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Causality of small firm growth: Towards a model of relations among challenges SMEs face while growing, solutions to them and aspects of the context of the growth

by

Jakub Šiller

&

Ahmet Selim Engin

Master's Programme in Entrepreneurship and Innovation

Supervisor: Solomon Akele Abebe

Examiner: Johannes Gartner

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Abstract

Even though researchers have investigated the growth of small and medium-sized enterprises (SMEs) for decades, we know little about the challenges they face due to their growth, what are the aspects of the context in which they emerge, and how they are addressed. Current literature provides even less knowledge about the causality of SME growth. This study, in the form of an explorative single case study of a high-growing company in e-commerce, fills that void. The analysis led to the identification of specific challenges, solutions to them, and aspects of the context in which they emerged. Moreover, the investigation resulted in models of their interconnectedness at multiple levels of abstraction. Finally, various types of relations were identified. These novel findings shed light on the causality and complexity of SMEs' growth process. They describe specific growth challenges, solutions to them, and aspects of their context. More importantly, the results provide tools for scholars to better understand and gather knowledge about SME growth. For entrepreneurs and managers, these findings offer insights for decision-making and aid in managing their companies through growth.

Keywords: SME; Small firms; Growing; Firm growth; Process; Interconnectedness; Causality; Causal; Relations; Effects; Challenges; Solutions; Context; Growth aspects

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1. Introduction

Small and medium-sized enterprises (SMEs) are an essential part of the economy, and they provide a significant number of new jobs, especially growing ones (Davidsson, Achtenhagen & Naldi, 2010; Arbaugh & Camp, 2000). Some researchers investigated challenges that small and medium-sized companies deal with. For example, Quayle (2002) investigated the challenges e-commerce companies in the United Kingdom face. Hicks, Culley, and McMahon (2006) focused on engineering SMEs' struggles in information management.

Small firm growth has been studied for decades, and some areas, such as growth antecedents, are extensively researched (Davidsson, Achtenhagen & Naldi, 2010). However, growth is a process that also brings challenges, yet we still do not know enough about that (Tunberg & Anderson, 2020; Kindström, Carlborg & Nord, 2022). Therefore, this work aims to contribute to this area of research.

To talk about a firm's growth, some scholars take a step back and first analyze what the term firm in the study of growth represents (Penrose, 1995; Davidsson, Achtenhagen & Naldi, 2010). Penrose (1995) developed a fundamental and commonly used (Davidsson, Achtenhagen & Naldi, 2010) resource-based theory of growth based on her definition of a firm as "an administrative unit" (Penrose, 1995, chap.II, p.25) and at the same time as "a collection of productive resources" (Penrose, 1995, chap.II, p.25). Davidsson, Achtenhagen, and Naldi (2010) discuss various formal forms a company can have and situations after one company splits into multiple.

According to Coad (2022), it is typical for companies to grow or decline at a very low pace. It is less common for firms to exhibit annual rapid growth or decline, and the probability of continuing in a given trend significantly decreases for the second and third consequent year (Coad, 2022). That is one of the reasons why to examine what is happening in those rare companies that grow fast.

As mentioned earlier, many researchers examined antecedents of growth. They found out that, for example, education and skills, industry experience, or entrepreneurial experience have positive effects on growth (Pugliese, Bortoluzzi, & Balzano, 2020; Demir, Wennberg &

McKelvie, 2017). According to Penrose (1995), a company is objectively limited by its ability to exploit opportunities; however, the company perceives opportunities through its assumptions about what it can accomplish according to which it acts. She adds that it is assumed that due to risk and uncertainty, entrepreneurs often calculate with lower demand and higher costs for planned expansion. Penrose (1995) further explains that basically, no firm fully utilizes all of its resources, and therefore there is always something more to employ and thus grow. Researchers often assume or explicitly state that growth is desired entrepreneurial activity for every company and should be pursued (Gundry & Welsch, 2001; Kindström, Carlborg & Nord, 2022; Schwab, Gold, Kunz & Reiner, 2017). However, growing sustainably is a tricky task (Schwab et al., 2017).

Some companies do better when they decide not to grow (Schwab et al., 2017), and some business owners do not even want their firms to grow (Penrose, 1995). Many managers and founders see it as a double-edged sword (Schwab et al., 2017). Coad (2022) points out that various thresholds of a company's size exist, which might limit growth. For example, some thresholds relate to taxes or employment protection legislation, and some do not have apparent reasons (Coad, 2022).

According to Penrose (1995), managers and their experience are essential for growth. The higher the growth, the more, or the severer challenges for managers emerge (Fombrun & Wally, 1989; Kindström, Carlborg & Nord, 2022), so only a few companies grow successfully (Arbaugh & Camp, 2000).

It is important for managers to understand and be able to control increasing complexity together with growth as it is often vital competence of a company, and the quality of decisions governs the direction of a company towards positive or negative outcomes (Arbaugh & Camp, 2000). However, Slevin and Covin (1998) state that changes in a company are triggered by external forces, and managers often solve problems in a fire-fighter-like ad-hoc manner, often responding to the outdated state of the environment. Some researchers took a look at that and studied the challenges companies face while growing. Most of the challenges they discover relate to leadership and people (Penrose, 1995; Hambrick & Crozier, 1985; Arbaugh & Camp, 2000; Kindström, Carlborg & Nord, 2022). Some (Hambrick & Crozier, 1985; Arbaugh & Camp, 2000) even provide examples or general suggestions on preventing or mitigating some of them. Nevertheless, there are still not many works that research managing the combination of complexity and growth (Arbaugh & Camp, 2000). Researchers often focused on investigating changes in growth rates, ignoring other aspects of the growth process (Davidsson, Achtenhagen & Naldi, 2010), including causality (Parry, 2010 cited in Tunberg and Anderson, 2020). Tunberg and Anderson (2020) shed light on that area when they investigated how small companies make sense of growth. One of the main topics in their findings was the complexity of growth. They illustrated the complexity of the interconnectedness of growth aspects and how those relationships make growth challenging for a company. They displayed that one change resulted in the necessity of another change. In their study, Tunberg and Anderson (2020) did not investigate the interconnectedness of aspects of growth much deeper, but they emphasized the necessity of investigating and theorizing about the process of growth to the details. Kindström, Carlborg, and Nord (2022) confirm that ways how companies achieve sustainable growth and related challenges are under-researched. They, for instance, propose to research further how companies understand and deal with growth challenges, their compounds and the sequential nature of some subset of them, inter-relations of challenges, if multiple challenges could be mitigated at once with a single solution and also how different firm's contexts affect challenges.

We see evident calls from researchers for further investigation of growth challenges, growth process, and its causality; therefore, in this work, we aim to address them. The purpose of this study is to

examine challenges that SMEs face while growing, what is the context in which they emerge, what are their effects, how they are approached, and how all these elements are interrelated.

This work aims to extend the current state of knowledge on small and medium-sized firm growth by identifying challenges that growth can bring, aspects of the context (contexts) in which they emerged, and solutions implemented to solve or mitigate the impact of the challenges. Furthermore, this work intends to provide novel insights by exploring and analyzing relations among those challenges, solutions, and aspects of their context.

We believe that these insights will help to strengthen the theory of small and medium-sized firm growth and provide helpful information to entrepreneurs and managers that they could utilize in practice.

In the following chapters, we present existing literature and theories, then we continue with describing the methodology we used for this study, followed by a chapter focused on findings where we describe the results of our analysis. Finally, we summarize our discoveries and discuss implications for theory and practice, but also acknowledge the limitations of this study and propose suggestions for future research.

2. Theoretical framework

2.1. What is a firm

Penrose (1995), in her seminal work, challenges the perception of a firm - that has a rigid product portfolio and is influenced by specific markets - derived from the 'theory of the firm.' She explains that such a model is used by many economists, for example, to analyze the allocation of resources, pricing, and production quantities or optimize the average cost curve to a given set of products. She argues that the 'theory of the firm' is unsuitable for investigating other aspects of a firm or a firm with a dynamic product portfolio. She offers a view of a firm that can satisfy any demand with appropriate resources, and the expansion of such a firm can be limited by the market or its resources.

She defines a firm as an "*autonomous administrative planning unit*" (Penrose, 1995, chap.II, p.16) whose structure, general policies, financial decisions, and other major issues are managed centrally, typically by, for example, a top manager or some board of directors.

Penrose (1995) writes that it might be tricky to determine the size of a company that, to some extent, controls its subsidiaries. She argues that for investigating growth, a subsidiary should be considered part of the larger firm only if there is a clear administrative collaboration; therefore, if there is only an economic relationship or power, the companies should be investigated as two industrial firms.

After identifying an entity to examine, another trouble of growth investigation might arise as, over time, one company could go through various legal forms, names or locations could be changed several times, managers or even owners could change, and even product portfolios might evolve (Penrose, 1995). Penrose (1995) explains that one firm can go through various transformations without losing its identity, "but it cannot survive the dispersal of its assets and personnel nor complete absorption in an entirely different administrative framework" (Penrose, 1995, chap.II, p.23), which might happen for example by merging with another firm.

