organization" (p.523).

 Understand how DAs influence each stage of their client's OL process? There are four stages in the literature: each stage represents a new development of the organisational learning [show card with all four stages]

The four stages in the literature come from Crossan, Lane and White (1999). One of their main premises is "Premise 3: The three levels of organizational learning are linked by social and psychological processes: intuiting, interpreting, integrating and institutionalizing [4Is]" (p.523)

• What are the barriers that they face at each stage of this process? The barriers at each stage, using the Crossan, Lane and White (1999) framework, have been outlined by Schilling and Kluge (2009).

Interviewees' role

- Answer questions based on a recent project that you have worked on with DA
 - Learnings based on subject matter/outcomes or the methods of the project
 - Could you please let us know which project you'd like to talk about? [If we're
 not familiar with this, then ask for a quick overview]

Interview

Broad

To warm up, and before going into the OL process, we'd like to show you two broad categories describing the role of consultants [show cards and explain them]

- 1. Which role do you think DA played in your project and why?
 - a. Resource-oriented
 - b. Process-oriented

These two broad categories come from Kubr (2002) and relate specifically to management consultants. It helps to contextualise the type of learning that design agencies provide. Whether this is based on 1) technical expertise and doing something on behalf of the client (resource-oriented) or 2) passing on a approach, method and/or values that can be used in the longer term (process-oriented).

Next, we have some more detailed categories describing the role [show cards and explain them]

2. Which of these roles (and you can choose more than one role) do you think DA played in your project and why?

Kubr (2002) plots eight categories on a spectrum of directive to nondirective roles taken by management consultants. These are 1) advocate, 2) technical expert, 3) trainer and educator, 4) collaborator in problem-solving, 5) identifier of alternatives, 6) fact-finder, 7) process specialist and 8) reflector. It helps to understand the relationship between the design agency and the client and the type of organisational learning that resulted.

Talking generally about your project, would you say that:

- 3. The ideas/insights generated were small or large changes for [case company]?
- 4. The methods used were small or large changes for [case company]?

Crossan, Lane and White (1999) view strategic renewal as the main outcome of organisational learning. Strategic renewal is the result of a tension between exploration (radical ideas/insights) and exploitation (incremental ideas/insights). Therefore, it is important to know on what side of the tension the projects fall.

Stage-specific processes

Next, we have a set of cards explaining each stage [show one card at a time and explains them].

- 5. How well does [case company] typically perform at this stage and why? (i.e. specific activities)
- 6. For your project, was DA involved in this stage? [If no, skip straight to barriers]
 - a. [If yes] Do you think working with DA made this stage better or worse and why?
 - b. What exactly did DA do at this stage (i.e. specific activities)?

This describes in more detail the stages outlined by Crossan, Lane and White (1999).

Stage-specific barriers

Next, we have a separate card outlining the barriers (meaning the factors that prevent or impede OL) that are typically experienced at this stage. [show card and explain them]

7. Thinking specifically about your project, would you identify with any of these barriers and if so why?

Are we missing any?

This describes in more detail the barriers at each stage outlined by Schilling and Kluge (2009).

Appendix 7: Interview guide - in-depth interview for DA employee

This interview guide has been built with the same purpose as the previous one. Of course, this interview guide aims to gain the DA's point of view and therefore focuses more on their perspective. Questions were rephrased accordingly and more details regarding the overall strategy of the working relationship were asked (see questions 9-10).

Introduction

Process and rules

- May we record the interview? It is anonymised.
- Sometime we will be using slightly conceptual language, so we will be aiding you with cards to explain these concepts and help you to visualise them

Goals of our thesis

- How do DAs influence [case company]'s organisational learning [show definition of learning and OL (incl. process)]
- More specifically,
 - o How do DAs influence each stage of their client's OL process?
 - 4 stages in the literature: each stage represents a new development of the learning [show cards]
 - What are the barriers that they face at each stage of this process?

Interviewees' role

- Answer questions based on a recent project that you have worked on with DA
 - Learnings based on subject matter/outcomes or the methods of the project
 - Could you please let us know which project you'd like to talk about?
 - o [If we're not familiar with this, then ask for a quick overview]

Interview

Broad

To warm up, and before going into the OL process, we'd like to show you two broad categories describing the role of consultants. [show cards and explain them]

- 1. Which role do you think DA played in your project and why?
 - a. Resource-oriented
 - b. Process-oriented

Next, we have some more detailed categories describing the role. [show cards and explain them]

2. Which of these roles (and you can choose more than one role) do you think DA played in your project and why?

Talking generally about your project, would you say that:

- 3. The ideas/insights generated were small or large changes for [case company]?
- 4. The methods used were small or large changes for [case company]?

Stage-specific processes

Next, we have a set of cards explaining each stage [show one card at a time and explains them].

- 5. How well does [case company] typically perform at this stage and why? (i.e. specific activities)
- 6. Was DA involved in this stage if you have to think to one or more projects? [If no, skip straight to barriers]
 - a. [If yes] Do you think DA can support [case company] at this stage (i.e. made this stage better or worse)?
 - b. What exactly did DA do (specific activities)?

Stage-specific barriers

Next, we have a separate card outlining the barriers (meaning the factors that prevent or impede OL) that are typically experienced at this stage. [show card and explain them]

- 7. Thinking specifically about your project, would you identify with any of these barriers and if so why?
- 8. Are we missing any?

In conclusion

- 9. When you started at [case company], what was the overall strategy for working with them (in terms of spreading your tools and methods within the organisation)?
- 10. How well do you think you've achieved this?

Appendix 8: Cards for in-depth interview

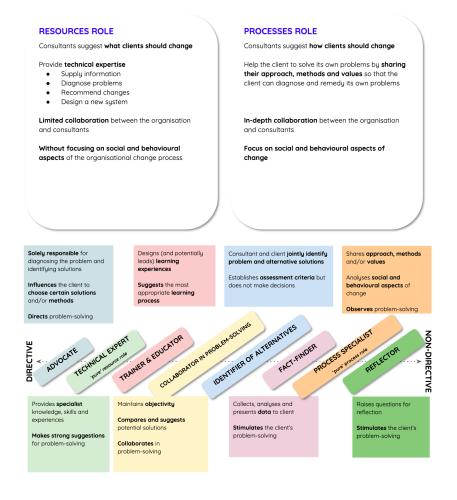
LEARNING is the **development of knowledge and skills** based on previous **experience**

ORGANISATIONAL LEARNING is

- A collective learning **process**
- Across **different levels** (individual → group → organisation)
- Seeks to improve **organisational performance** and/or goals
- More than the sum of each individual's learning
- It becomes **embedded and preserved in the organisation** (i.e. routines, processes, structures, behaviours and norms)

ORGANISATIONAL LEARNING





INTUITING



INTUITING

BARRIERS

The individual:

- Lacks relevant, explicit insights/ideas
- Fears failure due to a blame culture
- Lacks direction because the organisation has no clear goals
- Has a narrow worldview due to the organisation's monolithic corporate culture, strict rules and homogenous workforce

INTERPRETING

DEFINITION The individual explains a new insight/idea through words and/or actions to themselves and their group

LEVEL Individual and group

ACTIVITIES Refines a new insight/idea through discussion

Change in the individual's understanding and actions

LANGUAGE Shared language

INPUTS Images and metaphors, cognitive maps and dialogues

OUTPUTS Shared language and understanding

INTERPRETING

BARRIERS

The individual:

- Fears that their insight/idea is inadequate
- Fears losing ownership over their idea
- Lacks political skills, status and influence

- The group:

 Has strong failure-avoidance norms
 - Lacks the ability to value, assimilate and apply new ideas/insights
 - Views new ideas/insights as a threat to its core beliefs

INTEGRATING

DEFINITION The group develop a shared understanding on a new insight/idea and incorporate this in their routines

LEVEL Group and organisation

ACTIVITIES Refinement of new insight/idea through discussion

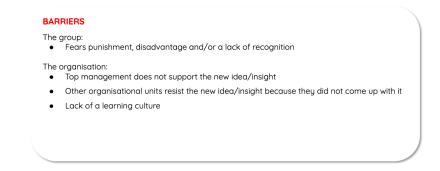
Coordinated action through mutual adjustment

LANGUAGE Refined shared language

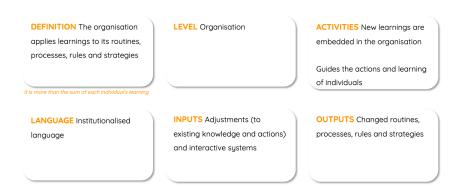
INPUTS Shared language and understanding

OUTPUTS Adjustments (to existing knowledge and actions) and interactive systems

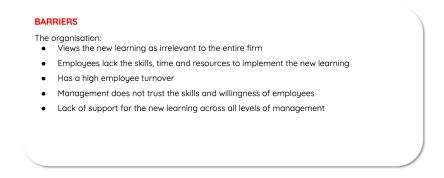
INTEGRATING



INSTITUTIONALISING



INSTITUTIONALISING



Source: own representation; Crossan, Lane and White, 1999; Kubr, 2002; Schilling and Kluge, 2009.

Appendix 9: Coding in-depth interviews

Anonymisation list

[IT consultancy(1)]: outsourced IT consultancy

[IT consultancy(2)]: small IT consultancy

[IT consultancy(3)]: digital document services

Markets(X): besides Sweden the case company operates in other 8 different countries

Projects description:

Project Name	Description	
Project 1	Started as a stand-alone customer journey mapping project. Led to a new app for different customer segments.	
Project 2	Banking app for Millennials.	
Project 3	Re-platforming banking websites for two markets	
Additional projects were mentioned during the interviews. Yet, not part of the thesis.		
Project 4	Calculator for loans	
Project 5	Digital card linked to Project 1	
Project 6	Financial management portal	
Project 7	Card linked to a retailer	

Premise: During the development of the data structure and the analysis, some information was moved to different stages. This is because we noticed that some interviewees misinterpreted some questions and answered to one question while actually referring to another one.

DA'S ROLE FROM A BROAD PERSPECTIVE

Contextual factors

[Interviewee A]:

[Case Company]: 8 years

[design agency]: "I'm the main point of contact for all projects."; from the start of the collaboration (3

years)

[Interviewee F]:

[Case Company]: 4 years

[design agency]: last year with project 3

[Interviewee G]:

[Case Company]: 4 years

[design agency]: 1 year, project 3

[Interviewee C]:

[Case Company]: 4 years

[design agency]: since the beginning of the collaboration (3 years)

[Interviewee E]:

[Case Company]: n.a.

[design agency]: Collaboration with [design agency] since last spring (2018)

[Interviewee B]:

[Case Company]: Been at [case company] for 2 ½ years

[design agency]: Since the start

[Interviewee I]

[Case Company]: Been at [case company] for 9 years

"Started on Operations so I know much about the products and the processes"

[design agency]: Worked with [design agency] past two years

"So mainly in cooperation with [design agency] I've acted more as a specialist I would say in the customer journeys and where we have the pain points in different areas. And also of course to decide what way we want to go with"

[Interviewee J]

[Case Company]: Been at [case company] for only a year

"Hard questions ... because I've only been here for one year."

Role [Interviewee A]

UX Manager, Digital team

[Interviewee F]

Product Owner, Digital Team

[Interviewee G]

CX Manage, Digital team

[Interviewee C]

Head of Digital, Digital Team

[Interviewee E]

Senior Brand and Marketing Project Manager. Marketing Team

[Interviewee B]

CX Manager, Digital team

[Interviewee I]

Product Manager, [case company] SE, Marketing Team

[Interviewee J]

Digital Store Manager, [case company] SE, Marketing Team

[Interviewee H]

Key Account Manager, design agency

Case studies

[Interviewee A]

See exploratory interviews

[Interviewee F]

[Project 3]

[Project 4]: "It's for [Market 2], they have in store some tablets that they show the customers and 'here you can choose whatever you want'."

[Interviewee G]

[Project 3]

[Project 6]: "... it's a big project at [case company], where we have done the additional UI to an existing platform." "... an online cloud management platform."

"... mostly my work has been around the types of login experience."

[Interviewee C]

See exploratory interviews

[Interviewee E]

[Project 1]: "I was not part of the design sprint for [Project 1], because then [pause] from the beginning they wanted to make this [Project 1] for the [case company's main partner] business line ... [whereas] I work mostly with the direct consumers."

[Project 7]: design sprint. "We worked with a problem for [Project 7], you know, the gas station." "[Interviewee A] was the leader, she and [Interviewee H] were the leaders for the [Project 7] problem."

[Interviewee B]

See exploratory interviews

[Interviewee I]

[Project 5]: "... I would say the [Project 5] is the big one I've been most involved in because that's actually a real product now"

[Proiect 1]: "I was in there, when we had a sprint, but then I haven't been so involved afterwards. So I'm not so aware of that"

[Interviewee J]

[Project 5]: involved in digital sprint

[Project 1]: "With [design agency] it has been the [Project 1] but not from the beginning."

Partner web for [case company's main partner]: "It's for the salespersons in the stores. They have it in order to sell finance to the customers. So it's a system. It's an information channel. It does calculators. You can pick up an application in there ... But really unmodern today."

"We have a really old solution there so I've been around with a UX designer interviewing in the [case company's main partner stores and finding out, where are the pains. We've plotted out the customer journey. And also he helped me in the end to design it all"

[Interviewee H]

See exploratory interviews

Process Resource

vs.

[Interviewee A]:

Both: "... the PMO or some bigger projects ... could ask for a resource role more, but in the case with me and all the projects that I have been working it's the process role."

[Interviewee F]:

"I think they want to be in the process role, but they are actually in the resource role ... they are facilitating all design sprints still. So it hasn't been embedded into the organisation."

"There's a clear money incentive, it's really good money to be in the resource role, compared to the process role, because the process role by definition means that they have to step back."

"In [Project 3] they were purely a resource, a visual design resource."
"... as soon as we start a project in the PMO, they become a resource for the front-end."

Whereas for the [Project 4] "when we have had one of the key account manager ... from [design agency], he was in our team, and then it's more in the 'process specialist', but only [pause] he's part of the implementation of it, so part of the organisational change and implementing."

[Interviewee G]:

"I think it depends on which one we're recruiting, what scenario."

Resource: "... mostly their work has been as a resource role, we need X or Y to be done".

"Sure they push back and have insights, but it's mostly being delivering specific things."

"Mostly I've used them as a design agency making user interfaces, so before we go to development we make prototypes, end-to-end clickable prototype, and do some simple user testing ... and also have that to test on employees at [case company] and some customers, before we start developing it."

Process: "... we have another person [Interviewee H] from [design agency] that works like this [process role], but ... he's doing more like a way to set a bigger relationship, more engagement."

[Interviewee C]:

"umm both."

Resource: "So we don't have for example a lot of designers. Like graphic designers. So when that's needed, especially in projects, they just provide that."

"Outside our team they tend to be involved as a resource so there really isn't that much learning." Process: "There was kind of like a hybrid role when we introduced you know design sprints and ways to do things more customer-centric ... They would come with a graphical user interface designer, a UX designer and a facilitator."

"Then little by little we started replacing roles to the point where I think that now [Interviewee A] can run the workshops ... But we have transitioned into a more process-type role including training our people to do the things that they came in to help us with."

[Interviewee E]

Both

Resource: "Well, the part that I've been involved in is mostly that they have played an important part for a specific problem or a specific pain."

"... we have used them to come in and together, the right amount of people, and re-do this all design sprint, to solve that specific problem. And then of course, do the prototyping, and launch a project and see what happen"

Process: "I know their way of working has also helped many departments and managers to rethink to how we work and how we are organised."

[Interviewee B]

"Both."

Resource: "... I have myself hired resources from them, the visual designer and the UX designer." "... most of it, in a project, I used them as a resource."

Process: "When it comes to process role, they have influenced us in how we can [pause] in different types of tools to use within our organisation to become more customer-focused primarily, about design sprint ... and, I know that [design agency] influences us in strategic things as well."

[Interviewee I]

Process: "Well, since we were working with them many years now, I guess they are more involved in our products and problems. So I think it has become more this [points to process role]."