Similarly, Davidsson, Achtenhagen, and Naldi (2010) discuss what a firm represents in research. They demonstrate the issue regarding various forms, ownership compositions, and transformation of a company on an example from work by Davidsson and Wiklund (2000) that shows several ways of splitting up a company that rapidly grew (organically as well as by acquisition). In the example, Davidsson and Wiklund (2000) assumed three possibilities that range from creating new legal entities that would still be partially centrally managed to making the new legal entities independent and mainly owned by their managers in which the entrepreneur's holding company would have a small stake. Davidsson, Achtenhagen, and Naldi (2010) further point out that instead of a holding company, an individual can have power over multiple companies that might not have obvious relations.

Let us move to the more operational side of a firm. Penrose (1995) extends the definition of a firm as an administrative unit by saying that "it is also a *collection of productive resources*" (Penrose, 1995, chap.II, p.25), which includes physical resources such as factories, devices, material but also waste, by-products, etc. and also human resources. She adds that which, when, and how the resources will be used is controlled by the firm's administrators. One resource or combination of resources can be utilized in multiple ways; hence how resources are used determine the services they provide (Penrose, 1995).

The European Commission defines small and medium-sized enterprises as companies that have at least 10 and less than 250 people. Companies with headcount lower than 10 it defines as micro enterprises. Furthermore, a company needs to have either less than 50 million euros of turnover or less than 43 million euros of balance sheet in total, to fit into the category of small and medium-sized enterprises (European Commission, 2003).

2.2. What is growth

> *"The business firm, as we have defined it, is both an administrative organisation and a collection of productive resources; [...] The productive activities of such a firm are governed by what we shall call its 'productive opportunity', which comprises all of the productive possibilities that its 'entrepreneurs' see and can take advantage of. A theory of the growth of firms is essentially an examination of the changing productive opportunity of firms"* (Penrose, 1995, chap.III, p.32).

Most of the time, the research considers growth as a simple increase in amount, for example, in sales, employment, or quality (Davidsson, Achtenhagen & Naldi, 2010), but it can also refer to a process consisting of events, changes, and transformations itself (Penrose, 1995). For example, Schwab et al. (2017) consider growth “as a dynamic process determined by the decisions made by managers.” (Schwab et al., 2017, p.84). Tunberg and Anderson (2020, p.1456) stated that "growth is portrayed as an endless range of connected decisions and actions following on from each other." In their work, Tunberg and Anderson (2020) stressed that growth is a complex process full of chain reactions where various aspects are interconnected.

Davidsson, Achtenhagen, and Naldi (2010) explain that growth is a heterogeneous concept. Various measures and indicators of growth are used in research (Davidsson, Achtenhagen & Naldi, 2010; *Coad, 2022*). Penrose (1995) suggested using a measure of all utilized productive resources, including human resources, to interpret a company's size. She proposed using their present value as a measure, but as she found it impractical, she chose to use mainly a number of fixed assets. According to Davidsson, Achtenhagen, and Naldi (2010), sales, employment, and assets are some of the most often used indicators of growth. Measures such as physical output, market share, profits, productivity, or turnover are also used (Davidsson, Achtenhagen & Naldi, 2010; Demir, Wennberg & McKelvie, 2017; Kindström, Carlborg & Nord, 2022). Davidsson, Achtenhagen, and Naldi (2010) claim that it is suggested to use increased sales as a growth indicator in cross-industry studies. They also add that it might be the most universal measure and that many owner-managers use it. However, they warn that it is not necessarily the most suitable option and suggest researchers think through the selection of indicators.

The selection of growth indicators or a combination of them can have significant consequences. Drawing on Shepherd and Wiklund (2009, cited in Davidsson, Achtenhagen & Naldi, 2010) and Delmar et al. (2003, cited in Davidsson, Achtenhagen & Naldi, 2010), Davidsson, Achtenhagen, and Naldi (2010) state that measuring various growth indicators yield results that, in many cases, do not correlate to each other. So various sets of indicators would yield different results for situations when for example, one company's turnover increases but assets stay constant, and another company exhibits a lower increase, but in both factors (Davidsson, Achtenhagen & Naldi, 2010).

Besides various measures, different formulas are used to evaluate the amount of growth (*Coad, 2022*). As discussed by Davidsson, Achtenhagen, and Naldi (2010) small companies might exhibit higher relative growth; however, bigger companies would more easily achieve higher growth in absolute numbers. Moreover, study period and sampling frequency should also be considered (Davidsson and Wiklund, 2000 cited in Davidsson, Achtenhagen & Naldi, 2010; Esteve-Pérez, Pieri & Rodriguez, 2022; *Coad, 2022*).

A company can grow in various modes, including, for example, organic growth, acquisition, merger, networks, alliances, or franchising (Penrose, 1995; Davidsson, Achtenhagen & Naldi, 2010; Kaufmann & Dant, 1996).

High-growth companies are, as defined by Eurostat, companies that had at least 10 employees when the growth started and have increased their number of employees by 10% per year for the last three years, and companies with 20% annual growth either in terms of the number of employees or in turnover for the last three years (Eurostat, 2014).

2.3. What affects growth

According to Penrose (1995), growth is planned and does not happen automatically. A growth programme contains a plan on how to orchestrate resources that a company has or could have in order to achieve the desired outcome and also a plan for its execution. She suggests examining drivers and obstacles separately as they influence the plan differently.

Based on previous literature on high growth, Demir, Wennberg and McKelvie (2017) synthesize a model of high-growth drivers. They identified five themes with direct influence on high growth and mediating relations between those drivers and high growth. These themes are human capital (mediated by human resources management), human resources management (mediated by strategy), strategy, innovation (mediated by strategy), and capabilities (mediated by innovation). They state that this model is not a mature theory and was developed to support future studies.

Similarly, Pugliese, Bortoluzzi, and Balzano (2020) extensively reviewed published articles examining drivers of growth. They created six groups based on 66 individual drivers they identified. These groups are individual and team-related drivers; marketing and strategy-related drivers; context-related drivers; industry and market-related drivers; firm-level resources; and capabilities and past performance. The dependent variables in the study were generic growth, profit-related measures, sales-related measures, size-related measures, and other growth dimension measures such as market share, company value, assets, and so on. They mention that empirical studies supported categories: individual and team-related drivers; marketing and strategy-related drivers; and capabilities and past performance significantly.

Penrose (1995) divides drivers into external and internal. Interestingly, besides increasing demand, technological change, conditions, and opportunities, she adds to external drivers also changes that might require growth in order to defend against the negative influence that the changes might have on a firm's present operation. In the context of internal and in the context of expansion in general drivers Penrose (1995) often talks about managerial and entrepreneurial skills to organize available or obtainable resources in order to exploit opportunities. She adds that even though conditions might change and particular products or locations might be unsuitable for expansion, a company can take advantage of other opportunities that are available to it since companies are not limited to particular products and locations. Furthermore, in her book, she explains that since it is significantly difficult to utilize all resources of a company to their full potential, there are always some spare productive services, resources, or special knowledge from which internal incentives emerge.

2.4. Managing growth

According to Arbaugh and Camp (2000), planning and managing the usage of resources and knowledge is influenced by transitions as they refer to a combination of complexity and growth.

In the work by Hambrick and Crozier (1985), challenges that high-growth firms face are presented. They explain that as a company quickly multiplies its size, the satisfaction of former employees that sought a small firm's characteristics might decrease, their relationship with owners might start to suffer as they see them less, and friction between them and new hires might increase. Moreover, the owners' vision might not be that clear anymore to the employees (Hambrick & Crozier, 1985). The study further illustrates that due to accomplished growth, companies might become overconfident and rigid in their strategies and behaviors, which may have negative effects on them. Hambrick and Crozier (1985) describe that due to a lot of new unknown people, the amount of effort needed for decision-making and knowledge-sharing significantly increases. They also point to issues regarding the boundaries of roles, as people might not know the range of their responsibilities or want to gain more responsibilities. The last theme of problems Hambrick and Crozier (1985) discuss is resource shortage. They claim that cash flow is often problematic as expansion requires capital.

Slevin and Covin (1998) investigate a company's adaptation to external environmental changes and their relation to time. They propose a model that builds on the rate of external change and adaptability of a company to situations. They demonstrate that a company needs to be more responsive as the rate of change increases. According to them, managers need to notice that environmental changes require changes in the firm, they need to be able to recognize what needs to be changed and act to adapt the company according to the environment, and finally, they need to make the changes in appropriate time so they happen quick enough but not too fast as rapid changes might be too risky for a company.