[Interviewee J]

Both: "I would actually say the process role. Even though I've had help of them in some projects which perhaps hasn't been that high level. But I think that's what they have changed here inside to some extent."

[Interviewee H]

"The core value proposition of [design agency] is both doing products and services and doing business transformation while doing it. So I believe that you can't only do the products and services. They are also changing some of the processes and the legacy inside the organisation."

"So I would say that we try to do both. I don't believe that you can do one. Well you can do, lots of design agencies work that way for many years. That you get a brief from a customer, then you go home, then you sit in your little office, then you come back a month later and say you have all the questions right [pause] ... we're way more collaborative in the way that we work. We always sit together with the customer. With the client in the same room. So we don't have all the answers. We have a way of gathering all the answers that the client's have. To work this way you need to change some of the processes and procedures."

"I have this saying, there is this saying that goes 'culture eats strategy for breakfast' ... So first and foremost you need to change the culture inside the company. And you need to transform the culture by changing the mindset."

Spectrum

[Interviewee A]:

- "... it has evolved, because when we've started working with them for three years ... the organisation wasn't ready ... So, I mean, the first year remained just to get to know each other and provide these specialists and skills for different projects and stuff and conducting design sprints and all of that. But then, year 2, I said, 'I wanna be training that and being able to doing that on myself within the organisation and get the organisation ready', so we talked a lot about design sprint and stuff. After that we have been going into the 'Proof by Design'."
- "... we have more the shared approach ... I don't wanna have the agency working by themselves and delivery to us, I want to work together, because that's also a way of learning."

[Interviewee F]

Middle: "... in 'fact finder', 'identifier of alternatives', and then 'collaborator in problem-solving'. So in the middle of the spectrum, but they are going a little bit in this way, and a little bit in this way."

[Interviewee G]

Right but would like to be left: "I think they would like to be more here [directive], but it becomes a bigger initiative, more people, more costs, so it's [pause] we don't always wanna pay that ... but it often happens, with the engagement with them, that it becomes too bigger quote, or too longer timelines and so most of the times we have to just take something over here [right-half]."

[Interviewee C]

Varies from left to right: "I would count [Interviewee H] as a very 'trusted advisor' for example. So I think that he trends on the directive side of things."

"Some people they just come in as a resource. ... more like, advisors, like. More in the middle or towards the non-directive. But there were a couple of people who we trusted a lot and who we just involved as if they were part of the team. It depends on, I would say the person."

"But in general, again, we did bring in [design agency] because we liked their pitch of 'hey we just work together and figure things out together."

"...It's a very close collaboration but when you push their buttons in particular areas they are very very strict. Advocating for things. Then you say 'hey, yes, reminder, my business'."

[Interviewee E]

Middle: "I think they are very strong at collaboration in problem-solving ... they go with you in whole way. It's absolutely not that they come like consultants and give you some advice and then 'bye bye' [laughing], and I think this is the strong thing, the collaboration in problem-solving."

"... there are other people at [case company], who are the problem-solvers, they have the technical expertise ... [design agency] help people to think in a new way, so that we can solve the problem. So, they are like from problem-solving and then the whole way to the solution. But they can't actually make the solution; you need other people for that."

[Interviewee B]

Varies from middle to right: "I would put them on the right half ... where we hire them for doing a specific task ... so we got all these graphical resources."

"And what [Interviewee A] and [Interviewee H], which is the key account manager, he has been educating us teaching us how to do and seeing our problem that we had, I think, you know, a proactive solution comes from them as well. So, something like that [in the centre]."

"And they are not in the far right, because we want [pause] they still have room to do things on their own and give us advice and stuff like that."

[Interviewee I]

Middle: "I think they are here in the middle. Collaborator. What I've experienced, in all the projects that I've been involved in. We always end up in a situation where we have two ways to go in the end. Then they've come in and advises up how to think. Not until then are they involved in that."

"... [they] maybe give a hint of what is the better thing to do. But not strict telling us what to do ... It's a big decision because it's such a quick process also the whole sprint week."

[Interviewee J]

Right: "More to the right I think ... Because they have their ways of doing things but they don't really care what the outcome will be ... But they are helping us to make those decisions."

"I think it's a good thing because otherwise I think it might be hard to change here if we're not in it together and we feel this is something we've understood together and not just given a solution and everything will be fine. It's like you own it more, the problem or the solution, if you're part of it."

[Interviewee H]

Middle to left: "So I would say we're in the middle, collaborator in problem solving, but leaning towards the left. Also being aware of processes ... we see design as being the main driver of every product development, business development, strategy development, organisational development out there. So we see ourselves as experts but believing in design as a way to solve problems".

[design agency]'s impact (ideas/method)

[Interviewee A]: Methods are large change

"I wanted to find someone who can help us work together, rather than being more innovative. So that innovation would be come from both sides, not only them ... So, that's more the innovation process."

Interviewee F1: Ideas are small change, methods are large change

Ideas: "small ... both [Project 1], the [Project 6], and what else do we have? [pause] It has been so many design prints."

Process: "Yes, I would say the actual process is a huge thing. The problem is that it has mostly been used for designs, and even though we are a digital bank we don't care about website and design."

[Interviewee G]: Methods are a small change (answer not fully captured)

Ideas: "And it's usually cheaper to create a clickable prototype to test, before we develop something that we realise it doesn't function. But if we go to the full cycle of Proof by Design and do tonnes of user research and several prototypes to test, it still becomes a big one ... So it is a balance between on how complex is a thing we're trying to solve."

Methods: "I think it's been with [case company] for a long time, the amount of legitimacy has grown, but it's still fairly low prio talking point. We were very business-case driven, so whatever you make up in a spreadsheet has way more value than any real user testing and user feedback."

[Interviewee C]: Method is a large change (answer not fully captured)

"I think that, again, the important thing that [design agency] is bringing in is customer-centricity and a methodical way to do it."

"... we're [the digital team] probably stronger technically ... A lot of us tend to be very logical, objective. So then the softer things we tend to be blind or deaf to. So [design agency] are really good

at methodically addressing the softer side of things ... It's a matter of alignment, of relationships, some emotional friction. They're good at that."

[Interviewee E]: Ideas and method both large change (but from the discourse she means method only)

Ideas: "More radical, it's a different way of thinking, it's a different way of working, it makes something with your brain, working in this way makes your brain like working in a different way and you are kind of allowed to be creative in a completely different way. And with creative I mean finding new solutions or possible solutions."

Methods: "Yeah, because this is a complete new method for us to work with."

"... [In the Marketing Dept] we work more traditionally ... writing a brief, working with an advertising agency, and a media agency, launching something, doing some kind of follow up, trying to optimise, change, but it's all ready when we launch it. It's not like the way they [design agency] work with, that we are also introduced in now, more kind of 'quick, launch, change, quick, launch, change' and all these design sprints."

[Interviewee B]: Ideas and method (to a lesser extent) both small change

Ideas: "they know us, so they know our limitations, I think they lead us into things that we can actually achieve, maybe the smaller stuff, the small wins, with less dependency from our banking system as possible. So, I would say small stuff."

Methods: "No, I mean, it's culture, within [case company], that makes it hard, but I mean, this type of activities can be easily done."

"...they are very small tangible tools that we can use, processes that we can use."

[Interviewee I]: Ideas are small change, methods are large change

Ideas: "I would say that we tend to be a bit less innovative."

Methods: Do you think it's a big change? "Yeh it is. From our normal way of working. And I think it takes a few times actually to get like [pause] that you should be a bit trained in the way of working. Because the first times you're really insecure with what will happen and why am I doing this. So I think it takes a few times before it gets comfortable"

[Interviewee J]: Ideas are small change, methods are large change

"I actually think that the process is the largest change. Perhaps not the outcomes because the [Project 5], I think another agency could find that solution as well."

[Interviewee H]: Ideas are small change, methods are large change

Ideas: "Working with [case company] we have kind of identified insights based on the patterns that we already know exist. So the patterns that can be how to organise within the structures, how do customers react to things, how with the technologies that we have available today ... So we're looking into already known patterns and trying to make those patterns better".

Methods: "Yeh I think it's really challenging the procedures, the risk aversity [aversion], being in control of everything that happens. I think that's really challenging kind of the whole legacy of being a control culture. I think it's hard but that's not only [case company]. That's every other company with a few years under."

Overall barriers

[Interviewee A]

Work stopping

"... I feel that a lot of people have given up a bit, that I didn't see when I started here like 8 years ago."

Process flow

"There's never a lack of ideas, it's just where should I go, what should I do with this."

[Interviewee F]

Work stopping

"... people has been giving up, so, [case company] is actually become a sleeper organisation, where you just go to work and go home again. You don't have feeling into it anymore, you don't have the passion into it anymore ... and when people have this mentality, usually they don't generate ideas anymore."

"Yeah, so that's really a major barrier, that people need to feel passionate and also their work is having a change and if they don't feel that, they kind of give up a little."

- "... you can especially see it with new talents coming into the organisation, usually they don't stay at the same job or same organisation for around two years on average, but it takes more than two years to finalise a project at [case company]. So they'll never see it. So, they don't really care anymore."
- "... if you go to work just to get your salary, and you don't have the passion, then you'll use everything to protect your salary ... it means don't take actions, don't take chances, because you want to have that salary."

[Interviewee G]

Work stopping

"So, you have this learned helplessness, so after a few years of nothing really coming out and being put to production, to fruition, how do you call it? [pause] you start to give up ... There's a lot of really good ideas inside any company, but if your organisation doesn't show the willingness to do these ideas or can't make them real, people start to give up on it."

Process flow

"We have this funnelling for any ideas ... I think we had four-five different ways to trying capture ideas from anyone in the company, where anyone can put any awesome idea and get sponsored." "With each iteration, that we have every year, there's less, less and less [pause] so, several years ago we had like a spreadsheet on a different part of our internal website, it had 100s of ideas. When we migrated to a new platform, let's say 60% were removed and were never re-entered. And then when we moved into the next one, again [even less] [pause] so people started loose interest in putting in the idea, because they've seen nothing coming out."

"One of the latest iterations was through our internal intranet we have a platform called 'service now' ... it's called 'ideas', where anyone can submit an idea ... and it goes into a your closest manager to give it a prio and then it gets into the funnel flow to get into development."

"... because we're risk-averse, we are very keen on having very big processes that [pause] all bunch of steps you have to go through [pause] so, if you follow the process as we made up for ourselves we have this new 'product approval' process - where any new idea, any bigger new idea should go through, so there's a template, you draft it up there, and it's passed to stakeholders from all the different parts of the organisation ... [but this is more] a way to catch risks, not really to help new ideas moving forward."

[Interviewee E]

Work stopping

"... but then it's stopped, because, the old way takes a lot of time before you can make a new product or service, or whatever it is."

"There's been lots of good ideas at this company, and I guess in many companies, but nothing happens. You have all these good people having lots of good ideas, but then pff."

"... we want to do a lot of things, but it's always getting stuck, because there's always the need of some kind of IT change, and it takes time."

[Interviewee B]

Work stopping

"... it could be that you might have tried before, but nothing happens, and tried again, and nothing happen, and then you stop in doing that, because it doesn't lead to anything."

[Interviewee I]

Work stopping

"Because after we have done the sprint job, the stop is mostly like on our side, like we can't develop it."

"It's not the ideas that we're lacking it's more that we don't have the capability to do everything at once. We have long development times so an idea might get old before we get it out."

"... it doesn't have to be IT related stuff ... But IT related stuff, the ideas are being like turned down because we don't have the possibility to develop it at this moment."

"Well it's mainly because of resources that can do it and a huge backlog of for example compliance and legal stuff."

"So you get to a stage where you think, 'I'm gonna stop suggesting things because it only gets so far and then it gets stopped'."

Process flow

"We don't really have a good idea flow."

"It's more who you talk to. If you talk to the right person, then they pick it up and there is time to look at it in that moment ... But just to put an idea, we don't have the capacity to have like that process." "And that's why I think we should have more design sprints for the future."

[Interviewee J]

Work stopping

On the partner web for [case company's main partner]: "But, then, there was an end. We couldn't get it into production. We haven't got the time or money to produce this prototype."

Process flow

"I think we are encouraged but I mean there should be a way to catch all these individual thoughts and to collect them and do something with them. And that might be missing."

"I think that we need a process actually because there might be some great ideas that comes up from market coordinator. But she or he shouldn't fulfill it and do it all himself. He should gather all the experts and talk about it. How will we do it. Could you help me. So I think yeh, lack of some structure in the whole marketing department."

"Because the CMS is open for too many people. We shouldn't have a whole bunch of people updating things. Then it goes really messy ... But we might kill their ideas. I don't know if this is the right way to do it."

"... it hurts when you're growing too fast ... Because there's so many of us now and we haven't found our roles. So the process is not really there."

[design agency]'S ROLE IN EACH STAGE

INTUITING

How does [case company] typically perform (specific activities)

[Interviewee A]

"I guess it depends on the persons and what level that persons are."

"... we don't have the culture enough to being able to experiment, and I see that a lot now that actually the management are talking about it more. That we are allowed to share our ideas, we are allowed to make mistakes and stuff, but it's still [change sentence] I think it could be better. That's why I'm also trying to, like, talk a lot about Proof by Design with the ones that want to do prototyping and stuff like that. ... I guess has to do with the culture that we're having a really strong project management organisation, who wants to make a really big project out of it."

[Interviewee F]

"Ehm, since I've started, four and a half year ago, it's just gone down hill."

[Interviewee G]

"...we're not that innovative of a company, we have a very simple product that we haven't really innovated along the last years ... we are super simple, traditional and I don't see that we've done any real innovation."

[Interviewee C]

"So we usually throw ideas. And I think brainstorming is just a terrible tool for example. So we throw a lot of ideas without regard to who's problem you're really solving. So everybody has a pet idea because they really like it."

[Interviewee E]

"I think that there is a mindset at [case company], that people are not just doing what they are supposed to do. They actually want to make things differently or better, and really find new solutions for things."

[Interviewee B]

"... in our team there's new ideas all the time, I mean [pause]. Ehm, throughout the company, I think it's lower ... we have a manager that, you know, is looking for these [pause] when we have an idea we can actually explore it, and we get the time to do research or prototyping or whatever, but there might be areas in the company, that have a lot of ideas but they're stuck in what they do in their everyday work."

[Interviewee I]

"Yeh I would say in my role, I'm in a good position to do that. Because I'm the one that prioritises the stuff that we should do in the Swedish business ... There is always people listening to new ideas but there will need to be a bit more than that, than like a fluffy idea ... I see more into what can we do with what we have."

"I think that many people here have really good ideas. Really smart ideas that [pause]."

[Interviewee J]

"Hmm no. In my experience."

[Interviewee H]

"So I think one thing that they've succeeded in at [case company] is that the digital team that they have is really diverse. In their way of thinking. In their way of acting. With their cultural backgrounds and competencies."

"I think it's a bit more unique to [Interviewee C]'s team. I think there's a lot of focus on it though because it's Sweden. But I don't think they've nailed kind of both the diversity of cultural background and competencies and personality types [in the rest of the bank]. I think they are more of the same."

"And if you put these competencies together they can actually do some really great stuff. So I think they've actually managed, well at least the digital team, to get the right individuals in place that are passionate about change and are ready for change."

"The hard job is next stage as I see it."

[design agency]'s engagement and specific activities

[Interviewee A]

"... it wasn't that we wanted to 'we're gonna do [Project 1]', it was the process of 'not knowing', the process of discovering and find a pain and solving a pain for a customer, and that ended up with a new idea ... it was more like 'we wanna see what kind of pain the customer has and that will end up with a couple of ideas'."

"They were the ones helping us realising that [project1]. They had the process and they had the persons."

"... they taught me a lot, I've grown a lot since I started working with them."

[Interviewee F]

"So, [design agency] still only have the service design thing, and that's only a part of it. I think the

method is extremely powerful for bringing people that stay across the organisation together in a room for actually understanding and collaborating in an efficient way ... But when you have good relationships, in a team or cross-functional team, even if they are not co-located, then it's actually not needed anymore, in my perspective."