As Arbaugh and Camp (2000) mention, the constant dedicating part of a company's resources to pursuing new opportunities, together with changes in resource organization, determines the pattern and rate of growth. According to them, introducing routines in this process might lead to more sustainable and higher growth. Their empirical study reveals a transition in personnel, underlying business model, the organizational/management structure, role of the entrepreneur/CEO and financial management, and external environment. Some examples of transitions they offer are losing senior-level employees, different visions among business partners, or facing too many tasks.

Kindström, Carlborg, and Nord (2022), in their three-year in-depth study, investigated organically growing companies (in terms of turnovers) aiming for further growth in order to discover challenges that managers face while their company is growing. The companies were already beyond the start-up phase, therefore, the growth was not early. They identified three themes of challenges: challenges related to a business model, people-related challenges, and leadership-related challenges. Aligned with Penrose (1995), Hambrick and Crozier (1985), Arbaugh and Camp (2000), and to some extent, Slevin and Covin (1998), Kindström, Carlborg, and Nord (2022) study illustrates that most challenges lie in leadership and people and the noticeably less challenging theme is business model. However, even there, managers face many challenges. Challenges with designing active boards, effective management teams, clarifying roles, decision-making, and delegation are some of the examples of individual challenges presented by Kindström, Carlborg, and Nord (2022).

2.5. Discussion on stage models

Investigating the process of growth is typically related to stage models of growth (Davidsson, Achtenhagen & Naldi, 2010). These theories model the life of a company in a predefined count of distinct stages (Levie & Lichtenstein, 2010; Davidsson, Achtenhagen & Naldi, 2010). Stage models are based on assumptions that similarly to humans, companies during their life pass through predefined, identifiable stages, in a predetermined order, and that the same rules govern the evolution of all companies (Levie & Lichtenstein, 2010). There are a lot of stage models that vary in the number of stages, starting with three and up to six (Levie & Lichtenstein, 2010; Davidsson, Achtenhagen & Naldi, 2010). They are popular among researchers, appear in textbooks, and are used as teaching tools (Levie & Lichtenstein, 2010; Davidsson, Achtenhagen & Naldi, 2010). Moreover, drawing on Eggers, Leahy, and Churchill (1994, cited in Levie & Lichtenstein, 2010), Levie & Lichtenstein (2010) state that there is a study where all participating entrepreneurs related their ventures with one of the given stages.

Yet, stage models are largely criticized (Levie & Lichtenstein, 2010; Davidsson, Achtenhagen & Naldi, 2010). Levie and Lichtenstein (2010) investigated the literature on stage models and found no agreement on the core model or characteristics of a stage, the number of stages, or transitions between stages among scholars. Another strong argument against stage models is that they often have weak or no empirical support, and there are also empirical studies that prove some of the models wrong (Levie & Lichtenstein, 2010; Davidsson, Achtenhagen & Naldi, 2010). In other words, they found out that there is no tendency towards a common theory and concluded that "it appears that stage theory is not appropriate for understanding business growth" (Levie & Lichtenstein, 2010, p.329). In their work, Levie and Lichtenstein

(2010) propose an alternative model based on dynamic states. They relax the first two assumptions and use complexity science instead.

Based on the above-mentioned strong arguments, we are not going to consider stage models in our research.

2.6. Summary of theoretical discussion

The complex nature of companies and their, sometimes fuzzy, relations to other organizations and individuals fogs up the borders of the assumed entity. Guided by the definition of a firm as an autonomous administrative unit presented by Penrose (1995), one might be able to uncover these borders and identify the firm and its history. While investigating the history of the company, one needs to pay attention to various transformations and changes and evaluate if the identity of the firm is the same or if the identity has changed and the edge of the company's history is hit.

In order to properly understand the growth of a firm, it is necessary for researchers or practitioners to choose wisely and pay attention to indicators of growth, as various subsets of measures and formulas can describe the same company differently. It is also important to pay attention to the mode of expansion.

As a company exists in some environment and has some internal structure and operations, various antecedents such as growth drivers, external environment, internal incentives, and resources available to a company before the growth period influence growth potential and expansion plan. Examination of these factors could help to comprehend the context of the growth.

Finally, once the odds are favorable and a company starts to grow, new challenges emerge. By investigating these challenges, one might gain knowledge about the process and management of growth. This knowledge is valuable for theoretical and practical purposes. However, it seems that investigating growth from the growth challenges' point of view is neglected.

3. Methodology

In this chapter, we describe how we conducted this work. We start with ontological and epistemological assumptions and standpoints through which our study was done. We continue with describing the design of this research and the selection of a case we investigated. After that, we explain how we collected and analyzed data and the reasons behind our choices.

3.1. Ontological and epistemological assumptions

Gioia (in Gioia, Corley, Eisenhardt, Feldman, Langley, Le, Golden-Biddle, Locke, Meesbus, Piekkari, Ravasi, Rerup, Schmid, Silverman & Welch, 2022) explains his view that organizing is socially constructed since the human agency is the force that motivates human actions, which form a system and influence future actions. In this work we adopted that view. Cambridge dictionary (Cambridge University Press & Assessment, 2023) defines *a challenge* as "(the situation of being faced with) something that needs great mental or physical effort in order to be done successfully and therefore tests a person's ability," (Cambridge University Press & Assessment, 2023) and it defines *successfull*y as "in a way that achieves the results wanted or hoped for" (Cambridge University Press & Assessment, 2023). From that, we conclude that challenges are closely related to human agency. This study was conducted through the lens of constructionism as its' essence seems to be aligned with the meaning of researched phenomena.

The epistemological standpoint of this work is interpretivism which is, according to Bell, Bryman, and Harley (2019, p.31) "concerned with the 'how' and the 'why' of social action, including the processes whereby things happen" which, according to Gioia (in Gioia et al., 2022, p.233) is "the purpose of discovery-oriented research." Moreover, multiple scholars suggested this standpoint for investigating the growth process of small and medium-sized firms (Tunberg & Anderson, 2020). Thus we find this standpoint suitable for this study as we wanted to explore challenges that growth brings to small and medium-sized enterprises, solutions to them, aspects of their context and relations among them; and reveal new concepts and contribute to the area of growth management.

3.2. Research design

This work aims to deepen our understanding of the growth of small and medium-sized companies, specifically in the area of challenges that growth brings to such companies. Besides identifying the individual challenges, solutions to them, and significant aspects of their context, our objective was to explore the relations among them and provide novel knowledge about the complexity of small (or medium-sized) firm growth. To do so, we conducted exploratory research in the form of a single case study.

We chose the case study design because it is suitable for capturing the richness of a phenomenon and its context (Eisenhardt & Graebner, 2007). Moreover, according to Gerring (2004), case studies are suitable for explorative studies, and "the in-depth analysis of a single unit is useful in elucidating causal mechanisms" (Gerring, 2004, p.349), which is exactly aligned with our research objective.

Furthermore, our goal is to make a unique and valuable contribution to the theory, and according to Eisenhardt and Graebner (2007), a theory based on a case study is strongly grounded in empirical data, and they claim that "building theory from cases is likely to produce a theory that is accurate, interesting, and testable" (Eisenhardt & Graebner, 2007, pp.25-26).

We also aim to provide practical insights to entrepreneurs and managers, and according to Gibbert, Ruigrok, and Wicki (2008), case studies are useful for generating managerial knowledge.

3.3. Case selection

3.3.1. Selection criteria

Our criteria for selecting a company for this study were following. First, it had to be a small or medium-sized company using the definition by the European Commission (2003). That means the company's headcount had to be between 10 to 250 and have less than 50 million euros of turnover or 43 million euros of balance sheet total.

The next criterion for selection was high growth. The reason for that is that anomalous or extreme cases tend to be richer in information than typical or average cases because they interact with more parties and uncover more concepts (Flyvbjerg, 2006). In the theoretical framework, we explained that multiple measurements could be used to measure growth. We followed the definition of high-growth companies by Eurostat (2014), according to which a company has to increase their turnover or the number of employees by 20% annually for the last three years or had 10 employees when the growth started and then for three years in a row increased that number by 10% in order to be considered high-growth. Another reason for choosing the number of employees and turnover as growth indicators is that they are widely used (Davidsson, Achtenhagen & Naldi, 2010), and therefore this work could be easily put in the context of existing research on firm growth.

Finally, the company's top managers had to be willing to cooperate with us. By cooperating, we mean sharing information with us as well as dedicating their and employees' time for interviews. This ensured that we would be able to collect data necessary for the work.

3.3.2. Selected company

The selected company for this study that meets all the requirements described above is an e-commerce company based in the Czech Republic founded in 2009. The company started in retail, however now they focus mainly on e-commerce. They expanded to markets in more countries, but the whole company still manages everything from a single city in the Czech Republic.

In the last three years, their turnover growth rates for 2020, 2021, and 2022 were 285%, 190%, and 148%. Annual employee growth rates from 2020 to 2022 were 200% and 177%. It can be easily seen that growth rates in turnover and the number of employees have been much higher than the criteria for a company to be categorized as a high-growth company which might make this case even richer in insights. Besides awards for its growth, this company was also awarded for its exceptionality and customer satisfaction and gained much interest from the media. That shows that the company is successful in terms of performance and popularity.