[Interviewee G]

"It could make the ideas more tangible, it make them more understandable for the wider audience ... but not all ideas are suited for the [design agency] workflows ... digital, customer-face touchpoints are very suitable, but if it is more like, let's say better data modelling for capital planning, I don't really see the need for it".

[Interviewee C]

"So what [design agency] does is, how they improve that is, they say 'hold on'. Let's think about the user, what they're trying to achieve and what's a pain in their butt. Now let's think about how we solve those things. So it's a much more focused conversation ... It brings efficiency. The quality of my ideas, people are just as creative as before. But because they're focused it's more efficient."

"The second part then is how you elicit the ideas. And not everybody's as verbal as others. And not everybody's as expressive and articulate. So then comes the other part of the methodology which is, everybody shut up. Spend time with yourself and your own thoughts and scribble it or draw it or do whatever it is that you can do on a piece of paper to express that idea and develop it ... And there's people who are introverts or people who cannot speak but can draw. They have an equal chance."

[Interviewee E]

"Because, you see that things happen. If you work together in a design sprint way, you see that all these things cooking that you would like to do, you actually can do them. It doesn't take long time, and it doesn't cost very much, you can test things, you are allowed to test things. So, I think that it's very good way of not [change sentence] not all the ideas are getting stuck, like 'ok, I have these ideas but they stay at the department'."

"... the way of working like with [design agency] makes people get a lot of hope, 'yes, we'll be able to do this', and people start to be enthusiastic again."

[Interviewee B]

"Yeah! I mean, we're working in concept stage, which not a lot of people are doing in the company."

- "... they way they do, the focus on pain points."
- " ... it's very open, and in that environment then you are more creative."
- "... design sprints they are really good because there's a lot of individual things you do."

[Interviewee I]

"Yeh definitely, the methods are really good for that, in thinking in different ways from how you usually do."

"I think it is the fact that you do it individually that makes everyone getting their right voice heard. And not having this group activities like you normally do when you're trying to come up with something new ... With people doing it by themselves, it's a good way of forcing people to actually come up with something in a short period of time ... If I don't have any time, like a deadline, I start to really think of stuff and then you kind of kill the idea because you come up with other ideas in between."

[Interviewee J]

Positive: "I think that their strategy though, their method, encourages this. The digital sprints. Yeh. Those really thinking wide."

"I think the brainstorming it is. So you sit by your own and nothing's wrong. You could just draw what you think or you could just write some words. It's really intuitive I think.

Negative: "But I don't think it fits everyone. I know some colleagues that hate this ... because it's time limited."

"But it could be like you have to come up with ideas about things you don't really think of on a daily basis and that might be hard for some people."

"One of them [my colleagues] he likes to work on his own. He doesn't like being in a group ... He just wants to do it himself. And then he could 'look what I've done'. He could collaborate but not in that way and not under that pressure ... I think it's prestige."

[Interviewee H]

"So I think if you have these brilliant individuals that have these core competencies, then you need a common language, a way to talk about things, the same thing. Because you come from different backgrounds. So if you get a common language and a way to talk around things, then I think proof by design is what the value proposition is."

[design agency]'s influence (better/worse)

[Interviewee A]: better

[Interviewee F]: would not be needed if relationships were better

[Interviewee G]: better for customer-facing projects only

[Interviewee C]: better [Interviewee E]: better [Interviewee B]: better [Interviewee I]: better

[Interviewee J]: better, although not for everyone

[Interviewee H]: better (although more interpreting stage)

Is Proof by Design at this stage?

[Interviewee F]

- "... if we take agile as a whole concept, where design thinking and design sprint are part of it, I would say we are in the 'I' of 'Intuiting' ... it's still perceived as a chaotic thing, everything is ad hoc, people want control still ... So, we are really in the beginning of it. And we have only changed marketing departments."
- "... [case company] recently hired the CTO advisor, and he is trying to implement Dev Ops, product team, change the IT and that's where, as soon as we have the product team, we can really begin to go into the next stages, where training product owners into having this agile mindset."
- "... we can't say 'agile' in this company, because it's so polluted, but we can say 'Dev Ops', but in the reality is there's no difference in that."

[Interviewee C]

"Then, and the thing we're learning is customer-centricity ... Not everybody [in [Interviewee C]'s team] is able to express what that means yet. And even someone who uses, it is complex I think ... I don't know if [pause] we are very good at this moment at explaining exactly what it means yet. I would say most of the team is still kind of at this stage [points to intuiting]."

"We consume this from [design agency], we're aware of this. We have an intuition that it's good for you. But we're still not practicing it."

Barriers

[Interviewee A]

Fear of failure due to blame culture

"I think that it has became more of fear of failure culture in the organisation, that [in comparison to] when I started 8 years ago."

Lack of clear direction:

"... but I miss that clear direction, because sometimes when you have an idea, you present it to the director [and they say] 'yeah, go ahead, yeah[pause] Ah ok, give me the money then [laughing]'. So, then you are supposed to do something, but I mean, your hands are tight."

New barrier of legacy systems

"We chose [Project 1] ... because we wouldn't have to integrate it with our legacy systems."

Work stopping

"... I feel that a lot of people have given up a bit, that I didn't see when I started here like 8 years ago."

Process flow

"There's never a lack of ideas, it's just where should I go, what should I do with this."

[Interviewee F]

Fear failure due to blame culture

"... so when our CEO, our previous CEO, CTO and head of development was fired, one of the [CC owner's name]'s son was here, to talk about culture. He asked what would happen if we do a mistake, and everybody was just looking, saying nothing. Then he said 'yeah, you just learn from that mistake', but the reality was that there were three people fired, because of mistake."

"And we absolutely have a blame culture. Nobody want to take a decision."

"... it's also really popular in this bank to say 'yeah we're gonna lose our banking license'."

"There's definitely a lot of people in this company that practice management by fear and you can see that; and that just kill the idea generation and the will to change."

New barrier of hierarchical organisation

"... we tend to, in the organisation, to build a hierarchy as soon as we have to manage three people, then there has to be a 'manager' in the middle. So, we practice really, what's it called, hierarchical organisation, instead of having a flat organisation."

Lack of insights

"... I have seen maybe 25 different silos of insights and analytics, and nobody has access to data. It also explains a lot, we have one data management guy, in 8 banks or one big bank that operates in 8 countries."

Work stopping

"... people has been giving up, so, [case company] is actually become a sleeper organisation, where you just go to work and go home again. You don't have feeling into it anymore, you don't have the passion into it anymore ... and when people have this mentality, usually they don't generate ideas anymore."

"Yeah, so that's really a major barrier, that people need to feel passionate and also their work is having a change and if they don't feel that, they kind of give up a little."

- "... you can especially see it with new talents coming into the organisation, usually they don't stay at the same job or same organisation for around two years on average, but it takes more than two years to finalise a project at [case company]. So they'll never see it. So, they don't really care anymore."
- "... if you go to work just to get your salary, and you don't have the passion, then you'll use everything to protect your salary ... it means don't take actions, don't take chances, because you want to have that salary."

[Interviewee G]

"You can find all of them somewhere [in the company]".

Work stopping

"So, you have this learned helplessness, so after a few years of nothing really coming out and being put to production, to fruition, how do you call it? [pause] you start to give up ... There's a lot of really good ideas inside any company, but if your organisation doesn't show the willingness to do these ideas or can't make them real, people start to give up on it."

Process flow

"We have this funnelling for any ideas ... I think we had four-five different ways to trying capture ideas from anyone in the company, where anyone can put any awesome idea and get sponsored."

"With each iteration, that we have every year, there's less, less and less [pause] so, several years

ago we had like a spreadsheet on a different part of our internal website, it had 100s of ideas. When we migrated to a new platform, let's say 60% were removed and were never re-entered. And then when we moved into the next one, again [even less] [pause] so people started loose interest in putting in the idea, because they've seen nothing coming out."

"One of the latest iterations was through our internal intranet we have a platform called 'service now' ... it's called 'ideas', where anyone can submit an idea ... and it goes into a your closest manager to give it a prio and then it gets into the funnel flow to get into development."

"... because we're risk-averse, we are very keen on having very big processes that [pause] all bunch of steps you have to go through [pause] so, if you follow the process as we made up for ourselves - we have this new 'product approval' process - where any new idea, any bigger new idea should go through, so there's a template, you draft it up there, and it's passed to stakeholders from all the different parts of the organisation ... [but this is more] a way to catch risks, not really to help new ideas moving forward."

[Interviewee C]

All of them

"Yes. Very painfully. Yes."

Fear of failure or judgement

"I think [pause] we try. I don't know if people are able to fully get rid of that fear. You know, truly be non-judgemental. I do see eyes roll once in a while."

Lack of ideas

"It's probably both right. Maybe they come with ideas and then we just kill their creativity. I don't know." "The challenge as a manager is never to discriminate between good and bad ideas. It's about saying no to a lot of good ideas. That's the difficult part to being a manager and a leader ... Yes, I know that has a terrible effect on people because 'yeah, they're good ideas but not for us, not for now, not with this budget' ... And I think we should say yes to a little bit more. But more importantly we should get wins. We're probably saying no to too many things ... it seems like some people and some areas get a lot of yeses. But they're very irrelevant or unconcentrated, unfocused. But they're not getting any wins. And that's killing morale and knocking the wind out of everyone."

[Interviewee E]

Work stopping

"... but then it's stopped, because, the old way takes a lot of time before you can make a new product or service, or whatever it is."

"There's been lots of good ideas at this company, and I guess in many companies, but nothing happens. You have all these good people having lots of good ideas, but then pff."

"... we want to do a lot of things, but it's always getting stuck, because there's always the need of some kind of IT change, and it takes time."

[Interviewee B]

Work stopping

"... it could be that you might have tried before, but nothing happens, and tried again, and nothing happen, and then you stop in doing that, because it doesn't lead to anything."

[Interviewee I]

No blame culture: "And we definitely don't have a blame culture here. I think that everyone can make mistakes and it's totally fine."

New barrier of being a bank: "Because many of the ideas that we've come up with with [design agency] are really good but then we have to think about, 'oh but we need to think that this is a bank customer so we can't do this with their information' ... Because when we look at our competitors, many of them aren't like real banks. They're like credit institutions. So they have much more free rules."

New barrier of lack of time: "... if you're sitting in customer service, I think there could be many good

ideas there that they don't like have the energy to put up or to create something around."

Work stopping

"Because after we have done the sprint job, the stop is mostly like on our side, like we can't develop it "

"It's not the ideas that we're lacking it's more that we don't have the capability to do everything at once. We have long development times so an idea might get old before we get it out."

"... it doesn't have to be IT related stuff ... But IT related stuff, the ideas are being like turned down because we don't have the possibility to develop it at this moment."

"Well it's mainly because of resources that can do it and a huge backlog of for example compliance and legal stuff."

"So you get to a stage where you think, 'I'm gonna stop suggesting things because it only gets so far and then it gets stopped'."

Process flow

"We don't really have a good idea flow."

"It's more who you talk to. If you talk to the right person, then they pick it up and there is time to look at it in that moment ... But just to put an idea, we don't have the capacity to have like that process." "And that's why I think we should have more design sprints for the future."

[Interviewee J]

All: "All these could fit into those people [who don't like design sprints] that I was talking about" Lack of clear goal: "... maybe more [intuiting] when I was working with the [case company's main partner] team I'm sorry to say. Because we had one goal with everything. Now I work with several different people. We work with different partners, different brands."

"... [a clear goal] I think that's something that's really important."

"I know that there's a scorecard coming up so I think we will know where we're going soon. But it does take so long because we have a new, what's it called, chief office."

Not fear of failure: "I don't feel the fear of failure and the lack of great ideas. I think it's, you can have crazy ideas. No one will hang you for that."

Not narrow worldview: "No I don't really think we have those kind of boxes."

Work stopping

On the partner web for [case company's main partner]: "But, then, there was an end. We couldn't get it into production. We haven't got the time or money to produce this prototype."

Process flow

"I think we are encouraged but I mean there should be a way to catch all these individual thoughts and to collect them and do something with them. And that might be missing."

"I think that we need a process actually because there might be some great ideas that comes up from market coordinator. But she or he shouldn't fulfill it and do it all himself. He should gather all the experts and talk about it. How will we do it. Could you help me. So I think yeh, lack of some structure in the whole marketing department."

"Because the CMS is open for too many people. We shouldn't have a whole bunch of people updating things. Then it goes really messy ... But we might kill their ideas. I don't know if this is the right way to do it."

"... it hurts when you're growing too fast ... Because there's so many of us now and we haven't found our roles. So the process is not really there."

[Interviewee H]

Fear of failure: "I think that it's typical of many companies, not only [case company]. That kind of embracing failure culture is always lacking. People being afraid of doing something wrong and only doing what's in their spreadsheet of yearly goals that they should do."

Lack of clear goals: "... this lack of direction because the organisation has no clear goals. Sometimes there's also the individual not having a clear understanding of what the purpose of the company is."

INTERPRETING

How does [case company] typically perform (specific activities)

[Interviewee A]

"... for me most of my job is like, for me and also when I started working, it's not much about the ideas, because they are there, it's more about working together".

[Interviewee F]

- "... if we take our team, I would say we have a high level of shared language actually. We are also really diverse ... we have the culture of sharing early, so it's ok to come out with something creative, we take it from there and then we just spark the discussion of how we can actually do stuff."
- "I think it's really positive, that we have this separate view as well. I think that's also why we have this strong team culture ... we've done personality tests ... So, it's really understanding the cognitive things that's going on in the other team members' minds, that can clear ground for having really heavy discussions and keep it on a work level."

Do you think there's these features outside your team? "Nope [pause] I don't think so."

[Interviewee G]

- "For me personally, I collaborate with the people I feel that is relevant to collaborate with, if it is in my team or in another team, it doesn't really matter to me."
- "... so when I'm in a project I work with the people that are in that project and relevant stakeholders, so [pause] yesterday I sat with the head of risk and next week I have a presentation for the entire risk team, and later today I have a meeting with the head of service management."
- "At [case company] in general, I would say there's probably many teams that are very strictly just hanging out with each other."
- "Within our team we have a recurring meeting we do, so we try to every two weeks to have a short update and then a longer session where we deepen anything that is more big, interesting or whatever ... but we are fairly unique in that sense."

[Interviewee C]

- "I think that's one of the weaknesses that [case company] has ... at [case company] we're very bad at this. We're very bad at defining things, at communicating things concisely, at boiling messy problems into a clear cause-effect model type explanation ... Everytime we do a strategy it's a description of the status quo. There's no cause-effect, there's no model of the world."
- "The lack of conceptualisation ... we tend to have people who focus on doing stuff."
- "If you don't have the language, you can't really build the scaffold you need to develop your ideas." Why is this? "I think the leaders tend to clone themselves. So if you have some people in key positions then they clone themselves and reinforce that."

[Interviewee E]

"... this might be special for marketing, but I mean we often discuss concepts and ideas from a marketing perspective. And as we have this 'working together', as one of our values, we work a lot together, we explain for each other a lot of ideas for example ... A lot of explanations and a lot of drawings ... So, I think in our department, I think we've been guite good at that, all the time."

[Interviewee B]

- "Ehm, I think we perform good here, within the [digital] team."
- "... we have regular meetings within the team, where we explain what we are working on ... present new ideas ... and then we talk about it"

"... within the different groups [departments], I think this works well ... but it might not be that good between departments ... especially if there's some interest, ehm conflicts ... is very confined within the teams".

[Interviewee I]

"I would say the same as for the first one [stage] ... The ideas are always welcome and the new ways of thinking."

[Interviewee J]

"Yeh I think it works fine because we work with digital communication and all people in the team are in digital and have a common language. So that's easier I think. That was harder when I was in the [case company's main partner] team because they weren't all digital. So they wouldn't somehow understand everything that I was talking about."

[Interviewee H]

"I think this was really lacking, a shared language. Like a way of working, a toolkit and a structure ... for ideas to become something that are real and not become real in three or five years but do that a bit faster ... But I think these were sort of the reasons why [case company] also chose us, since we were kind of challenging the way of working and not only saying like 'we can solve this and this problem for you'. But we can give you the tools to do it yourself."

[design agency]'s engagement and specific activities

[Interviewee A]

Working with [design agency] "yes, that helped a lot."

"... we are finding a method to do that, like with the design sprints and the safe environment to do so ... to just, yeah, give it all out there."

"I think that what [design agency] has brought in with here, is two things: is the process and the ability to focus on the customers, not yourself. So, as soon as you focus on the customers, and customers having a pain, it becomes more not so much on me, it becomes on the customers, so sharing your ideas for helping customers, sharing, doing something, that makes everyone comes together, it's not like 'your idea is bad, mine is better', it's not that kind of blame game, it becomes more about the customer and everyone needs to help."

[Interviewee F]

- "... what they are good at, is sampling different competences in a room"
- "... in the product organisation, there's a hierarchy there now, and that's where the design framework, the design thinking, can be good to break down these barriers."
- "I think the method there is really good, the problem is that we don't have any technical competences in this company. So, we miss the whole part of the idea generation."

[Interviewee G1

"Maybe, I don't know, I have no explicit need that I feel like, that it would help me a lot in the ongoing initiative side that I'm doing."

[Interviewee C]

"On customer-centricity they show very clearly why it's important, how it's relevant, how it improves things. But the question needs to be restricted to that. There's other things at play like business models, cost structures, supply chain, value chain. You know they have very little to add there."

[Interviewee E]

"... the difference since working with [design agency] is rather more drawing than before to explain of course, but also involving more people from our departments, and not the silos thinking. So that's the big difference ... to form new groups and new constellations."

What are the benefits of diverse teams? "Much better solutions, because when we work only with people good at marketing you have the marketing perspective, and you might forget what would

happen at the operations, or what would happen at sales, or how could they help us at the risk department ... Now we are more 'all together' and it's also that we have a common goal ... everyone is working in the same direction."

"And it's also very much that everyone in the design sprint are kind of equal. It is up to you to help the group to come with a solution and it's actually the group together that decides the solution we're going for."

[Interviewee B]

- "... [design agency] are quite good at take them and make them more visual and understandable. It also makes everybody [pause] get in sync on the [pause] on what this idea can do. As soon as you start to draw then all the small details, everything comes together, everybody has a common image on what we're trying to do"
- "... at least there's something on the notes, and we can all vote on it and it's more visible."

[Interviewee I]

Do [design agency] help? "Yeh [pause]. I really like to work with them and the way that we are doing it. But it needs to be, since we are in this situation where we can't get so much out ... really relevant for what we actually need ... so I think we need to before starting a new sprint, it's important to have like a clear view and picture on what we want to do or what the problem actually is that we want to solve. Because you tend to like runaway, you get so many ideas. And then it's nothing like what you thought about in the beginning. And you forget about the core issue."

"I prefer small changes that make big differences for them [customers and partners]. Than to make a big new fancy app or something like that that won't give anything."

[Interviewee J]

Does [design agency] help? "I think so."

"The method because in the sprints we have different people from different departments who don't know about digital anything. So then I think we can create something together that is common."

[Interviewee H]

See 'is proof by design at this stage?' in the integrating stage

[design agency]'s influence (better/worse)

[Interviewee A]: better

[Interviewee F]: it depends

Interviewee G1: none, see above

[Interviewee C]: a limited extent, can only help in certain areas needing more customer-centricity

[Interviewee E]: better [Interviewee B]: better [Interviewee J]: better

[Interviewee I]: a limited extent, ideas need to be more practical

[Interviewee H]: better (although more integrating stage)

Is Proof by Design at this stage?

[Interviewee C]

"Like, again, in the team I think that I'm the person who puts things into words. But not everybody's able to do that yet."

"So I think that the person best equipped to do the methodology that [design agency] has brought in is [Interviewee A]. Right. She can run the workshops [pause] and she can do the workshops like clockwork and it's a repeatable process."

"And I think we do have a slight personal issue where the team is so logical, objective, and [Interviewee A] is very emotional relationship. So that creates a gap in communication very often. So she's the most advanced person in this thinking and we rely on her to bring us onboard. But she lacks the language to talk to rational objective people."

"... we have two very new people coming in. Yolanda and Christian. Who haven't gone through this process. So we need to bring them onboard."

"The older the members the more, ummm, the more they're using this. We do have some newer members that haven't been as involved with [design agency]."

Barriers

[Interviewee A]

All barriers have "... a lot to do with the management and the culture they set. So, it varies a lot in the company."

Not losing ownership

"And for me losing ownership over an idea is like 'great, take it', I just want to start with another one [laughing]. So I guess it's all about the personality type."

New barrier of needing consensus in Sweden

"... one of our [pause] working together is one of our core culture values, and especially in Sweden we have a big consensus ... if you just have an idea and present them, and you haven't tell like in 500 meetings, people feel like they aren't involved, won't happen."

[Interviewee F]

New barrier that you lack trust in your team (as they leak ideas)

- "... you don't have the trust when you do new creative ideas ... there has been a lot of leaks in the team, which means that all our new ideas suddenly Sweden has presented to the CEO, and it's our idea that we have been working on, there's actually three cases now [laughing], which is really interesting, but that also means that 'ok, as a group we cannot have this discussion anymore'."
- "... it also happens on a really high level, for example when the innovation team was launched and communicated to the management team, the PMO started their own innovation team."
- "... that is really scaring, because that means that you cannot talk loud about creative ideas, you cannot share early, and that destroys the culture actually ... if we cannot mature the ideas together before they go out to the organisation, and somebody else steals it, that means that we are running after the same ball."
- "I had an idea and I explained to Sweden, 'let's work together on this', so using the machine learning and the credit cards ... but [for them] that was not needed, they didn't like that at all ... and now they are doing it themselves."

New barrier of competition

- "Right now it's unhealthy competition, and you can also see that with the project methodologies, that it is become more religion."
- "... you be really protective around this, and you don't want to share it, but then other people will start the same thing and then they are really protective, so working two different silos."
- "But there's also healthy competition, which can be super super interesting."

[Interviewee G]

"All happen, at some point, at some level probably."

"Failure-avoidance norms I would say is the single biggest cause here ... [because] we are a very risk-averse organisation"

Where does this come from? "Ehm, our finance controlling department has a very big grip on it [pause] we have a very ambitious cost-income ratio target, we've moved in the wrong direction for a couples of years, so we've had several initiatives that costed more money than expected, take longer time and deliver less than promised."

[Interviewee C]

Fear of insight/idea being inadequate

"I think that's the reason why a lot of people don't speak up ... They don't speak up so I don't know. But I refuse to think that they don't have ideas ... I cannot go, 'are you thinking? Do you fear judgement?"

Failure avoidance norms

"So [case company] Bank has a very high fear of loss, fear of failure, fear of I don't know what it is. I don't quite think we have that in our team. But my team is a bit weird."

Fear of losing ownership

"But I think there's a lot of the ownership issue. You know, 'my turf concerns'."

Lack political skills, status and influence

Lack of ability to value, assimilate and apply new ideas/insights

Threat to core beliefs

"It's a lesser issues I think. But yeah there is a little bit of 'but that's not part of our core values or how we've done it before'."

New barrier of UX being seen as non-essential

"It's 'UX, well that's colours and fonts and you know UI design. The good shit is in the numbers or the, even worse, the core systems and you know, the really heavy stuff which is a commodity ... The things that we put value in is the commodity. And the differentiation layer is the fluffy thing."

[Interviewee E]

Lack of political skills, status and influence

"... if you don't know who to talk to, if there's not like, this group is the group I should talk to, it might be difficult and your idea would stay just in your own."

Lack of ability to value, assimilate and apply new ideas/insights

Because "there's not a method to value the ideas, it's difficult to know 'are they good or not?"

Not fear of failure "I mean, it's in our values that we will be better if we also fail, so we should be allowed to make

Not fear of losing ownership

Not fear that idea is inadequate

New barrier of lack of time

"I think that people are very busy at [case company] ... there's not time to reflect and think."

[Interviewee B]

mistakes."

"No I don't see anything."

[Interviewee I]

New barrier of legacy systems

"... you can't just take it out of the blue because we know that we need to connect different systems ... So we need a clear plan, so if we are going to do something then how are we going to do it. Because we are locked into these old systems."

"But depending on how big the idea is, I would say that is the difference between if you have an idea that you can do yourself with some help from another colleague and not have too much people involved ... But most of the time you need someone to do some coding and developing and something in the systems. Then that's the big border."

New barrier of involving the right people

"And it's also which ones you're involving from the bank. Because many people don't know the problems that we have in the daily business."

[Interviewee H]

Lack of political skills: "On the individual level, with the political skills, if you are a person that thrives in this kind of environment, where you design together and embrace diversity and all these things,

then you can maybe lack navigating the old, hierarchical (what do you say) organisation diagram and the politics going on there."

INTEGRATING

How does [case company] typically perform (specific activities)

[Interviewee A]

"Yeh, that is much harder and we are not much developed on that, but I don't think we have the tools to do so either."

[Interviewee F]

"Yeh [pause] we are definitely not there yet"

- "... so there's a thing called, financial language, the [case company] language, and then there's the business line language, [pause] and we don't have common things there."
- "I don't see we have strategy to be honest, a strategy and vision doesn't really exist ... the whole strategy team was also fired."

How receptive are people to new ideas? "They don't accept it at all."

[Interviewee G]:

"We have a bunch of formal processes to do that, and we had different experiments also, we had a talk every Friday ... I think we stopped with that talk late last year, because we fired our main drivers of that, we fired our CTO, our Head of Development"

[Interviewee C]

"We don't know how to do this ... If I cannot explain the thing I want [the interpreting stage], how am I telling people 'do this thing'. So we're not here."

Why? "Ok so the problem with [case company] is we have a very complex business now. Because we don't have just loans, we have different business lines, different customer lines, different product lines ... We have a lot of products, a lot of platforms, a lot of products. This thing is super difficult to explain so we are not able to explain what it is that we do."

[Interviewee E]

"I think we are better here [first two stages] ... we're trying to make some things together, things that we're doing in one country should also be good here ... But I don't think we're good at it ... it's not that we don't want to share them, but we don't know how we should do this ... we don't know who we should contact. How should we spread the information about this? How should we cooperate?"

[Interviewee B]

"... when it comes to this stage I think we have a good way of just getting the expertise from the different departments, I've never seen an issue that if we need expertise from somewhere, some departments we didn't get it"

[Interviewee I]

"Well I think this is the tough one for [case company]."

[Interviewee J]

"I think if you need advice or some other persons you're just reaching out. There's no problem."

[Interviewee H]

"I think spreading ideas across organisations when it's divided into silos is pretty hard because you need to push through one of the silos and then get out of the other one and then push through the next one, get out of it and etcetera."

[design agency]'s engagement and specific activities

[Interviewee A]

- "... they teach me the tools to [pause] So now for example we're gonna start with a project with the B2B [case company's main partner], and now I will help them to conduct that."
- "... most of all is setting new KPIs I think."

"But a lot of this always boils down to [pause] actually self-reflection, team, people, it's not so much about the ideas always ... the trouble is working together and if we don't do that, and if we don't work personal development, like getting each other feedback and talk about failures and do all of that, that's when it fails."

[Interviewee F]

"The problem that has arised, and this is really well-played by [design agency], is that the organisation wants to work with design sprints, but they want to work with [design agency] and not us as facilitators, which was the original plan."

This is because "... we don't dare to do mistakes in the organisation because you get fired, and especially when you do a design sprint you sit with a group of people, that potentially doesn't understand it [pause] so there's a high risk of doing a fail there or looking bad or something like that."

[Interviewee G]

"I think that there's a risk that if we commit too much to do with the [design agency] way, will land with a big disappointment if we don't have a way of actually executing our things. So, with [design agency] you have good ideas and a structured process to innovate prototypes, but if we don't have a way of working that allows us to get out there [in the market] for real, it's just gonna be another disappointment, and we are gonna waste a lot of money and not really make any meaningful change. So, not without further changes also."

"Any external actor can always play a role, like we should be always open to inputs, but we've had a long history of spending a shit of money on external professionals [pause] some type of consultant ... we've had expensive C suite agencies help us draft the banking strategy that costed millions of euros and we threw it out ... we had several years of spending a lot of money on very good professional agencies and not getting out any real change, in ways of working, in organisation or any like real new thing seeing in the market."

[Interviewee C]

"Umm yes and no. I think that we have more problems than just customer-centricity. So yes we can solve the customer centricity issue. We can use customer-centricity to fix other things. But it's not the only problem to solve. And I am unsure that it is the easier thing to grasp to start solving problems or the most straightforward sale to start solving things." (e.g. problem with capital requirements)

[Interviewee E]

"... I think that is a new way to work people from different departments, and also making people come together in a new way. Maybe people who haven't even worked with before, also your partners or your customers, being part of this. So, it's not always this inside-out perspective, but it's actually outside-in perspective."

[Interviewee B]

"I don't know, now we're getting to be super integrated and need to know the names of everybody and getting into a little bit too much internal inside and stuff."

"...yeah is possible, but you need to be more integrated, you need to be here all the time."

[Interviewee I]

Overall: "... now it's more like we work with [design agency] until the sprint is done and we have done the testing and stuff. And then the job here needs to start with all of that ... I think it's fine because they can't do anymore either, because it's all then based on how we choose to prioritise in the bank. So I think it's good as it is."

On the [Project 5]: "... we had to think who can be involved in that new product and how will it affect

them that we start using it."

"So when we were already in the design sprint we basically put a demand in our IT system and then just prioritised it ... talked to legal and compliance and all of those departments."

[Interviewee J]

"... it might be easier to have some external person describing."

Do you think that's taken place? "No. Not that I know of".

[Interviewee H]

See 'if proof by design at this stage?' and questions at end of analysis

[design agency]'s influence (better/worse)

[Interviewee A]: better

[Interviewee F]: none

[Interviewee G]: none

[Interviewee C]: a limited extent (same as previous stage)

[Interviewee E]: better

[Interviewee B]: no because this is an internal process [Interviewee I]: no because this is an internal process

[Interviewee J]: might be better but not really evidenced

[Interviewee H]: better for some work

Is Proof by Design at this stage?

[Interviewee A]

"Now it needs, I mean, this process needs to fit in the organisation and more on a higher level, because to be able to work like this and have experiments with new ideas, the management also needs to be involved. So, we still have a lot of issues here. That's why we're looking into find new KPIs, not always measured on time and cost for instance. So, I think, that both in a group and both in our team, in my team, because we work very individually, we're a global organisation, so we work with different countries, with different projects, and stuff like that, so I still think we have a little bit to, or a lot of work here, but that's the next step that [design agency] is helping with."

"... with the Marketing team, we're having a kick off, a two days with [Interviewee H] and me, where we have a lot of different activities, from the toolbox, how we work together and give feedback and stuff. And also, him telling [them] about innovation and how it should work, and doing all of these small [pause] we give them a sandbox on how they can work with that on a daily business, everything from like HMW tool, dot democracy."

"So that's also a little bit what I'm writing about for [case company's intranet] and stuff. So the organisation knows that we can help with that."

[Interviewee F]

"They [[design agency]] have an incentive to [keep expanding] ... they're at least training all the employees together with [case company]. So, they can put into the big financial customers ...That's the business model. Which is ok, the problem is that we are not training our people at all, which should have been the purpose."

[Interviewee C]

"[Interviewee A] is probably here at integrating. But she's not able to explain to you things yet."

"The rest of the team, I don't think we've fully integrated and much less, we're not advocates of this outsider team yet."

"Either [Interviewee A] and I need to remind people ... But I haven't internalised the 'hows' yet. She goes into the 'hows'. So we together need to explain because she says 'do this, do this'. And then they say 'why?' and she's sat there lost for words. So I have to say the 'whys' but I couldn't come up with the 'hows'. So we together do this and we're having a really hard time just making it part of the DNA, part of the way of working. That's hard still."