3.4. Data collection

Since this research is done through the lens of constructionism and interpretivism, we chose semi-structured interviews as the primary means of obtaining data. This enabled us to stay open to the information we would collect (Bell, Bryman, & Harley, 2019) while ensuring cross-interview compatibility. Gioia's, Corley's, and Hamilton's (2013) comment that semi-structured interviews are at the center of sound qualitative works supports our choice. Furthermore, semi-structured interviews are engaging for interviewees, so they are willing to provide valuable information (Gioia, Corley & Hamilton, 2013).

We built an interview guide, which you can see in the appendix, around open questions focusing on challenges our interviewees and the company experienced. We made sure the interview guide was broad enough to let the interviewees talk about what they considered important and challenging without being biased by questions but at the same time, we made the interview guide specific enough to keep the discussion within the boundaries of the research aim. During the interviews, we asked follow-up questions based on what the interviewee said to better understand the described situation, its context, antecedents, and consequences. Additionally, we asked the interviewees questions about situations mentioned in the previous interviews, which the current interviewee did not mention spontaneously. This way, we could see how people from various departments and managerial levels see the same situation and capture a more holistic understanding of it. Besides open questions, we also asked some closed questions to relate what we just heard to the research question and stay focused on the research aim or to make sure that we understood correctly and to prevent misinterpretation.

Before we conducted the interviews, we went through secondary sources, including the company's website, online magazine articles, videos, podcasts, and posts on social media made by company representatives. This allowed us to have a preliminary picture of the company's life. Even though we had this information prior to the interviews, we always started by asking blindly on purpose to prevent asking questions that might influence the interviewee's response. Instead, we wanted to be led by the informants and enable them to reveal new concepts. The information obtained from secondary sources helped us to better understand the information we obtained during interviews and helped us with its interpretation, and at the same time, it enabled us to ask about events that interviewees did not mention spontaneously during interviews in the beginning of investigation. Additionally, it might have shown our genuine interest in the company.

First, we had an interview with the founder of the company. That allowed us to gain a better understanding of the founder's view of the challenges the company and the founder faced, together with the overall picture of the company and its life. After that, we interviewed various C-level managers, including CEO, COO, CFO, and CMO. Then we interviewed the HR manager, personnel from the warehouse, and customer care to gain an understanding of the company as a whole.

Interviews with the founder and the CFO were done via online meeting, and the rest of the interviews were physically held in the company's premises in the Czech Republic. We tried to do the interviews in English, however in some cases, when the interviewees preferred their native language, the interview was partially or fully held in that language. With the interviewees' consent, the interviews were recorded and later transcribed. Both researchers were present during all interviews. In total, we interviewed 11 people from different departments and managerial levels. We spent more than 10 hours with the company's representatives.

3.4.1. Ethical consideration

While doing research, it is important to keep interviewees' interests and matters safe (Gioia, Corley, and Hamilton, 2013). That includes avoiding violating informants' privacy, harming interviewees in any way, and ensuring that participation in the research would not have any negative impact on interviewees (Bell, Bryman & Harley 2019). Moreover, researchers should not distort or hide the truth for the interviewees and always have their voluntary informed consent for the investigation (Bell, Bryman & Harley 2019).

To make sure not to harm any interviewee or the company and to follow all mentioned standards, and keep good manners in general, we started by asking for consent from the founder, the CEO, and a representative of the investors to conduct this study. During interviews, we always explained the aim of our study, and informed our interviewees that they do not need to answer any question we ask and that they can stop the interview any time they want. We always asked for their consent to record the interview, and we explained to them that we can pause the recording any time they want. We did not run into any opposition from the interviewees regarding these criteria, and every time they wanted to say something off-record, we paused the recording, and we did not use that information in our research. We also avoided presenting quotes that could be potentially misinterpreted in a negative way or negatively influence the company or interviewees in any way.

To ensure anonymity, we do not present information about the company that could be used for its identification. However, there is some information we need to present to keep the rigor and transparency of this thesis. This includes the already presented country where the company is based, the year when it was founded, growth rates in terms of turnover and employees for the last three years, and the general nature of awards and publicity it gained. We believe this information does not reveal the company's identity, and we have got the oral consent to present them by the company's CEO.

3.5. Data analysis

After collecting the data, we started with analysis. We primarily followed Gioia's method because it is suitable for discovering new concepts, and it builds a theory grounded in data with the rigor required for academic research and presents the findings to others effectively (Gioia, Corley & Hamilton, 2013; Gioia, 2021; Gioia et al., 2022).

When researchers use Gioia's method, they consider both informants and researchers knowledgeable and therefore bridge the informant-based and researcher-based understanding of the phenomenon (Gioia, Corley & Hamilton, 2013; Gioia, 2021; Gioia et al., 2022) thus, they bridge the world of practitioners with the world of theories. As the goal of this study is to reveal new concepts and construct a theory based on empirical evidence that would benefit both practitioners' and academics' worlds, we argue that following this method fits our aim.

However, we did not use it as a cookbook or a template, but we fine-tuned and tailored our analytical moves to our research objective as it is suggested by many scholars, including Gioia himself (Gioia, Corley and Hamilton, 2013; Gioia, 2021; Pratt, Sonenshein & Feldman, 2022; Gioia et al., 2022). We will explain this tailoring within the description of our analysis.

We started by doing a so-called first-order analysis. We went through the recordings and transcripts of interviews and performed open coding through the lens of our research question. To keep this stage informant-centered, we were purposely blind to literature and theories. Instead, we created codes that represent challenges, solutions, and aspects of context at a low level of abstraction, if any, to stay close to words used by informants, as Gioia, Corley, and Hamilton (2013) recommended. We focused on finding out what really happened, and that is why we avoided building codes based on interviewees' hypotheses and general assumptions. During this phase, we also noted all the effects and relations among the challenges, solutions, and aspects of context mentioned by interviewees, which we utilized later in the analysis.

After coding all the interviews, we went through the codes and sorted them into three categories according to our research question: challenges, aspects of context, and solutions. Then we merged duplicates, improved labels, removed codes that were too detailed, too broad, insignificant, or irrelevant to the research questions, and if we found out that we used one code for multiple meanings, we split the code. This was done collaboratively between both researchers, and the analysis was discussed until a consensus was found.

After that, we moved to second-order analysis. As we followed Gioia's method (Gioia, Corley & Hamilton, 2013), at this point, we considered ourselves as knowledgeable agents, and based on our knowledge and creativity, we grouped the first-order codes under more abstract second-order themes which we consulted with existing literature and theories, and therefore, we moved to the theoretical realm. We did this separately for codes representing context, challenges, and solutions. This was also discussed among the authors until a consensus was reached.

As the next step, we aggregated those second-order themes into even more abstract and theoretical categories. At this point, we had finished the data structure, which is the basis for Gioia's methodology (Gioia, Corley & Hamilton, 2013; Gioia, 2021). Our deviation from using Gioia's method as a template is that we did all the described steps individually for challenges, solutions, and aspects of their context. Gioia (Gioia et al., 2022) stated that

> "qualitative researchers should provide some sort of 'data structure' that shows how the informant-based (first order) codes relate (similarly or differently) to researcher-based (second order) themes and dimensions" (Gioia et al., 2022, p.233).

We argue that our deviation did not violate that requirement, and all the benefits of Gioia's method remained untouched.

After we created the data structure, we analyzed relations among challenges, solutions, and aspects of context, and we set the data structure, as Gioia would say, "in motion," (Gioia 2021, p.26) and this way created a grounded theory model (Gioia, Corley & Hamilton, 2013).

Gioia explains that the model should elucidate data-to-theory relation (Gioia, 2021), and in Gioia et al. (2022) he stated that

> "theorists and researchers should become sense-givers by simplifying the complex in essential ways (that's what models inevitably do anyway). In my view, we should practice this kind of 'simplexity' and convey simpler ways of understanding complex concepts." (Gioia et al., 2022, p.236)

That is why we created a model on the level of aggregated dimensions of second-order themes.

However, at the same time, the complexity and paradoxes of real life in the narratives that emerge in the case studies according to Flyvbjerg (2006), drawing on Benhabib, (1990 cited in Flyvbjerg, 2006), Mitchell and Charmaz (1996 cited in Flyvbjerg, 2006), Roth (1989 cited in Flyvbjerg, 2006), Rouse(1990 cited in Flyvbjerg, 2006) and White (1990 cited in Flyvbjerg, 2006) "may be difficult or impossible to summarize into neat scientific formulae, general propositions, and theories" (Flyvbjerg, 2006, p.237). According to Peattie (2001 cited in Flyvbjerg, 2006), by summarizing information into general concepts, the fundamental value of a case study might be lost. As we were analyzing the data, we saw how the details and richness in the information about the phenomena we gathered during the study were diminishing as we were moving to more and more abstract terms. Therefore we created an additional model at the level of second-order codes, which is still in the theoretical realm, but it is richer in information than the model at the level of aggregated second-order dimensions. That is still aligned with Gioia's method as an aggregation of second-order themes is not a strict requirement (Gioia, 2021) and addresses Peattie's concern. We simply provided a model of the phenomena at both levels of theoretical abstraction.