[Interviewee E]

"[Interviewee C]'s team, which [Interviewee A] is part of, they have been working very separately for a long time at [case company]. So, we kind of knew about [Interviewee C]'s team, and we knew about the cooperation with [design agency] and [Interviewee H], because [Interviewee H] has been very much here [at [case company]'s office], but we didn't exactly know, we were working in the old way, we were not involved in this. And then suddenly, they did the first design sprint and we were involved. But that was only, like, some [emphasis] people were involved, the other ones were still working in their old way."

"last spring - we were re-organised - and after that we had this big workshop and it's started to happen things, and I think that that was the first time when I heard about [Interviewee C]'s team, and the new way of working."

[Interviewee H]

"At this stage I think interpreting is kind of, I think there is so many ambassadors for proof by design, that they are kind of trying to scale this outside of the digital team. And there's ambassadors outside of the digital team as well. So what we've been doing right now is still being a supporting role because they are lacking the resources needed to, this way of working, outside the digital team."

"But in order to make this work inside companies you need to protect this process with a way of an operating model around this. And I think this is what they're buying into right now. That ok, we can't ignore so much that we are a bank. Some of the procedures that we have. Some of the ways that we are structured organisationally. Some of the KPIs. But we can challenge them in order to make proof by design work in the company."

"So they have to develop a common language, not only to talk about how to execute ideas and on problems to make their products and services more successful. But also they are buying into kind of the process into integrating this into the company which is the operating model. The KPIs, organisation model, diagram, mindset, the culture inside the company."

"It's very, very early stage. We have our first workshop on May 2nd."

"So again, the ambassadors that we have right now that buy into proof by design, they have seen like that this is difficult as well for them to just do the talk. They need to walk the talk so they need to do projects that use proof by design as the methodology. But in order to use proof by design as the methodology outside the digital team, they need to have a way to talk into the overall strategy and focus of the company ... So we are kind of building the ambassadors the operating model so they have both the proof by design and the operating model to make it work within the organisation."

Barriers

[Interviewee A]

Most of them

"Yes, we are there a lot, and that's what I work a lot with now, trying to push into the organisation."

Support from management

"I think that for top management, it's not that they do not support, I think that sometimes it's a lack of knowledge [laughing] ... They say that they want to be, like they say to us, customer experience, digital, experimenting and bringing new ideas and bla bla bla, but you're still forcing projects through cost and time ... sometimes they take a decision that contradicts what they are saying, not based being ignorant, but just they don't know and they still want to have a bit of control. They say 'be experimental, do new digital cool stuff', but then they still want to know the plan for two years ahead. That's a contradiction. At least in the lab they have other KPIs, like activities KPI, or customer, NPS, [change sentence] I think they are getting there, but I think they are still a long way to go."

[Interviewee F]

Support from top management

"I think the problem with top management is that they think we are a big bank and we should operate as a big bank, so we don't need to think about digital initiative or thinking on digital in general."

"... when you show really good business cases but the process is not in their mind, what they actually believe in, and you show the business cases and outcome of already existing things, then you are getting punished, and that is weird."

New barrier of legacy systems

"... in [case company] you are rewarded for the method, not for the outcome, the outcome doesn't matter. So you get promotion for following a strict method and showing your own budget, own target, even though these two things can [pause] is relative ... it doesn't matter how it performs afterwards."

[Interviewee G]

"I think you can find all of them in any organisation."

Lack of support from top-management / high turnover of top mgmt

"But it's also that we've changed the managers for the last two years ... So, the entire C suite essentially, has every year been changed. So, it's hard with that also to make any meaningful impact if you change top management every [pause] too often maybe! ... they come in with a clear agenda 'we wanna do this and let's throw out all the work you've just done'."

Fear of punishment

"Yeah, everything is linked. Like, that also causes fear, like, if you see people being fired, you get also a sense of fear, so everything is linked."

[Interviewee C]

Lack of support from top mgmt

"Customer-centricity is super important and I think it's what companies are built around. But in the current management team, it occupies like 5% or 10% of their conversations. And when they say customer-centricity they actually meant 'yeah I want bigger margins in this product'."

"It's a lack of understanding."

"I don't think it's an active not support, it's more of a not in my radar, not in my consideration set. There's also the issue about people tending to give lower important to things they don't know about or don't understand. So it's not a proactive not supporting."

Resistance from other units

"There's a little bit of that. A little bit of not-invented-here. Like when we were pushing for agile PMO totally rejected it. When we said, 'ok fine, do whatever, we don't like it' they did it [laughs]."

Lack of a learning culture

"I don't know, we don't invest in our people. And we try to get away with as cheap as possible."

Not fear of punishment

"No one gets punished here."

[Interviewee E]

Support from management

"... if you don't have the tick box from management it will be difficult to do it. Especially if there's money and people involved."

[Interviewee B]

Top management doesn't support the new idea/insights

"This is definitely true, top management, I mean that's where we struggle, that's the hardest part."

Other organisational units resist the new idea

"they kind of wanna [pause] they want to carry themselves ... for example, we in our team, we did research and we looked at previous app that we have done, that we can maybe use that, we talked with Sweden, for example, Swedish market, and then it just [pause] a couple of days after that, they had already created their own prototype and designed it."

"A lack of a learning culture, that's a little bit what I went into as well, that we use one way of working and that a lot of people aren't comfortable and a little bit afraid of new stuff, maybe they are not talented in that, maybe they can't do it, they have part-time struggle with it, so"

[Interviewee I]

Lack of support from top mgmt not a barrier: "Of course the top management needs to support the idea but I've never experienced that they don't if we have good, a strong meaning to do it and it doesn't cost too much. That's why I think it's important to do these small changes."

New barrier of knowing who to involve: "... it's difficult to know who to involve."

"There are many positions in many teams who don't have clear roles and ownerships. And not many people know the whole, how stuff are linked together and which people needs to know certain stuff. So the communication is not [pause] it can be a lot better here."

[Interviewee J]

Resistance to ideas: "It depends on if they have known about this idea before. I think this is the key issue and actually [Project 1] was an example of that. When we had this group working with it and then 'here would you like this'. And there was 'what's this? We don't want this'."

"There was something missing there I think. Because some were a bit confused. 'Are you developing an app? Why haven't you told us?'."

"I don't know what went wrong but obviously some people, important people, did not know this was going on. And if you want to launch something I think you have to involve even some people outside the team."

New barrier of lack of forums: "But I'm not sure how many forums there are. Now I'm not sure if we're going to continue but we had digital store managers in different countries gathering on the phone."

New barrier of wrong people in sprint teams: "Because the digital team ... they weren't there for example. And the marketing, there was a person from the marketing team but she's working a lot with PR and she's not in the house very often. And I'm sure she didn't have the time to explain."

"But to defend [design agency] [laughs]. It was supposed to be an [case company's main partner] product in the beginning ... If we had [case company's main partner] in mind it might have been the right people."

[Interviewee H]

New barrier of "legacy systems. Legacy [pause] business development procedures."

"It's the willingness to give up control. Because they kind of like, they want to own the process, they want to own the product, they want to own every part of the stage because that's one of their goals."

INSTITUTIONALISING

How does [case company] typically perform (specific activities)

[Interviewee A]

"It takes a lot of time, it's lot of planting seeds, like before, now actually, even though they are not doing it as I think they should, they are at least asking for a UX or designers in the project teams that they didn't do before ... So when I look back I can see that there has been changes, not quick enough and not management-wise enough."

[Interviewee F]

Not there yet, but "At least it has come an acknowledgement that we need to have [pause] to do innovation, at least, that's a step, but it's also a failure in modern organisations, that you have one department that needs to ensure innovation for example. It should be embedded in the whole

organisation. And in this company, whit this unhealthy competition, I don't think it's gonna ever been embedded to be honest."

"the way we start to look at products, so a product is not just a loan or card, a product can also be a service, an application, and that is a step forward to think more modern in organisation ... So, it's small steps just going too slow [laughing], like really too slow, because all our competitors are thinking in the other direction already."

[Interviewee G]

"We've had a lot of very good initiatives, and then after not long enough we threw them out and started doing something else, so that we had to redo everything. So we never really get to institutionalising ... So, we're very impatient and ambitious organisation, so as a group we're very stupid, and give up maybe a bit to fast on things."

[Interviewee C]

"It doesn't. No."

"Probably in the early days. I haven't seen it now."

"We have a leadership model full of contradictions ... we pay lip service to company culture. We behave exactly the opposite."

[Interviewee E]

"... I think we are slow ... I think still, that all the ideas and the right people have been here, but something has happen, so that everything is going too slow, costs too much, all the good ideas take too long time."

"I think it's an organisational matter actually, I think it's the organisation in combination with the IT structure."

[Interviewee B]

"... we perform really bad here ... I've been reading top management business strategies and that also includes ways of working and that says that we need more customer-focus ... but there is not, it's just words on paper, and nothing really gets done, so I don't see any routine changes or anything, we still go on with the always, so when it comes to outputs 'changed routines, processes, rules and strategies', I haven't seen anything there"

[Interviewee I]

"It can of course be better, but that's probably the way for a lot of companies."

"Since there haven't been so many changes in the past years, we definitely have the skills and time to take care of the ones, the changes that we have made."

"But say that we would triple the changes that we make. Then it would of course require a more strict process of how it should be done."

[Interviewee J]

"I haven't really been through anything like this here. I don't know. I think it's hard."

[Interviewee H]

"I've seen so many organisational changes the past three years at [case company] and so I think that they are trying to put the right pillars in order to make, you can say, new processes, rules and strategies, routines, culture, become the norm."

"I think they have changed a lot in the past three years so I can't say which one but I think they're doing it right because they've done it continuously."

[design agency]'s engagement

[Interviewee A]

"Yes, with the design sprint they have helped, and working with customer journeys and all of that. There are people coming to me now asking to help them with these stuff."

and specific activities

"Yes, I had from [Market 6] the other week, from Sweden, from Global [pause] So there are [pause] so I mean, as soon as they say customer journey they say 'oh [Interviewee A], we need to [pause]', so I can send them to [design agency] [laughing]. But the most work is actually the 'being ambassador', talk about it and write about it, inviting myself to meetings and pushing it forward."

[Interviewee F]

"So, top management [pause] since we are building an hierarchy, they don't believe in a service design agency, they can do this with McKinsey or BCG, they need the major consultancies to come and say 'this is how to do stuff', it is right what they are doing, you should just implement."

"The thing is also that top management don't see the incentive of [design agency], so it has to be a separate agency coming in and has to be a big name if you are up there on that level."

"[IT consultancy 1] for example, they were in all levels, so top management, middle management, on the floor as well, also development, which meant that they were totally aligned on IIT consultancy 11 side."

[Interviewee G]

"No, no, no. As I said, they have a lot of good ways of working, all bunch of good insights, but if we just take things and throw them out, it's not gonna change anything. They can have the best ways of working and ways to prototype things, but if we'll just throw them away, it's just a waste of money."

[Interviewee C]

See 'is proof by design at this stage?'

[Interviewee E]

- "... it's good the way they are working, it's really good, but it doesn't involve [pause] it should kind of involve the whole company."
- "... these parts which [design agency] helps us it's very good, but all the others are still the same." See 'is proof by design at this stage?'

[Interviewee B]

Can [design agency] play a role? "No."

- "... they don't have authority."
 "... I mean, if someone like [Interviewee C], if they say we need everybody to learn and the importance of including the customers, and [design agency] might being able to educate them actually."

[Interviewee I]

"I don't think it's something for them to help with. Because it's so much, only internal."

"Of course they can come up with a good example of how it should be done. But I don't think it will work because the company's built in perhaps another way. I think that this one is only [case company]. the [case company] way of doing things."

[Interviewee J]

Can [design agency] play a role? "Umm they might, in close collaboration with the global department, perhaps."

"Yeh it might depend on what it's about. Like the method of digital sprints. Yeh of course. If there's some other ways of working that they can promote for us. But I'm not sure if they should be in every institutionalising. They could play a role but I'm not sure how much."

[Interviewee H]

"I don't actually think that's [design agency]'s task. I think that it's a [design agency] task to get them to go to this state themselves. And then everything should be culture and mindset from here. Because institutionalising, you can do it top down but you need so many ambassadors within the company to make this work. And I think this is for themselves to do it."

"I think if you just institutionalise by setting a date and saying 'by now on we are using proof by design'

without having the buy in from the ambassadors and the people that have tried it. Then I think you would lose a lot of momentum. But I think that, yeh, proving your way is the right way to do it."
[Interviewee A]: better (method) [Interviewee F]: No impact [Interviewee G]: Lack authority [Interviewee C]: Could play a role in the future but not now [Interviewee E]: Need to involve entire company [Interviewee B]: Lack authority [Interviewee I]: Not [design agency]'s task [Interviewee J]: better potentially (method) [Interviewee H]: Not [design agency]'s task
[Interviewee C] "It could be, probably. I wouldn't use them now because it would be super expensive and it wouldn't achieve anything because the platform isn't ready. So it would just be, you would run a load of workshops You're gonna run a load of speeches and presentations and stuff. It's gonna be fun and you're gonna spend a lot of money." "The way I would do it is I would focus on a few projects, a few people, deliver things. Then spread them out and let them virally spread. And then kick off a new project, split the team, put some new people inside those teams and then start infecting that way of thinking. And let it grow organically." [Interviewee E] " I don't know what was the task. Was it just come in and help us with some specific things, or was or is the plan to really try the whole way of working? Or maybe the task was for them to come in and show 'this is the way you can do it' and then is up to [case company] and [case company] management to change." "I mean, if you have a team that knows very much about design sprints and the new way of working, you need ambassadors in the company, because otherwise it will still be like, some people is working in this way, but all the others are working in the other way."
[Interviewee A] "Yeah, almost all of them." " the high employee turnover there's a lot now Because it's all about the trust again, like if it comes new employees now you need to sit down and convince them and know a little bit about them so you can trust them and bla bla bla." New barrier of leadership style " I think it's also about, again, developing the right leadership skills to letting go of control sometimes, because sometimes I think they are deciding stuff in [too much] details [areas that are not of their competence]" [Interviewee F] Employees lack skills, time and resource to implement new learning "That's absolutely true. Nothing is automated in this company, which means that everybody needs to do manual work, so they don't have time to actually do, learn new stuff. One thing that my manager did, a couple of year he said everybody in the team you need to have one day a week that is not, where you are not booked, to do anything, just read and think about new things. And I think that that should be actually be a thing everybody needs to do." High employee turnover "From an organisational perspective it is [pause] the people that are leaving [case company] has been here for 10-15 years, and are really stuck in that 'I go to work, and then I go home' so I think the

high employee turnover is actually more a benefit right now, to be honest."

Management does not trust the skills and willingness of employees

"They don't trust in something that they don't understand. They have the traditional thinking, they need to take all the decisions, so there's a neutral 'yeah, I don't trust what you are saying, I need to understand before I can say yes to it".

Lack of support for the new learning

"We don't have any educational program at [case company] ... so we don't have a culture of learn new things, pay educations for employees, it could be small courses on the internet, you cannot get anything in reality."

[Interviewee G]

Culture of fear

"Our owners have a very good speech about empowering people and make entrepreneurial mistakes. So, if you make a mistake, as long as you have good intentions and it's entrepreneurial you shouldn't be penalised for it."

"in relation to the several levels of management been fired recently, so that had generated a fear of being fired, no matter the reason, if you see the team surround you being fired, if you see your manager or your manager's manager being fired of course, even though you have no idea what they were fired for, you're gonna have a certain fear from that."

"If you instead see announcements that, that this quick small amazing thing went live and this [other] thing went live, you wouldn't really have the fear of people being fired; if we show more that prosper company [aspect]."

View learnings as irrelevant to the entire firm

"... given a track record that we spent a lot of money on expensive consultant agencies to help us build strategies or whatever, or taking competent people to help to set up new ways of working in innovation and if we throw it out, or fire those people, then somehow we as a company view them as irrelevant."

[Interviewee C]

Lack of time

"So there's a lot of people running on the same spot. Exhausting themselves to death and going home super tired and nothing ever happens."

Management not trusting skills and willingness of employees

"So not trusting skills. They trust skills. They trust the people who look exactly like them. But they're not able to manage diversity. We have a problem with not diversity per see but the ability to build on diversity and to leverage it." As a consequence lack of support for new ways of learning

New barrier of individualism

"People like me, like 'I'm an individual, leave me alone' [laughs]."

[Interviewee E]

"... we have had a high employee turnover, but that, if we change the way of working here, people won't feel that this is hopeless, it takes such a long time, well, I think that it comes with each other"

Not top mgmt not trusting skills or willingness

"I think we are, we all feel very trusted, and we all feel that we have the competences."

New barrier of lack of process

"... I think that if there was like a real spoken process on how we should do this, and if there were a deadline within the organisation ... that wouldn't be impossible ... but I think it's not enough if you do

it in some departments. I think it's something that it has to be really from top management"

[Interviewee B]

Views the new learning as irrelevant to the entire firm

UX is often skipped. "Yeah, 'we don't need to do that' ... they think it's irrelevant, they don't see the benefits ... especially product owners or digital store managers."

[Interviewee I]

Lack of time: "In Operations, it of course requires more planning because there are more like [pause]. They have their time that they need to be on the phone."

High employee turnover not a barrier: "High employee turnover is true though, but when we talk about this stuff it doesn't really matter for those."

New barrier of knowing who to involve: "That it's all about communication and to have more clear roles in who to speak with."

[Interviewee J]

Lack of time and resources: "I think the lack of time and resources is one. I think everyone wants to learn some new things. It's just it doesn't fit in the day, the scheme of the day."

Not lack of trust of skills by management: "I don't feel that the management don't trust the skills."

New barrier of lack of processes: "I think where do you begin? So many people, so many different departments. I don't think we have a great process for it. Perhaps the global department should be the ones who start it."

[Interviewee H]

None because not here yet

Additional questions for [Interviewee H]

When you started at [case company], what was the overall strategy for working with them (in terms of spreading your tools and methods within the organisation)?

"So we didn't talk about proof by design or any operating model ... We simply wanted to do the pilot ... Then they got interested themselves and realised this is something we can do ourselves. And we said yes, the way that we do things is proof by design ... But we were only allowed to say this, to talk in this perspective, when we had proved that this was a way that we could work with products and services at [case company]. And then we got buy in, kind of instantly."

How well do you think you've achieved this?

"Yeh, so I think that it's going pretty well. So the past two and a half years we have had different people from different parts of the organisation joining the different activities that we have done with the digital team. And now they are interested in doing these activities ... themselves. So they are kind of buying into the proof by design and are asking for it themselves."

"So I think it's important also for us to not say that we have this way of working works for everyone ... We should just come in with our methodology and replace some of the ways they've been working before and do it in a better way. And if it doesn't go we should be honest about it and say that this isn't the process for this. Maybe this project is better for a waterfall process, going with a clear structured PMO process, integrated with IT. But they shouldn't be the one solution for everything. It should be done wherever it makes sense."

Appendix 10: Data Structure with 1st order concepts with quotes

Appendix 10.1 Overall role

1st Order Concepts with quotes	2nd Order Themes
 INTERVIEWS Both at different times [I.G]: "I think it depends on which one we're recruiting, what scenario." [I.A]: " the PMO or some bigger projects could ask for a resource role more, but in the case with me and all the projects that I have been working it's the process role." [I.J]: "I would actually say the process role. Even though I've had help of them in some projects which perhaps hasn't been that high level." 	The DA adopts a resource role or a process role, depending on the nature of the project and the maturity of the client relationship
 [I.H]: "The core value proposition of DA is both doing products and services and doing business transformation while doing it." [I.H]: "So I would say that we try to do both. I don't believe that you can do one. Well you can do, lots of design agencies work that way." 	
 ● [I.E]: " I don't know what was the task. Was it just come in and help us with some specific things, or was or is the plan to really try the whole way of working? Or maybe the task was for them to come in and show 'this is the way you can do it' and then is up to [CC] and [CC] management to change." 	
 [I.G]: " mostly their work has been as a resource role, we need X or Y to be done." [I.C]: "So we don't have for example a lot of designers. Like graphic designers. So when that's needed, especially in projects, they just provide that." [I.C]: "Outside our [Digital] team they tend to be involved as a resource so there really isn't that much learning." [I.E]: "Well, the part that I've been involved in is mostly that they have played an important part for a specific problem or a specific pain." [I.B]: " most of it, in a project, I used them as a resource." [I.C, exp]: " there's the big projects, the real PMO. And they say, I want 40 hours of UX and then they go, hey DA can deliver this for 40 hours." [I.C, exp]: "Very often a project needs a designer or a GUI person so we work with DA. But then it's kind of like a 'body shop', we just need someone for a few hours and DA provides that." 	
[Project3] as a resource role ■ [I.F]: "In [Project3] they were purely a resource, a visual design	

- resource."
- [I.C, exp]: "... there was sprints but development sprints. It was more of a, a little bit more technocentric."
- [I.B, exp]: "... we were following like the Silicon Valley way of working. So we had a product owner, a product designer which was me, and then we had two developers and one visual designer. So that was a small end to end team. Super agile."
- [I.C, exp]: "It was more, we need hours, we need a designer ... we have a deadline and it has to be done in three weeks. So give us three weeks of designer."

Wants to be process role but actually resource role

- [I.F]: "I think they want to be in the process role, but they are actually in the resource role ... they are facilitating all design sprints still. So it hasn't been embedded into the organisation."
- [I.F]: "... it's really good money to be in the resource role, compared to the process role, because the process role by definition means that they have to step back."

Process role

- [I.G]: "... we have another person [I.H] from DA that works like this [process role], but ... he's doing more like a way to set a bigger relationship, more engagement."
- [I.C]: "... we have transitioned into a more process-type role including training our people to do the things that they came in to help us with."
- [I.E]: "I know their way of working has also helped many departments and managers to rethink to how we work and how we are organised."
- [I.B]: "... they have influenced us in ... different types of tools ... to become more customer-focused primarily, about design sprint."
- [I.H]: "So we don't have all the answers. We have a way of gathering all the answers that the clients have."
- [I.C, exp]: "The reason why I brought them in is the way they worked. You know they worked in a way that I thought developed us. So they had a methodology that was fun, I mean the first thing about design sprints is that they're a lot of fun. And then it enforces customer relevance in the process."
- [I.C, exp]: "Well they introduced us to the design sprint methodology and I think that has been super valuable because it's such a marketable tool."
- [I.C, exp]: "I don't foresee that scenario [bringing their skills inhouse] taking place because agencies exist for a reason and that is, they live at the cutting edge ... the resources at the cutting edge are usually never fully utilised. We use them 30-40% of the time. And also it's riskier or it's difficult to recruit or these are people who like to be agency side."
- [I.C, exp]: "... what design thinking does is it doesn't make you
 more creative necessarily, but it just makes your creative
 process more efficient. So it's a way to make creativity
 efficient."
- [I.H, exp]: But "... I think it's bad business for us, because we have a kind of 'goal' not being relevant anymore."

SECONDARY DATA (DA proposal document)

Process role

- CC was looking for a business partner to help them accelerate their innovation, digital transformation and customer-centricity
- Proved effectiveness of methods in first year
- Introduced PbD in second year

INTERVIEWS

Collaborative role (middle of spectrum)

- [I.A]: "... we have more the shared approach ... I don't wanna have the agency working by themselves and delivery to us, I want to work together, because that's also a way of learning."
- [I.F]: "... in 'fact finder', 'identifier of alternatives', and then 'collaborator in problem-solving'. So in the middle of the spectrum."
- [I.C]: "... we did bring in DA because we liked their pitch of 'hey we just work together and figure things out together'."
- [I.E]: "I think they are very strong at collaboration in problemsolving ... It's absolutely not that they come like consultants and give you some advice and then 'bye bye'."
- [I.E]: "... DA help people to think in a new way, so that we can solve the problem. ... But they can't actually make the solution; you need other people for that."
- [I.I]: "I think they are here in the middle. Collaborator ... [they] maybe give a hint of what is the better thing to do. But not strict telling us what to do."
- [I.H]: "So I would say we're in the middle, collaborator in problem solving, but leaning towards the left. Also being aware of processes."
- [I.C, exp]: "They said 'we have a methodology that allows us to find things together and for you to learn how to understand vour customer'. So we're working together towards a goal and we feel like we're constantly upskilling ourselves."
- [I.H, exp]: "We are really focused on the 'working together' part."
- [I.C, exp]: "So I brought them in a little bit to train my team to be more customer-centric ... By the time we're kind of done then essentially we can run the workshops the way they run them."

Not non-directive role (right of spectrum)

- [I.B]: "And they are not in the far right, because ... they still have room to do things on their own and give us advice."
- [I.J]: "More to the right I think ... Because they have their ways of doing things but they don't really care what the outcome will be."

Not directive role (left of spectrum)

[I.G]: "I think they would like to be more here [directive], but it becomes a bigger initiative, more people, more costs ... so most of the times we have to just take something over here [centre and right-half]."

The DA adopts a collaborative role as it is more interested in the methods than outcomes of projects

Varies depending on DA employee

- [I.C]: "It depends on, I would say the person."
- [I.C]: "Some people they just come in as a resource. ... More in the middle or towards the non-directive. But there were a couple of people who we trusted a lot."
- [I.C]: "I would count [I.H] as a very 'trusted advisor'."
- [I.C, exp]: "... you know the DA, they're pretty good but this [I.H] guy is really good. So then I, what I see is that he steps up when needed, he steps back when needed."

Evolved over time

- [I.A]: "... it has evolved ... the first year remained just to get to know each other and provide these specialists and skills for different projects ... But then, year 2, I said, 'I wanna be training that and being able to doing that on myself within the organisation and get the organisation ready' ... After that we have been going into the 'Proof by Design'."
- [I.H. exp]: "So in the beginning it was more like a normal clientdesign agency relationship, telling us 'can you help us with this product [pause]', but then when we saw that we were on the same path, they got more and more into the process and wanted to learn more."
- [I.H, exp]: "... it has moved, because we have the capability trainings and so on, so I think we were in the leading role in the projects beforehand, but now they already know the stuff themselves and so now we have just more a supporting role."

SECONDARY DATA (DA proposal document)

Collaborative role (middle of spectrum)

- Through collaboration, the people involved take ownership
- Developing new competencies is crucial when setting up small, interdisciplinary product teams

INTERVIEWS

Methods are a large change

- [I.F]: "Yes, I would say the actual process is a huge thing."
- [I.E]: "More radical, it's a different way of thinking, it's a different way of working ... you are kind of allowed to be creative in a completely different way."
- [I.E]: "... this is a complete new method for us to work with ... [compared to traditional processes in Marketing department] more kind of 'quick launch, change, quick launch, change' and all these design sprints."
- [I.J]: "I actually think that the process is the largest change."
- [I.H]: "Yeh I think it's really challenging the procedures, the risk aversity [aversion], being in control of everything that
- [I.D, exp]: "...It was very inspirational to do something where you can't see the end result ... to do just something new and work with different methods."
- [I.B, exp]: "So DA is really good at finding the direction. So for the [Project1], we didn't know anything, was it gonna be an app or something else?"

The DA's methods are radical yet its outcomes are incremental

Methods are a small change

- [I.G]: "I think it's been with [CC] for a long time, the amount of legitimacy has grown, but it's still fairly low prio talking point.
 We were very business-case driven, so whatever you make up in a spreadsheet has way more value than any real user testing."
- [I.B]: "...they are very small tangible tools that we can use."

Outcomes are a small change

- [I.B]: "... I think they lead us into things that we can actually achieve, maybe the smaller stuff, the small wins, with less dependency from our banking system as possible."
- [I.I]: "I would say that we tend to be a bit less innovative."
- [I.J]: "Perhaps not the outcomes because the digital card, I think another agency could find that solution as well."
- [I.H]: "Working with [CC] we have kind of identified insights based on the patterns that we already know exist."
- [I.C, exp]: "... we are, how should I put it, a low cost copier. So we copy commodities."

Ideas are a big change

• [I.C, exp]: [Project2] "... it was so weird. It was so different. That's not how we do this, that's not how a loan works, we've never seen a loan like this before."

Appendix 10.2 Intuiting Stage

1st Order Concepts (<i>Quotes</i>)	2nd Order Themes
 INTERVIEWS CC lacks the right culture (experimental, diverse and innovative) [I.A] " we don't have the culture enough to being able to experiment." [I.H] "So I think one thing that they've succeeded in at [case company] is that the digital team that they have is really diverse But I don't think they've nailed kind of both the 	The CC performs poorly at the intuiting stage
diversity of cultural background and competencies and personality types [in the rest of the bank. I think they are more of the same."	
 [I.G] "we're not that innovative of a company we are super simple, traditional" 	
 [I.F] " since I've started, four and half a year ago, it's just gone down hill." 	
Ideas not targeting problems that need solving	
 [I.C] " we throw a lot of ideas without regard to who's problem you're really solving." 	
Digital team is exceptional	
 [I.A] CC's intuiting stage "depends on the persons." 	
• [I.B] "in our team [DD] there's new ideas all the time	

139

throughout the company, I think it's lower."

All employees have the potential to come up with new ideas

- [I.E] "I think that there is a mindset at [CC], that people are not just doing what they are supposed to do. They actually want to make things differently or better, and really find new solutions for things."
- [I.I] "I think that many people here have really good ideas."

SECONDARY DATA

Project1 Internal Report

Proof of Insights (Pol)

- Method: desk research (reviewing business journals and internal reports or conducting UX/design audit)
 - Outcomes: in-depth data collection on market, trends and competitors
 - Insights/Ideas: UX/design of digital platform benchmarked against competitors
 - E.g. "life situations rather than demographics are a helpful way of understanding different user personas"
- Method: Customer research (customer interviews, surveys and observations)
 - Outcomes: in-depth data collection on customers
 - Insights/Ideas: As-is customer journey maps plotting needs and pain points
 - E.g. "50% of people apply for a credit card because they are moving house"
- Method: strategy (Value Proposition Canvas, KPIs, hypothesis creation)
 - Outcomes: definition of a value proposition, business model. KPIs and hypotheses
 - E.g. "Being relevant to the customer early on in their house move planning will lead them to select the CC as their bank"

Proof of Concepts (PoC)

- Method: design sprints
 - Outcomes: Presenting back pain points from research and voting on them (individual/group)
 - Outcomes: Turning pain points into HMWs, presenting them and voting (individual/group)
 - Outcomes: Brainstorming, presenting back and voting on solutions (individual)
 - BDP workshop: 27 pain points became four HMWs and 16 brainstormed ideas

Project2 Internal Report

Pol

- Method: desk research
 - Insights: "millennials are underbanked (lacking access to mainstream finances)"

The DA engages in a broad range of learning activities in the intuiting stage

- Method: customer research
 - Insights: "I want it to be easy and convenient. Don't make me work"
- Method: strategy
 - Insights: "Millennials will respond favourably to a more convenient and affordable financing solution"

DA proposal document (DPD)

Pol

- Method: Customer research
 - O CC's projects with DA: 300+ customer interviews
- Method: strategy
 - O CC's projects with DA: 150+ hypothesis tested

PoC

- Method: design sprints
 - CC's projects with DA: 40+ design sprints conducted,
 200+ participants, 10 employees trained in facilitating

OBSERVATIONS

Digital Toolbox Workshop

- Eight participants
- 44 pain points captured in group discussions
- Categorised and made into nine HMWs as a group
- HMWs voted on individually with three selected
- 14 ideas brainstormed individually

BDP Workshop

- Six participants
- 27 pain points identified from nine stakeholder interviews, presented in workshop and voted on individually
- Made into four HMWs as a group
- 16 ideas brainstormed individually

INTERVIEWS

Individual vs group work

- [I.C] "Spend time with yourself and your own thoughts and scribble it or draw it or do whatever it is that you can do on a piece of paper to express that idea and develop it ... And there's people who are introverts or people who cannot speak but can draw. They have an equal chance."
- [I.I] "I think it is the fact that you do it individually that makes everyone getting their right voice heard ... With people doing it by themselves, it's a good way of forcing people to actually come up with something in a short period of time"
- [I.J] "So you sit by your own and nothing's wrong. You could just draw what you think or you could just write some words."
- [I.B] "... design sprints they are really good because there's a lot of individual things you do."
- [I.C, exp] "it creates a safe space and you're not judgemental and loud people shut up for a little bit. Which maybe encourages the creativity or allows you to focus and be more

The DA has a large influence on the intuiting stage by providing and teaching the CC a new method for developing insights and concepts

efficient"

Creative thinking

- [I.B] "... it's very open, and in that environment then you are more creative."
- [I.I] "Yeh definitely, the methods are really good for that, in thinking in different ways from how you usually do."