We acknowledge the complexity of the model created from second-order themes and even the one of their aggregations. At the same time, we aim to provide a simplified explanation of the complex phenomena we investigated, as it is advocated by Gioia (in Gioia et al., 2022). Therefore, in order to express the "simplexity" of the interconnectedness of the challenges, aspects of the context in which they emerge, and solutions to them, we analyzed the relations in the models and identified types of relations among them, and additionally created a model at this level of abstraction.

In conclusion, in order to provide the best answer to our research question and to provide a valuable contribution to theory and practice, we tailored our analysis to be able to (1) identify challenges that growth brought to the studied company, solutions to them, and aspects of the context in which they emerge and to be able to (2) investigate what are the relations among them. We argue that our whole analytical process remained aligned with the fundamentals of Gioia's method by building dynamic theoretical models through data structure on top of informant-centered insights, and helped us to express the "simplexity" of the phenomena without substantially losing the value of information richness of the case study.

We present our findings in the next chapter.

4. Findings

In this chapter, we present findings that the data analysis, explained above, resulted in. In figure 1, we present the data structures of the first-order codes, second-order themes, and their aggregated dimensions for challenges, their contexts, and solutions to them. Then, we individually describe them and elaborate on their effects and relations to other concepts in narratives built on top of quotes from our data, as it is recommended by Gioia (Gioia, 2021; Gioia, Corley, Hamilton, 2013). The visual representation of the model is shown in figure 2, figure 3 and figure 5. Finally, we move above specific challenges, solutions, and aspects of context and present identified types of relations among those three concepts and a model at this level of abstraction.

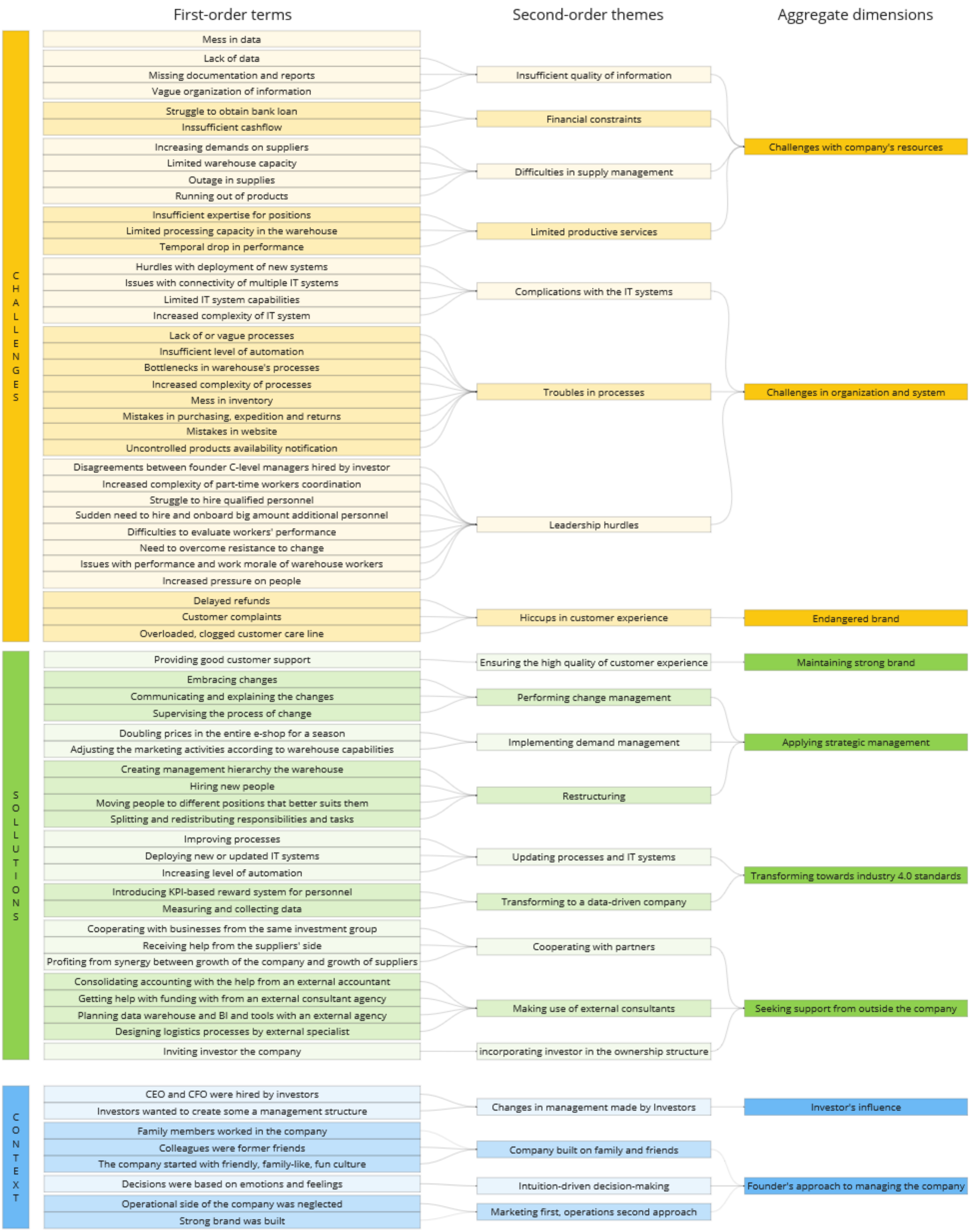

Figure 1: Data structure of identified growth challenges, solutions to them and aspects of their context

4.1. Challenges

Before describing individual challenges, we present what our study revealed about the challenges that the company faced due to its growth in general. First, we found out that (high-)growth really is a source of challenge. The COO stated: *"It grew so fast that we didn't even have time to somehow prepare all this."* Growth, whether big or small, also increases the number and impact of mistakes and trifles became challenges. This was explained by the CEO, who said: *"Before there was no big impact [of mistakes in purchasing] because you don't have so big quantities [...] you are buying like 500 [products], if you sell only a 70% from 500 - Okay, it was sold 350, and then we have 150 - that is nothing significant, but if you add one zero, so it means that you have 5000 [products], you sell only 70%. What to do with 1500 [products]? [...] You can make a big mistake, or you can make like 20 small mistakes. In the end, it is the same. It's the worst combination."* Similarly, when there were fewer people in the warehouse, there were individual cases of people with low working morale, but then, as the warehouse worker explains, as the company grew, *"more people were needed, and the more people who did not work [appeared in the warehouse] and simply, [people in the warehouse] split into two camps."* Finally, multiple interviewees explained that as the company grows, the challenges recur. For example, the founder told us that *"every year the warehouse had to be improved".* The CFO confirmed that and described that the same applies for HR, IT systems, finance and concluded that *"The challenges are definitely recurring in everything."*

Let's move to the specific challenges we identified. Our analysis led to three aggregated dimensions of second-order themes of challenges. This includes challenges with the company's resources, challenges in organization and system, and endangered brand. In the following sections, we present them one by one. We also describe their effects and relations to other challenges.

4.1.1. Challenges with company's resources

As we described in the theoretical framework, Penrose (1995) defines a firm as a pool of productive resources. Restrictions of these resources form the first group of challenges we identified. This includes challenges with financial constraints, insufficient quality of information, limited productive services, and difficulties in supply management.

4.1.1.1. Financial constraints

The first theme of challenges we discovered was financial constraints. Multiple interviewees, including the founder, CEO, COO and CFO described situations when the company faced challenges in this area. Especially, in regards to insufficient cash flow and struggles to obtain a bank loan.

According to the founder, *"the biggest problem was borrowing money for goods. [...] Because the bank may not want to lend you, or it wants to lend you but according to last year's statistics, not the current one."*. The COO confirmed that getting a bank loan and maintaining cash flow that would support growth was challenging as he said: *"The first [challenge] was definitely the funding. That was the point that basically influenced us the most in some way. [...] [Banks] didn't want to give us [money] and we were just convincing them: 'Look, but how are we supposed to grow?' [..] They saw that we are growing massively and that we simply need to finance it, but they just didn't care."*

Our investigation revealed that obstacles in finances led to challenges in supply management as the COO explained: "*The first point was finances, get money for goods, so we could sell or somehow fulfill that demand. Because every year we ran into it, that we didn't have the goods in December and people still wanted them and we were already sold out. [...] Because we didn't have the money for it, because the goods worked on pre-orders, so I couldn't say in November [to suppliers]: 'Now bring me another truck here for x million and I'll just sell it right away' "*

4.1.1.2. Insufficient quality of information

Another frequently stressed topic by our interviewees was information deficiency. According to the CEO: *"Without data, you are totally lost. [...] And I came here, and here was like nothing. Only daily sales reports in an excel file that shows us minimum data."* He also explained that mess in data is another issue as he said: *"If you have three sources [of data], you have to somehow mix it and select - 'okay, this time, these data are correct'"*.