Customer-centricity

- [I.C] "Let's think about the user, what they're trying to achieve and what's a pain in their butt. Now let's think about how we solve those things. So it's a much more focused conversation ... It brings efficiency. The quality of my ideas, people are just as creative as before. But because they're focused it's more efficient."
- [I.A] "It was the process of not knowing, the process of discovering and find a pain and solving a pain for a customer, and that ended up with a new idea ... it was more like 'we wanna see what kind of pain the customer has and that will end up with a couple of ideas'."

Method that doesn't fit all projects and/or everyone

- [I.G] "... not all ideas are suited for the DA workflows [referring to [Project3]."
- [I.J] "But I don't think it fits everyone. I know some colleagues that hate this ... because it's time limited."
- "... it could be like you have to come up with ideas about things you don't really think of on a daily basis and that might be hard for some people."
- "... one of them [my colleagues] likes work on his own"
- [I.D, exp] "... there is always a certain approach from risk people or legal people."
- [I.C, exp] "... the Spaces team, where we had a lot of engineers. And they were super skeptical of this. They thought it was marketing mumbo jumbo."

Overall views on influence of DA

- [I.A]: better
- [I.B]: better
- [I.C]: better
- [I.E]: better
- [I.F]: better
- [I.G]: better for customer-facing projects only
- [I.H]: better
- [I.I]: better
- [I.J]: better although not for everyone

SECONDARY DATA (Project1 Internal Report)

- "group brainstorming doesn't work"
- Need to balance individual-group brainstorming

INTERVIEWS

Actional-personal

Lack of motivation

- [I.A] "... I feel that a lot of people have given up a bit."
- [I.F] "... so, [case company] is actually become a sleeper organisation, where you just go to work and go home again ... you don't have the passion into it anymore ... and when people have this mentality, usually they don't generate ideas anymore."
- [I.F] "Yeah, so that's really a major barrier, that people need to feel passionate and also their work is having a change and if they don't feel that, they kind of give up a little."
- [I.G] "So, you have this learned helplessness ... There's a lot of really good ideas inside any company, but if your organisation doesn't show the willingness to do these ideas or can't make them real, people start to give up on it."
- [I.E] "... but then it's stopped, because, the old way takes a lot of time before you can make a new product or service. or whatever it is."
- [I.I] "So you get to a stage where you think, 'I'm gonna stop suggesting things because it only gets so far and then it gets stopped'."
- [I.C] "Maybe they come with ideas and then we just kill their creativity ... we should say yes a little bit more. But more importantly we should get wins."

Lack of new insights and ideas

[I.F] "nobody has access to data. It also explains a lot, we have one data management guy, in 8 banks or one big bank that operates in 8 countries."

Structural-organisational

Fear of failure due to blame culture

- [I.A] "I think that it has became more of fear of failure culture in the organisation."
- [I.F] "Then he [owner's son] said 'yeah, you just learn from that mistake', but the reality was that there were three people fired, because of mistake ... And we absolutely have a blame culture. Nobody want to take a decision."
- [I.F] "There's definitely a lot of people in this company that practice management by fear and you can see that; and that just kill the idea generation and the will to change."
- [I.F] "... it's also really popular in this bank to say 'yeah we're gonna lose our banking license'."
- [I.C] "I don't know if people are able to fully get rid of that fear. You know, truly be non-judgemental. I do see eyes roll once in a while."
- [I.H] "That kind of embracing failure culture is always lacking. People being afraid of doing something wrong and only doing what's in their spreadsheet of yearly goals."
- [I.G] "... we are a very risk-averse organisation." (moved from

Main barriers are a lack of motivation to develop new ideas. fear of failure due to a blame culture and the lack of an effective, formal ideas funnel

the interpreting stage)

- [I.C] "So [CC] has a very high fear of loss, fear of failure" (moved from the interpreting stage)
- [I.E] "I mean, it's in our values that we will be better if we also fail, so we should be allowed to make mistakes." (moved from the interpreting stage)
- [I.I] "And we definitely don't have a blame culture here [Marketing team]. I think that everyone can make mistakes and it's totally fine."
- [I.J] "I don't feel the fear of failure and the lack of great ideas. I think you can have crazy ideas. No one will hang you for that."

Lack of a process flow for new ideas/insights

- [I.I] "We don't really have a good idea flow."
- [I.A] "There's never a lack of ideas, it's just where should I go, what should I do with this."
- [I.J] "I think we are encouraged but I mean there should be a
 way to catch all these individual thoughts and to collect them
 and do something with them. And that might be missing."
- [I.I] "It's more who you talk to. If you talk to the right person, then they pick it up and there is time to look at it in that moment."
- [I.G] "With each iteration, that we have every year, there's less, less and less [pause] so, several years ago we had like a spreadsheet on a different part of our internal website, it had 100s of ideas. When we migrated to a new platform, let's say 60% were removed and were never re-entered. And then when we moved into the next one, again [even less] [pause] so people started to lose interest in putting in the idea, because they've seen nothing coming out."
- [I.G] "One of the latest iterations was through our internal intranet we have a platform called 'service now' ... it's called 'ideas', where anyone can submit an idea ... and it goes into a your closest manager to give it a prio and then it gets into the funnel flow to get into development."

Lack of a clear direction

- [I.A] "... but I miss that clear direction, because sometimes when you have an idea, you present it to the director [and they say] 'yeah, go ahead, yeah' [pause]. Ah ok, give me the money then [laughing]. So, then you are supposed to do something, but I mean, your hands are tight."
- [I.H] "... this lack of direction because the organisation has no clear goals. Sometimes there's also the individual not having a clear understanding of what the purpose of the company is."

Appendix 10.3 Interpreting stage

1st Order Concepts (Quotes) 2nd Order Themes INTERVIEWS The CC performs Team culture in the Digital team poorly at the • [I.A] "... for me most of my job is like, for me and also when I interpreting stage started working, it's not much about the ideas, because they are there, it's more about working together". [I.F] "... if we take our team, I would say we have a high level of shared language actually ... we have the culture of sharing early, so it's ok to come out with something creative, we take it from there and then we just spark the discussion of how we can actually do stuff." [I.B] "... we have regular meetings within the team, where we explain what we are working on ... present new ideas ... and then we talk about it" [I.C, exp] "But you know in my team we always catch up every week for status updates. On top of that, every month I have a one-on-one and every month we have a deep dive on issues that are important for the team." Team culture in the Marketing team • [I.E] "I think in our department, I think we've been quite good at that, all the time." [I.E] " Ehm, I think, and this might be special for marketing, but I mean we often discuss concepts and ideas." [I.J] "Yeh I think it works fine because we work with digital communication and all people in the team are in digital and have a common language. So that's easier I think." Lack of a shared language across CC [I.C] "... at [CC] we're very bad at this. We're very bad at defining things, at communicating things concisely, at boiling messy problems into a clear cause-effect model type explanation ... Everytime we do a strategy it's a description of the status quo. There's no cause-effect, there's no model of the world." [I.C] "The lack of conceptualisation ... we tend to have people who focus on doing stuff." [I.H] "I think this was really lacking, a shared language. Like a way of working, a toolkit and a structure ... for ideas to become something that are real and not become real in three or five vears but do that a bit faster." The DA engages in SECONDARY DATA Project1 Internal Report a broad range of Pol learning activities in the interpreting Method: desk research, customer research and strategy

Outcome: develop shared language and meaning around the problem and a high-level, strategic course of action

stage

PoC

- Method: design sprint
 - Outcome: presentation, discussion and selection (based on dot voting) of pain points, HMWs and brainstormed ideas
 - Outcome: prioritisation and potential combining of ideas using an effort-impact matrix (selecting ideas with highest user value and lowest organisational effort)
 - Outcome: prototype developed through sketches and 0 storyboards
 - Outcome: overall a shared language, meaning and course of action is generated
- Method: user testing
 - Outcome: customer feedback captured and future refinements identified
 - Customers rated the initial concept with a NPS score

Project2 Internal Report

PoC

- Methods: design sprint and user testing
 - Created three prototypes and interviewed 150+ people

OBSERVATIONS

Digital Toolbox Workshop

14 brainstormed ideas prioritised using effort-impact matrix

BDP workshop

- 16 brainstormed ideas voted on individually
- Two selected to be prototyped in small groups
- Initial idea steered in a particular direction, from a simple UX guidebook into a complex prototype for an online database of existing projects and a chat forum
- One prototype selected via voting individually
- User tested with six participants from workshop one week after

INTERVIEWS

'Dot voting' and equality

[I.E] "And it's also very much that everyone in the design sprint are kind of equal. It is up to you to help the group to come with a solution and it's actually the group together that decides the solution we're going for."

Prioritisation and customer-centricity

[I.A] "I think that what DA has brought in with here, is two things: is the process and the ability to focus on the customers, not yourself ... so sharing your ideas for helping customers, sharing, doing something, that makes everyone comes together, it's not like 'your idea is bad, mine is better', it's not that kind of blame

The DA has a large influence on the interpreting stage by providing and teaching the CC a new method for developing a shared language and meaning for new ideas/insights

- game, it becomes more about the customer and everyone needs to help."
- [I.C] "On customer-centricity they show very clearly why it's important, how it's relevant, how it improves things."

Prototyping helps to externalise ideas

- [I.B] "... DA are quite good at take them and make them more visual and understandable. It also makes everybody [pause] get in sync on the [pause] on what this idea can do. As soon as you start to draw then all the small details, everything comes together, everybody has a common image on what we're trying to do."
- [I.G] "It could make the ideas more tangible, make them more understandable for the wider audience."

Diverse teams

- [I.H, exp] "It's critical [diverse teams] if you have people with the same background you would probably come up with the same idea, therefore diversity is the key, core to make innovation happen."
- [I.E] "Much better solutions, because when we work only with people good at marketing you have the marketing perspective. and you might forget what would happen at the operations, or what would happen at sales, or how could they help us at the risk department ... Now we are more 'all together' and it's also that we have a common goal ... everyone is working in the same direction."
- [I.E] "... involving more people from our departments, and not the silos thinking."
- [I.F] "I think the method there is really good, the problem is that we don't have any technical competences in this company."
- Different set up for the three projects
 - [Project2]: [I.C, exp] "So we had [I.A] who is the customer centricity advocate. So yeh, credit, compliance, IT architecture. [I.A] kind of project managed it. I was the product owner. Then it was DA that provided a UX designer, GUI designer and the facilitator of the sprint methodology that we used. They provided these three resources. By the way, we also had [case company's main partner] people, so the end customer was involved in this."
 - [Project3]: [I.C, exp] "The other, so [Project3], we had a UX designer, he's more of a GUI person actually. Then a product owner, [I.F]. Then the countries, the commercial representative, so the marketing manager in [Market 5] and [Market 3]. And then developers, so front end and back end."

Struggle translating PbD into a common language

[I.I]: "Because the first times [in design sprints] you're really insecure with what will happen ... So I think it takes a few

- times before it gets comfortable."
- [I.C]: "So I think that the person best equipped to do the methodology that DA has brought in is [I.A]. Right. She can run the workshops ... we do have a slight personal issue where the team is so logical, objective, and [I.A] is very emotional relationship. So that creates a gap in communication very often."
- [I.C]: "The older the members the more, ummm, the more they're using this. We do have some newer members that haven't been as involved with DA."
- [I.H]: "So we didn't talk about proof by design ... We simply wanted to do the pilot ... Then they got interested themselves ... And we said yes, the way that we do things is proof by design ... But we were only allowed to say this, to talk in this perspective, when we had proved that this was a way that we could work with products and services at [CC]."

Overall views on influence of DA

[I.A]: better

[I.B]: better

[I.C]: a limited extent, can only help in certain areas needing more customer-centricity

[I.E]: better

[I.F]: it depends

[I.G]: none

[I.H]: better

[I.I]: a limited extent, ideas need to be more practical

[I.J]: better

INTERVIEWS

Actional-personal

Lacks political skills, status and influence

- [I.F]: "... we tend to, in the organisation, to build a hierarchy as soon as we have to manage three people, then there has to be a 'manager' in the middle. So, we practice really, what's it called, hierarchical organisation, instead of having a flat organisation." (moved from the intuiting stage)
- [I.E] "... if you don't know who to talk to, if there's not like, this group is the group I should talk to, it might be difficult and your idea would stay just in your own."
- [I.A] "... one of our [pause] working together is one of our core culture values, and especially in Sweden we have a big consensus ... if you just have an idea and present them, and you haven't tell like in 500 meetings, people feel like they aren't involved, won't happen."

Fear of losing ownership over a new insight/idea

- [I.C] "But I think there's a lot of the ownership issue. You know, 'my turf concerns'."
- [I.F] "... you don't have the trust when you do new creative ideas ... there has been a lot of leaks in the team, which means that all our new ideas suddenly Sweden has presented to the CEO, and it's our idea that we have been working on that is really scaring, because that means that you cannot

Main barriers are employees lack political skills and fear losing ownership over ideas

talk loud about creative ideas, you cannot share early, and that destroys the culture actually ... if we cannot mature the ideas together before they go out to the organisation, and somebody else steals it, that means that we are running after the same

- [I.F] "Right now it's unhealthy competition, and you can also see that with the project methodologies, that it is become more
- [I.F] "... you be really protective around this, and you don't want to share it, but then other people will start the same thing and then they are really protective, so working two different silos."
- [I.B]: "... we did research and we looked at previous app that we have done, that we can maybe use that, we talked with Sweden, for example, Swedish market, and then it just [pause] a couple of days after that, they had already created their own prototype and designed it."
- [I.A] "And for me losing ownership over an idea is like 'great, take it', I just want to start with another one [laughing]. So I guess it's all about the personality type."

Fear that the insight/idea is inadequate

[I.C] "I think that's the reason why a lot of people don't speak up."

Structural-organisational

Lack ability to value, assimilate and apply new ideas/insights

[I.E] Because "there's not a method to value the ideas, it's difficult to know 'are they good or not?"

Views new ideas/insights as a threat to the team's core beliefs

[I.C] "It's a lesser issues I think. But yeah there is a little bit of 'but that's not part of our core values or how we've done it before'."

Appendix 10.4 Aggregate dimension: Integrating stage

1st Order Concepts (Quotes) 2nd Order Themes **INTERVIEWS** The CC performs Shortcomings in interpreting stage poorly at the [I.C]: "We don't know how to do this ... If I cannot explain the integrating stage thing I want [the interpreting stage], how am I telling people 'do this thing'." Decentralised structure [I.E]: "... I don't think we're good at it ... it's not that we don't want to share them, but we don't know how we should do this ... we don't know who we should contact." • [I.B] "it might not be that good between departments ... especially if there's some interest, ehm conflicts ... is very confined within the teams" (moved from the interpreting stage) [I.I]: "There are many positions in many teams who don't have

- clear roles and ownerships. And not many people know the whole, how stuff are linked together and which people needs to know certain stuff. So the communication is not [pause] it can be a lot better here."
- [I.G] "At [CC] in general, I would say there's probably many teams that are very strictly just hanging out with each other" (moved from the interpreting stage)
- [I.G] "For me personally, I collaborate with the people I feel that is relevant to collaborate with, if it is in my team or in another team, it doesn't really matter to me" (moved from the interpreting stage)
- [I.H]: "I think spreading ideas across organisations when it's divided into silos is pretty hard."
- [I.F]: "... so there's a thing called, financial language, the [case company] language, and then there's the business line language, [pause] and we don't have common things there."

Communities of practice

[I.G]: "... we had different formal processes to do that fintegrating stage]... we had different experiments also, we had a talk every Friday ... I think we stopped with that talk late last vear."

Good network

- [I.B]: "... we have a good way of just getting the expertise from the different departments."
- [I.J]: "I think if you need advice or some other persons ... There's no problem."

OBSERVATIONS

Digital Toolbox Workshop

- Heard how a Digital Product Forum was held in CC office weekly in 2018
- Ultimately cancelled due to low attendance
- Challenge of including Product Owners based outside Sweden

INTERVIEWS

Training other departments in PbD

- [I.A]: "... with the Marketing team, we're having a kick off, a two days with [I.H] and me, where we have a lot of different activities, from the toolbox."
- [I.H]: "So the past two and a half years we have had different people from different parts of the organisation joining the different activities that we have done with the digital team. And now they are interested in doing these activities."
- [I.C, exp]: "Well they introduced us to the design sprint methodology and I think that has been super valuable because it's such a marketable tool ... the design sprint has been the centre piece by which we market customer centricity in this company."
- [I.J]: [on training] "... it might be easier to have some external person describing [although not seen this take place]."

Training internal ambassadors

The DA engages in some learning activities in the integrating stage

- [I.H]: "... I think there is so many ambassadors for proof by design, that they are kind of trying to scale this outside of the digital team ... So what we've been doing right now is still being a supporting role because they are lacking the resources needed to, this way of working, outside the digital team."
- [I.C, exp]: "... essentially we can run the workshops the way they run them."

Building an operating model

- [I.H]: "But in order to make this work inside companies you need to protect this process with a way of an operating model around this. And I think this is what they're buying into right now. That ok, we can't ignore so much that we are a bank [the procedures, structures, KPIs] ... But we can challenge them in order to make proof by design work in the company."
- [I.H]: "So they have to develop a common language, not only to talk about how to execute ideas ... But also they are buying into kind of the process into integrating this into the company which is the operating model."
- [I.H]: "It's very, very early stage. We have our first workshop on May 2nd."
- [I.H, exp]: "... you can see us maybe again being more for a leading role in the scaling up the methodology, because we need to have everyone on board that is not on board yet."

Challenges

- [I.A]: "... this process needs to fit in the organisation and more on a higher level ... we still have a lot of issues here."
- [I.F]: "They [DA] have an incentive to [keep expanding] ... they're at least training all the employees ... the problem is that we are not training our people at all, which should have been the purpose."
- [I.F]: "The problem that has arised, and this is really well-played by DA, is that the organisation wants to work with design sprints, but they want to work with DA and not us as facilitators."
- [I.E]: "[I.C]'s team ... have been working very separately for a long time ... and we knew about the cooperation with DA ... And then suddenly, they did the first design sprint and we were involved. But that was only, like, some [emphasis] people were involved, the other ones were still working in their old way."

SECONDARY DATA

Project1 Internal Report

Proof of Solution (PoS)

- Feasibility test (e.g. with business, legal, IT)
- Build MVP (e.g. agile/iterative process, data modeling, functionality development, interaction development, integration test, QA)
- Launch
- Measure and optimise (e.g. A/B testing, customer effect score, data analysis, net promoter score)

INTERVIEWS

Collaboration across different departments

- [I.E]: "... I think that is a new way to work people from different departments, and also making people come together in a new way ... also your partners or your customers, being part of this.'
- [I.F] "... what they are good at, is sampling different competences in a room ... the design thinking, can be good to break down these barriers, but that's only within the team and then you need to go to the next team and they also need to be cross-functional as well." (moved from the interpreting stage)
- [I.F] "I think the method is extremely powerful for bringing people that stay across the organisation together in a room for actually understanding and collaborating in an efficient way."
- [I.E] "... the difference since working with DA is ... involving more people from our departments, and not the silos thinking. So that's the big difference ... to form new groups and new constellations." (moved from the interpreting stage)

DA plays a limited role

- [I.B]: "I don't know, now we're getting to be super integrated and need to know the names of everybody and getting into a little bit too much internal."
- [I.I]: "... we work with DA until the sprint is done ... they can't do anymore either, because it's all then based on how we choose to prioritise in the bank."

More problems than just customer-centricity

- [I.C]: "Umm yes and no. I think that we have more problems than just customer-centricity ... And I am unsure that it is the easier thing to grasp to start solving problems."
- [I.C]: "There's other things at play like business models. cost structures, supply chain, value chain. You know they have very little to add there." (moved from the interpreting stage)
- [I.G]: "... not all ideas are suited for the DA workflows." (moved from the intuiting stage)

Unsuccessful past experiences with external actors

- [I.G]: "So, with DA you have good ideas and a structured process to innovate prototypes, but if we don't have a way of working that allows us to get out there [in the market] for real, it's just gonna be another disappointment, and we are gonna waste a lot of money and not really make any meaningful change."
- [I.G]: "Any external actor can always play a role, like we should be always open to inputs, but we've had a long history of spending a shit of money on external professionals [pause] some type of consultant ... and not getting out any real change. in ways of working, in organisation or any like real new thing seeing in the market."

Overall views on influence of DA

[I.A]: better

[I.B]: no impact because this is an internal process

The DA has only a limited influence on the integrating stage as this requires an internal (rather than external) focus

[I.C]: a limited extent

[I.E]: better

[I.F]: none

[I.G]: none

[I.H]: better for some work

[I.I]: no impact because this is an internal process

[I.J]: might be better but not evidenced

INTERVIEWS

Actional-personal

Not-invented-here (NIH) syndrome

- [I.C]: "There's a little bit of ... not-invented-here. Like when we
 were pushing for agile PMO totally rejected it. When we said,
 'ok fine, do whatever, we don't like it' they did it."
- [I.J]: "... [Project1] was an example of that. When we had this
 group working with it and then 'here would you like this?'. And
 there was 'what's this? We don't want this' ... I don't know what
 went wrong but obviously some people, important people, did
 not know this was going on."
- [I.J]: "Because the [Swedish] digital team ... they weren't there [for [Project1] ... And the marketing."
- [I.C, exp]: "Now there's people who actually like to participate in these things as long as it's not their own product. When it's their own product, they're like 'no you shut up. I know. Don't you come and tell me what to do'."

Top management not supporting new learnings

- [I.A]: "I think that for top management, it's not that they do not support, I think that sometimes it's a lack of knowledge ... They say 'be experimental, do new digital cool stuff', but then they still want to know the plan for two years ahead."
- [I.F]: "I think the problem with top management is that they think we are a big bank and we should operate as a big bank, so we don't need to think about digital initiative or thinking on digital in general."
- [I.C]: "Customer-centricity is super important ... But in the current management team, it occupies like 5% or 10% of their conversations. And when they say customer-centricity they actually meant 'yeah I want bigger margins in this product'."
- [I.C]: "I don't think it's an active not support, it's more of a not on my radar."
- [I.G]: "... the entire C suite essentially, has every year been changed ... they come in with a clear agenda 'we wanna do this and let's throw out all the work you've just done'."
- [I.E]: "... if you don't have the tick box from management it will be difficult to do it. Especially if there's money and people involved."
- [I.B]: "... top management, I mean that's where we struggle, that's the hardest part."
- [I.I]: "Of course the top management needs to support the idea but I've never experienced that they don't if we have good, a strong meaning to do it and it doesn't cost too much."
- [I.A]: "... developing the right leadership skills to letting go of control sometimes." (moved from the institutionalising stage)

Main barriers are not-invented-here syndrome, top management not supporting new learnings and legacy systems and processes • [I.F]: "They [mgmt] don't trust in something that they don't understand. They have the traditional thinking, they need to take all the decisions." (moved from the institutionalising stage)

Structural-organisational

Legacy systems

- [I.I] "... we need to connect different systems. Like these technical parts ... So we need a clear plan, so if we are going to do something then how are we going to do it. Because we are locked into these old systems." (moved from the interpreting stage)
- [I.E]: "... there's always the need of some kind of IT change, and it takes time." (mentioned also in the intuiting stage)
- [I.D, exp]: "... sometimes limit ourselves within the bank in what we can do and what we can't do, maybe system-based sometimes, but also the limitation is I shouldn't say thinking but the way we work."
- [I.A] "We chose [Project1] ... because we wouldn't have to integrate it without legacy systems." (moved from the intuiting stage)

Legacy processes

- [I.F] "... in [CC] you are rewarded for the method, not for the outcome ... So you get promotion for following a strict method and showing your own budget ... it doesn't matter how it performs afterwards."
- [I.H]: "Legacy [pause] business development procedures ... It's the willingness to give up control. Because they kind of like, they want to own the process, they want to own the product."
- [I.C, exp]: "It [Project3] was shut down because it did not follow the pre-existing processes and it was deemed as someone had lost control of things. It wasn't waterfall enough."

Lack of a learning culture

- [I.C]: "... we don't invest in our people."
- [I.B]: "A lack of a learning culture, that's a little bit what I went into as well, that we use one way of working and that a lot of people aren't comfortable and a little bit afraid of new stuff."
- [I.C, exp]: "... it's actively discouraging it [learning] ... So we are not technologists, in [case company] there's few technologists, and people are inherently uncomfortable with technology. So then when people are asked to do things that are outside their comfort zone, they recoil."
- [I.F]: "We don't have any educational programme at [case company] ... so we don't have a culture of learn new things, pay educations for employees." (moved from the institutionalising stage)

Lack of communication across departments

- [I.J]: "...I'm not sure how many forums there are."
- [I.B, exp]: On [Project3] "Ummm, I mean we were transparent. We had, we had our backlog on the whiteboard openly ... [But] we don't really have a really accessible way of knowing exactly what people are doing inside the projects."

- [I.I]: "That it's all about communication and to have more clear roles in who to speak with." (moved from the institutionalising stage)
- [I.J]: "So many people, so many different departments. I don't think we have a great process for it." (moved from the institutionalising stage)

Appendix 10.5 Institutionalising stage

SECONDARY DOCUMENTS

1st Order Concepts (Quotes) 2nd Order Themes **INTERVIEWS** The CC performs New learnings are not institutionalised poorly at the • [I.E]: "... everything is going too slow, costs too much, all the institutionalising good ideas take too long time ... I think it's the organisation in stage combination with the IT structure." [I.G]: "We've had a lot of very good initiatives, and then after not long enough we threw them out ... So we never really get to institutionalising." [I.B]: "... we perform really bad here ... I've been reading top management business strategies ... and that says that we need more customer-focus ... it's just words on paper, and nothing really gets done, so I don't see any routine changes." [I.I]: "Since there haven't been so many changes in the past years." General acknowledgement that innovation, UX and design are needed [I.F]: "At least it has come an acknowledgement that we need to have [pause] to do innovation ... but it's also a failure in modern organisations, that you have one department that needs to ensure innovation for example. It should be embedded in the whole organisation." [I.A]: "It takes a lot of time, it's lot of planting seeds ... they are at least asking for a UX or designers in the project teams that they didn't do before ... there has been changes, not quick enough and not management-wise enough." In contrast, the DA's Account Manager has seen many changes [I.H]: "I've seen so many organisational changes the past three vears at [case company] and so I think that they are trying to put the right pillars in order to make, you can say, new processes, rules and strategies, routines, culture, become the norm." [I.H]: "I think they have changed a lot in the past three years [in terms of organisational changes] so I can't say which one ... because they've done it continuously." **INTERVIEWS** The DA does not [I.C, exp]: [Project1] outcomes confined to Swedish market engage in learning [I.C, exp]: [Project2] outcomes never launched activities during the • [I.C, exp]: [Project3] outcomes confined to two markets institutionalising

stage

Internal project management document

Waterfall processes are dominant way of running projects

OBSERVATIONS

- BDP Workshop: outcomes confined to Digital team
- Digital Toolbox Workshop: still in business case development

INTERVIEWS

DA lacks authority

- [I.B]: "No ... they don't have authority."
- [I.F]: "So, top management ... don't believe in a service design agency, they can do this with McKinsey or BCG, they need the major consultancies to come and say 'this is how to do stuff' ... top management don't see the incentive of DA."

The DA does not influence the institutionalising stage as this requires an entirely internal focus

Institutionalisation is an internal role

- [I.G]: "As I said, they have a lot of good ways of working, all bunch of good insights, but if we just take things and throw them out, it's not gonna change anything."
- [I.E]: "... it should kind of involve the whole company."
- [I.I]: "I don't think it's something for them to help with. Because it's so much, only internal."
- [I.H]: "I don't actually think that's DA's task. I think that it's a DA task to get them to go to this state themselves. And then everything should be culture and mindset from here. Because institutionalising, you can do it top down but you need so many ambassadors within the company to make this work." PbD as an example
- [I.J]: "Yeh it might depend on what it's about. Like the method of digital sprints. Yeh of course ... But I'm not sure if they should be in every institutionalising."

PbD is not at the institutionalising stage

- [I.C]: "... the platform isn't ready. So it would just be, you would run a load of workshops ... You're gonna run a load of speeches and presentations ... and you're gonna spend a lot of money."
- [I.C]: "The way I would do it is I would focus on a few projects. a few people, deliver things. Then spread them out and let them virally spread."

Overall views on influence of DA

- [I.A]: Better potentially (method)
- [I.B]: No impact. Lack authority
- [I.C]: Could play a role in the future but not now
- [I.E]: No impact. Need to involve entire company
- [I.F]: No impact
- [I.G]: No impact. Lack authority
- [I.I]: No impact. Not DA's task
- [I.J]: Better potentially (method)
- [I.H]: No impact. Not DA's task

INTERVIEWS

Actional-personal

Main barriers include new learnings are

New learnings perceived as irrelevant to the entire CC

- [I.G]: "... given a track record that we spent a lot of money on expensive consultant agencies to help us build strategies or whatever, or taking competent people to help to set up new ways of working in innovation and if we throw it out, or fire those people, then somehow we as a company view them as irrelevant."
- [I.B]: "... they think [UX] it's irrelevant, they don't see the benefits.
- [I.C]: "It's 'UX, well that's colours and fonts and you know UI design. The good shit is in the numbers or the, even worse, the core systems and you know, the really heavy stuff which is a commodity." (moved from the interpreting stage)

perceived as irrelevant, employees lack time to implement them and a decentralised structure

Structural-organisational

Employees lack time to implement new learnings

- [I.E]: "I think that people are very busy at [CC] ... there's not time to reflect and think." (moved from the interpreting stage)
- [I.J]: "I think everyone wants to learn some new things. It's just it doesn't fit in the day."
- [I.F]: "Nothing is automated in this company, which means that everybody needs to do manual work, so they don't have time to actually do, learn new stuff."
- [I.C]: "So there's a lot of people running on the same spot. Exhausting themselves to death and going home super tired and nothing ever happens."
- [I.I]: "In Operations, it of course requires more planning because ... they have their time that they need to be on the phone."
- [I.I] "... if you're sitting in customer service, I think there could be many good ideas there that they don't like have the energy to put up or to create something around." (moved from the intuiting stage)
- [I.F]: "One thing that my manager did, a couple of year he said everybody in the team you need to have one day a week ... where you are not booked, to do anything, just read and think about new things. And I think that that should be actually be a thing everybody needs to do."

Decentralised structure

[I.C]: "Here also, in this company, the central, I mean the executive management has very little formal control over the countries. The countries do whatever they want."

Management does not trust the skills and willingness of employees

- [I.C]: "They trust the people who look exactly like them. But they're not able to manage diversity."
- [I.E]: "I think we are, we all feel very trusted, and we all feel that we have the competences."
- [I.J]: "I don't feel that the management don't trust the skills."

High employee turnover

[I.A]: "Because it's all about the trust again, like if it comes new employees now you need to sit down and convince them."

- [I.F]: NO "...the people that are leaving [case company] has been here for 10-15 years, and are really stuck ... so I think the high employee turnover is actually more a benefit right now."
 [I.I]: NO "... it doesn't really matter."