Top management also explained how lack of data and missing or vague organization of documentation contributed to challenges in leadership, and finance. For example, the COO "*was supposed to evaluate [workers in the warehouse] in some way and check the* *performance and the work, and [he] didn't have any numbers*." Similarly, for CFO *"it was very difficult to compare whatever - new contracts with banks or finding some crucial documents for financial authority and controls. [...] Everything was in the email, but you can't really find anything in the email."*

4.1.1.3. Limited productive services

By going back to Penrose's (1995) definition of a firm and seeing the company as a pool of productive resources providing productive services, we identified that the company needed to deal with limits of the productive services it utilizes. This includes the limited capacity of the warehouse in terms of space which contribute to challenges in supply management. As the COO stated: *" We grew rapidly so we needed more and more space for the goods, and we had nowhere to put it."*. But the limits were also in terms of speed of expedition as he further explained: *"there were simply too many orders, that we knew that if we would be here 24 hours a day, we wouldn't be able to package [products in orders] anymore"*. And as we will demonstrate in the upcoming sections, troubles in processes or issues with IT systems slowed down some departments, which experienced hitting the limits of departments.

The company also faced limits of productive services they can utilize due to insufficient expertise and qualification for positions. People in the company started as generalists, which illustrates the claim of the manager of incoming goods: *"Many people did lots of different stuff. I was ordering goods and creating products on the website and processed incoming goods"*. Former lack of knowledge also led to difficulties in obtaining a bank loan, as the COO stated: *"bank wanted some reports from us, it wanted us to have some balance sheets and something and we basically didn't know.*" The CEO described how these limits increased pressure on individuals by saying, *"We have lots of people, which have very good skills, but no qualification, they were like on their own limits, and they were not comfortable because it was like pushing them 'Okay, guys, we are growing, we need to learn more, we need to push more, we need to be more professional', for some people that was no issue because they want to learn and wants to grow, but for some people, it was out of their comfort zone."*.

4.1.1.4. Difficulties in supply management

Due to challenges in finances, as mentioned above, the company ran out of products. Moreover, as the company grew, the demand for suppliers increased. Some suppliers grew with the company, and some decided to terminate the contract. The COO described the outgrowing of a supplier, which led to an outage of supplies as follows: *"Our pre-order was for about 15 thousand [CZK] and then it was for about 7 million [CZK]. [... and] they told us: 'Well we won't give you 7 we can give you 3.5 and this is all we can do and we know that the next order for next year will be bigger again, and we simply can't do that anymore.' [...] So, We had some goods [from them in the warehouse]. It was sold well, [so] it was sold out [and] we were, let's say, half a year without any of these goods. [...] [The supplier] did not want to grow with us. They just had enough of what they had and they didn't need to get bigger.".* However, as we presented above, even when suppliers were able to provide enough products, the company needed to deal with the limited capacity of the warehouse.

The outage of goods, together with uncontrolled products availability notification, endanger customer experience. As we have heard from the COO: *"When we sold out the goods, and then there was a return, someone didn't like the product - and the e-shop was set up in a way that at the moment when a product was returned all those x people what had the watchdog set up received a message that it is available and there was one single piece, so it totally made those people angry because one won it and another 300 were angry: 'you sent me an email, but you don't have the goods'"*

4.1.2. Challenges in organization and system

Another sphere of challenges we identified was Challenges in organization and system. Our interviewees described various troubles in processes, complications with the IT system, and leadership hurdles.

4.1.2.1. Troubles in processes

One of the central themes of challenges mentioned by the top management of the company was processes. The CFO's statement: *"the internal processes were just not existing. No approvals for invoices, everything was only based on phone calls, and there was no evidence on anything"* illustrates a lack of or vague process. He also explained how lack of automation influenced customer experience as he said that *"due to not having automated processes in terms of payments and returns. We were far behind the usual time of returning the money to the customers."*

The company also needed to deal with various errors including mistakes in the website, purchasing, expedition, and returns. According to the founder, *"the error rate in the warehouse increased"* as the company grew. The COO added that *"it was a common problem, that as [products for an order] lay on the ground, [a worker] took them and he should have checked them visually with that invoice - if he does it all day, eight hours, he can't check it properly".* The CFO of the company described how those errors influence other processes by saying *"Once there are mistakes in the return processes, then the accounting departments and I especially are really behind the payments, and paybacks. It's because there is a mistake in every written document created since someone returns some goods, and someone makes some mistakes in typing it into the system. Then we do not have the invoice matched with the written document. So we can not pay for the goods, and start investigating, "Where did the mistake occur? Was it a mistake in the warehouse? Was it a mistake in Customer Care?" And this slows us down a lot. And my accountants couldn't do their jobs. And they were kind of detectives, and it even slows me down due to auditing which I have to have done by some date. And I do not manage because of that."*

There were also various bottlenecks in the company's processes. One of them was explained by the warehouse manager: *"When the system broke down, let's say the printer broke, we just stood until someone repaired the printer and it delayed the whole process, so out of nowhere 20 people were standing and they waited until someone fixes the printer even though packing orders was still possible".* She also described how not following processes created a mess in inventory as she explained that *" maybe he took a [product] from a box, and for example forgot to record it, so [in the system shows] that there should be 15 of those [products] and there were physically 14 of them."* On the other hand, as more processes were introduced, their complexity increased and their agility decreased. This illustrates the COO with an example about the contract for renting a place for a store: *"It was a simple contract, which we always just read and said: 'ok, fine.' Now, we have investors, it had to go to the investors, the investors were sending it to their lawyers, lawyers, they changed something there... We dealt with signing the contract for that store for a year, which then resulted in penalties, and we weren't sure if they don't kick us out overnight because we don't have a signed contract, it was just unnecessarily tedious, completely useless because of a few [square] meters for a few pennies..."*

We already explained how uncontrolled product availability notification, together with the outage of supplies, affected customer experience and these examples show how various troubles in processes contribute to challenges with limits of the company's productive services and also to different challenges in processes.

4.1.2.2. Complications with the IT system

The company also faces various complications with its IT system. First, they experienced the limits of IT system capabilities. The COO explained that *"[the previous system] said 'you have to find [some products] and they are at those locations', but how many are there none of us know. So we basically guessed that. We did not know how many items we have at each location."*. The warehouse manager added *that "if [a product] is already reserved in an order [...] [the system] won't let you move it anymore and the replenisher went and he needed to make room for some new products, and he needed to move the goods but the system wouldn't let him do so [...] So he either moved it, or he simply left something buried in a pile of others."* Additionally, CFO stated that: *"[the accounting system they use] is definitely not made for e-commerce projects with 300,000 transactions and 1.5 million accounting journal entries. So, I believe there we are kind of getting to the limit of what the [the system] is capable of."*

After updating, replacing, or adding the software, hurdles with deployment arose, issues with connectivity of various systems emerged, the complexity of the whole IT solution increased, and the personnel faced different limits in the functionality of the system. The warehouse manager stated: *"We got a new system, [...] and it was a massacre for me, nobody understood [...] with the old system, in some number of people, we were used to processing 1,000 orders in a morning, and now they gave us the new one, and we did a maximum of 300 a day for 14 days."* The employee in customer care explained that: *"it took probably one month to accommodate everything and to get used to the programs - to IT systems."* The CEO further added that "*the implementation [of the new system] was already running when I started here. Of course, you can imagine, it's not like, two clicks, and everything is working. It was rather like a disaster, everything was not working. So we had to somehow try to fix all the issues and be in touch with the company, which was providing the system."*, and he added that there were *"a lot of issues in other systems to connect everything"*.

These examples also illustrate how complications with the IT system contributed to challenges in processes. Multiple IT systems meant multiple sources of data, which also created issues in information, as we described above.

4.1.2.3. Leadership hurdles

The company also experienced challenges in leadership. For example, the warehouse manager had "*days when [she] was doing nothing but onboarding*" as there was a sudden need to hire additional personnel. Furthermore, according to her, in the last season, *"the coordination of the part-timers was simply insane".* Besides difficulties in performance evaluation presented in the section about information deficiency, our interviewees experienced issues in performance and working morale in the warehouse. The COO explained that "*I just had to go to a meeting and it could be seen how the performance went down terribly [...] [some worker] knew that he could hide in the alley and basically I didn't know if he was working or not unless I actually went there and caught him".*

As the company grew, pressure on people was increasing as they needed to learn new skills and the workload increased. The COO told us: *"I have been at work for 12 hours, then I have been here almost overnight to do everything, and I said: 'It just can't go on like this'".*

Hiring qualified personnel was also a struggle. The CFO illustrated it like this: *"I hire a new accountant and I know that after six months, due to the fast pace of growth, I can start looking for another one, you know, people quit their jobs, you need to hire a new one."* The COO added that they also *"had a terrible problem finding people for marketing".*

Leaders in the company also needed to deal with resistance to change when they alternated the company or its part, for example, when they made changes in processes, IT systems, management hierarchy, or reward structure. According to multiple interviewees and according to the HR manager: *"from the beginning, employees felt that we wanted to take something from them"* when rewards based on performance were introduced.

Changes in the top management led to disagreements between the founder and C-level managers hired by investors which they needed to resolve in order to move forward. As the CEO explained: *"We had to somehow find a way, how to cooperate with [the founder] because he was like 30% owner and still was trying to be like CEO, and it was a little bit* *difficult. [...] We needed to somehow discuss who will be responsible for what, and I think we finally found a way, how to cooperate.*"

4.1.3. Endangered brand

Even though the company's brand was not harmed, as we will present later, we spotted situations when it was endangered due to some hiccups in the customer experience.

4.1.3.1. Hiccups in customer experience

As we illustrated above, the outage of supplies, together with uncontrolled product availability, led to customers' complaints. After increasing the price of products to regulate the demand, which we will explain later, according to the COO: *"customer care went through hell."* And he adds that when a lot of people contacted the company *"customer care was in really [bad] situations"*. Together with delays in refunds, these issues represent hiccups in customer experience the company needed to deal with. However, as we will describe later, the company cared a lot about the brand, and they had robust customer service, which solved all the issues and kept the brand unharmed.

4.2. Context

The context in which a company grows includes the characteristics of the company. We spotted two themes of these aspects of the company's growth context. The founder's approach to managing the company and the influence of investors.

4.2.1. Founder's approach to managing the company

We identify three characteristics of the founder’s approach to managing the company. He built the company on family and friends, his decisions were intuition-driven decision making, and he focused on marketing, and the operations came second.

4.2.1.1. Company built on family and friends

The COO told us that *"[the founder] built the company on friends"*. He further explained that he was also a founder's friend a long time before he joined the company. Additionally, he mentioned that multiple family members of the founder also worked in the company.

The atmosphere in the company was friendly and family-like, which the COO illustrated by the following story: *“We often worked late in the night, orders were processed at night, we had fun because simply the work behind us was visible. [...] There was a club nearby, and we used to party there in the evenings. Once, we were dancing there, and then [the founder] challenged us out 'Let’s go pack orders'. Then, we went to pack the orders at three in the morning. We just ran here and started packing the orders, well, just for fun.”*

These characteristics of the company, thus aspects of the context of the growth later led to limits of the company's productive service in terms of insufficient expertise at various positions.

4.2.1.2. Intuition-driven decision-making

In many interviews with the founder in the secondary sources, the founder mentioned his strategy to make decisions based on emotions and feelings. The COO supported this by saying: *"he is that kind of a businessman who works with feelings, numbers simply don't mean much to him."* He further explained that *"nothing was measured" and he* admitted: *"I didn't look at the data myself, but as time goes I found out now that I need them for my work, so it can somehow be managed well and without them, I am simply lost".* The CFO *"[the founder] was an amazing entrepreneur he was like a 'bull-dog' or how to call it. And he just went straight ahead and did not care about any processes."*

This shows that intuition-driven decision making was a typical aspect of the company, therefore an aspect of the context of the growth, and it also illustrates how it negatively influenced the situation with processes and information in the company.

4.2.1.3. Marketing first, operations second approach

From all the interviews and multiple secondary sources, it was evident that marketing was a great growth driver of this company. The COO explicitly stated: *"the company grew up on that marketing. We had a great brand manual"* and the CFO added: *"we are kind of a love brand".* The COO illustrated how the company cares about the brand and customer experience, and he said: *"we are counselors, we help [our customers], we tell them what's good... that we don't want to sell primarily, but that we want to help with that product".* However, he further explained that the rest of the company received significantly lower attention. The COO stated: *"the focus was on the marketing and the rest was poorly done.*

[...] the other things were just being forgotten [...] So the marketing grew, but the rest, kind of worked, but it was not at the ideal level. And then we started to bump into that - in a moment, when marketing delivered those sales, but the warehouse could no longer process them."

This strong focus on brand and customer relationships had a positive impact on the whole customer experience and positively contributed to build and maintain good customer support. However, neglecting the rest of the company negatively affected the company's productive services limits, contributed to troubles in processes, and also resulted in the insufficient quality of information.

4.2.2. Investor's influence

When the investment group joined the company, it immediately became the majority owner of the company. The influence the investors gained resulted in a change of characteristics of the company. The main change we identified was the introduction of a new management structure.

4.2.2.1. Changes in management made by investors

During our investigation, we found out that the CEO and CFO were hired by the investors. The CEO explained that *"there were conditions from the investors side. And when they are buying some shares of the company, they always create their own management, not own, but like professional management, so they were looking for people from the business and creating the management [team]".*

The new managerial team spoke a lot about the need to improve processes, automation, digitalization, data collection and data-driven approach. According to the CFO *"the internal processes were just not existing [...] So [he] started working on them."* he also explained that *"[The CEO] is from corporate environment and he knows that the processes are crucial for the growing companies".* The COO clarified that *"all these companies where I was, were like data driven companies [...] And this is what we are working right now on".* From that, we conclude that this change in the context of the company's growth positively affected or initiated solutions in terms of updating processes and IT systems and transforming into a data-driven company. On the other hand, hurdles in leadership emerged due to some disagreements between the new management and the founder.

4.3. Solutions

Finally, we analyzed how the company reacted when dealing with the challenges that growth brought. Our investigation led to 4 types of solutions: seeking support from outside the company, applying strategic management, transforming towards industry 4.0 standards, and maintaining a strong brand. For each theme, we now describe second-order themes that emerge from the empirical data.

4.3.1. Seeking support from outside the company

To overcome restrictions in the company's resources and challenges in organization and system. The company sought support outside the firm. Managers of the company made use of external consultants, invited and incorporated an investor into the ownership structure, and cooperated with partners of the firm.

4.3.1.1. Making use of external consultants

The company got help from several external consultants. An external domain expert helped them to increase the automation level and update processes in logistics. The COO illustrated it as follows: *"We invited a specialist in logistics and we had the logistics concept processed/designed. [...] He told us how we should store [products], [he designed] simple automation - the belt. The expert has basically invented [warehouse processes] for us. Since none of us are logisticians, not even me, so we have to solve it through the experts."*. The COO further explained how the company used the services of external consultants to mitigate limits of its productive services caused by insufficient expertise, the improved situation in the information, and struggles to obtain a bank loan as he said: *" I had to file a tax return, etc. and I'm not a financial person. So we had an external tax advisor, which basically did everything for us. [...] she was an excellent tax collector, processed our payroll, she was basically processing [everything regarding finance for] the whole company [...] and she somehow consolidate the [financial] data for us, which we basically didn't have and she somehow managed to prepare the documents for the bank for us, because we basically didn't know anything about it".* He also explained how getting help from a consultancy agency in order to obtain money catalyzed inviting investor as he said: *"[the founder] didn't even want to sell it, we asked [consultancy agency] to help us with some financial matters with those banks. [...] They prepared some documents for us for the bank [...] and helped us to get money. [...]*

And then [they] said: 'How about trying an investor?' [...] And it was tried out, like, why not?"

4.3.1.2. Including an investor in the ownership structure

The entry of investors into the company had multiple effects. It helped with financial constraints and it enabled and catalyzed cooperation with other companies in investors' portfolios as they became partners. This was helpful for addressing difficulties in supply management. The COO described how they utilized these allied companies when an outage of supplies happened: *"Within the same investment group, there is another e-shop, they had some goods [from the same supplier] - it didn't really work for them, somehow it didn't fit their business, [...] so they sent us, for example, 500,000 [CZK] worth of goods 'You'll sell it immediately, [otherwise] it would lay here' [...] it sold out, and in the meantime, a new supplier was being sought."*.

After investors joined the company, they wanted to build a management hierarchy and they hired CEO and CFO. This altered the role and competencies of the founder and redistributed power in the company. We consider this change in the context of challenges that the company faced as the structure of decision makers who have a direct influence on sources and solutions of possible challenges changed significantly.

4.3.1.3. Cooperating with partners

We just described how cooperating with firms within the same investment group helped to mitigate issues with the outage of supplies. The company mitigated other difficulties in supply management, caused by financial restrictions by receiving help from the suppliers' side. The founder explained: "*[suppliers] grew together with us [...] they wanted the money in advance. As they started to know us more after two years and saw that we were doing well, they started helping us from their side."*. That also illustrates how cooperation with partners helped mitigate struggles with the cash flow.

Profiting from the synergy between the growth of the company and the growth of suppliers was also mentioned by the COO and additionally exemplified by the CEO as he said that: *"So you are looking for something which is smaller but helps you to grow. [...] If we implement [solutions for big enterprises], it will kill us. We are too small and it's too complicated solution. So, we selected some company which is growing with us"*. This situation helps them in getting better services when they encounter problems with the IT system they are using since they are closely cooperating with the IT system supplier.

4.3.2. Applying strategic management

Our analysis revealed that the company implemented multiple solutions from the field of strategic management. They performed change management, implemented demand management, and some hurdles they addressed by restructuring the company.

4.3.2.1. Performing change management

As we already explained in the section on leadership hurdles, we found out that people are resistant to change. CEO's statement *"You have to talk with the people to maybe share more details with them, and they need to be informed because if they are not, there are a lot of questions and the mood is going rapidly down. So, we started to talk with them."* implies that the managers are aware of that and actively address it. In order to overcome this resistance, managers communicated and explained what was happening. For example, the personnel did not welcome rewards based on key performance indicators (KPIs), but according to the HR manager: *"when it is explained to them properly and it is shown to them on that first payslip and after the first paycheck, they found out, that actually yes, they have more"*. Managers also supervised the process when some change was made, which is illustrated by the warehouse manager describing solving problems with the deployment of the new IT system, which also resolved the temporal drop in performance: *"Basically the whole management was here with us, they were so actively dealing with those problems with us here, which was perfect for me [...] there was a big turning point, that they solved the problems with us immediately."*

4.3.2.2. Implementing demand management

When we talked about challenges, we described the criticality of hitting the limit of the expedition process' speed. The company started to manage demand in order to mitigate that issue and its impact on the company. They did it by adjusting marketing activities according to warehouse capabilities, so as CMO said: *"Our goal isn't to have as many orders as possible but if possible having a balance [...] to get as many orders as we can get out of the warehouse a day."*. The other solution was increased prices for peaks in season. This led to complaints from customers. The COO explains the whole situation as follows: *"We just knew that the marketing will deliver again [...] but then I said dude but we won't make it in that warehouse [...] so the entire e-shop was doubled in price, the entire e-shop immediately* *became more expensive. It helped with orders, they went down a bit and our sales rose rapidly. [...] We tried to explain to people that the demand is enormous and we simply have no other option because we wouldn't be able to do it and we'd rather deliver it to a customer on the promised date, although expensive if he is willing to pay for it [...] than if we promised him that we will deliver it to him [before Christmas] and it would be delivered on 5. January [...] Of course customer care went through hell."* This was done multiple years in a row.

4.3.2.3. Restructuring

By creating a hierarchy and management structure in the warehouse, splitting and redistributing tasks and responsibilities, the company helped to relieve pressure from overloaded managers, reduced bottlenecks in the process, and people worked efficiently. The warehouse worker commented as follows: *"Since it's structured here in the warehouse, I think it's definitely better, [When] I need to deal with something I know that I should go after that person. Because before that it was solved by 10 people and no one solved anything, and the responsible person did not even know about it."* the income manager added that *"[he] can focus on one job"* and he is not slowed down by other tasks.

As we explained earlier, multiple positions required expertise that people at those positions did not have so they moved to a position that fits them better. As the CEO stated: *"we are not firing them. We are just trying to find them a more suitable role."* Additionally, he explained that they are hiring new people for positions where certain qualifications are needed.

4.3.3. Transforming towards industry 4.0 standards

By updating processes and IT systems and transforming to a data-driven company, the firm made steps in transformation towards industry 4.0 standards.

4.3.3.1. Updating processes and IT systems

All C-level interviewees stated that the company is continuously improving its processes and IT systems. Which we demonstrated in an example with external consultants. The CEO also explained to us that at different sizes, the company needs different types of systems as some advanced systems are too complex for smaller companies, so they are updating them as they grow. As we already mentioned, the solution supplier grows with them, and the IT system advances according to their needs.

Besides positive impacts on corresponding areas, this solution has its pitfalls. It increases the complexity of the processes and IT systems, and it might lead to issues with the connectivity of all parts of the software. It can negatively influence the organization of information. *"If you have free sources [of data], you have to somehow mix it and select - 'okay, this time, these data are correct'".* Moreover, the new IT system might paradoxically lead to a temporal performance drop, thus, lowering productive service limits. The warehouse manager described that situation: *"We processed 1,000 [orders] per morning, and now they gave us the new [warehouse system], and we did a maximum of 300 a day for 14 days and we just weren't able to speed it up."*

4.3.3.2. Transformation to a data-driven company

As we already illustrated, the company representatives repeatedly mentioned the actions they had taken so far that fall under the category of transformation to a data-driven company. Additional examples include the CEO's statement: *"we have created KPIs, and we start to split the salary from only fixed to fixed and variable part of the salary. [...] it's very, very motivating for the people, especially in a warehouse".* The COO further added *"[now] I simply look at the numbers and simply see [the performance of a worker [...] we will be introducing a data warehouse and some visualization in [business intelligence tool], etc. [...] and it's not because we need to give it to the investors but we need it to manage the company"*

These developments improve the quality of information and as they motivate people they also help with leadership hurdles. However, the leadership needs to deal with challenges due to resistance to those changes.

4.3.4. Maintaining strong brand

The company put great effort into building and maintaining a strong brand. This includes ensuring the high-quality customer experience through providing good customer support.

4.3.4.1. Ensuring the high-quality customer experience

In order to maintain its strong brand and customers' satisfaction, the company put great effort into customer care. We already mentioned the COO's explanation that they try to help people, not primarily sell. The founder stated that *“[after the error rate in the expedition increased]*

Luckily nothing [happened] because we had good customer support, or we were able to respond well, so we apologized, explained the reason and fixed [the issue], and [the customers] didn't get angry with us afterwards."

4.4. The interconnectedness of challenges their context and solutions

In previous sections, we presented individual challenges, their context, and solutions. Our analysis reveals that those challenges, contexts, and solutions are not isolated but they are interconnected, one affects the other. The founder stated: *"These problems are actually intertwined, and it is important to solve them continuously."* We already described the relations among specific challenges, their solutions, and aspects of the contexts in the text above. The visual representation of those relations is displayed in figure 2 and figure 3.

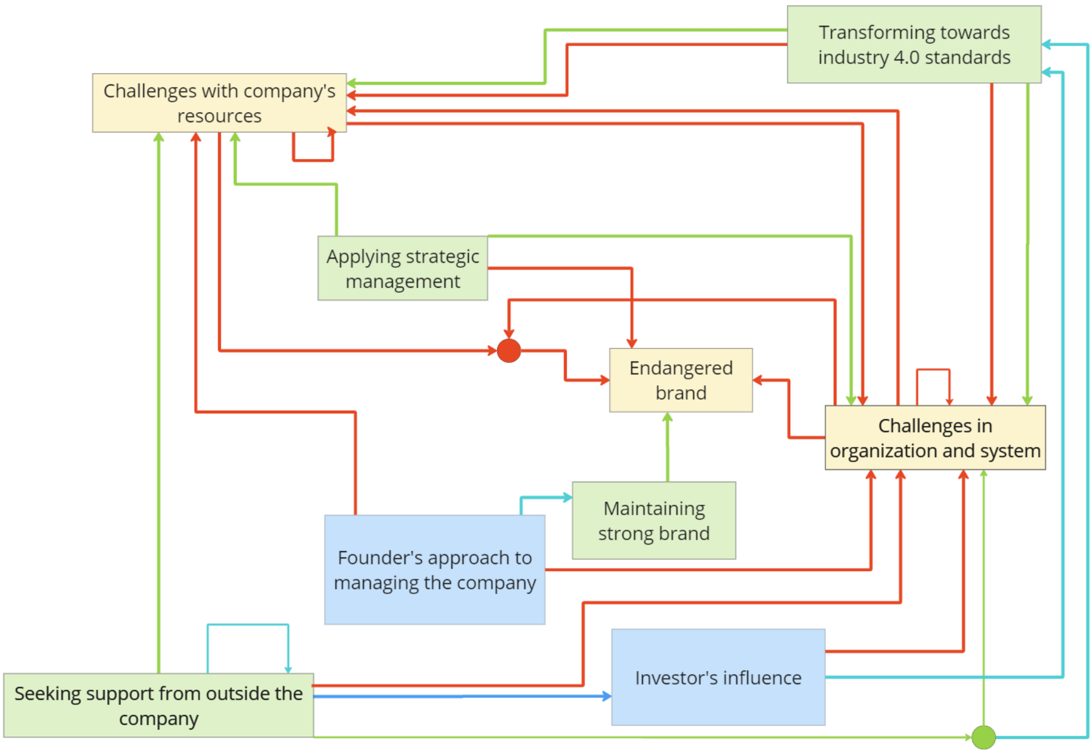

Figure 2: Model of relations among aggregate dimensions of growth challenges, solutions to them and aspects of their context. (Red lines represent contributing to challenges in the target area, green lines represent mitigating challenges in the target area, dark blue lines represent a change in context, and light blue lines represent catalyzing solutions in the target area.)

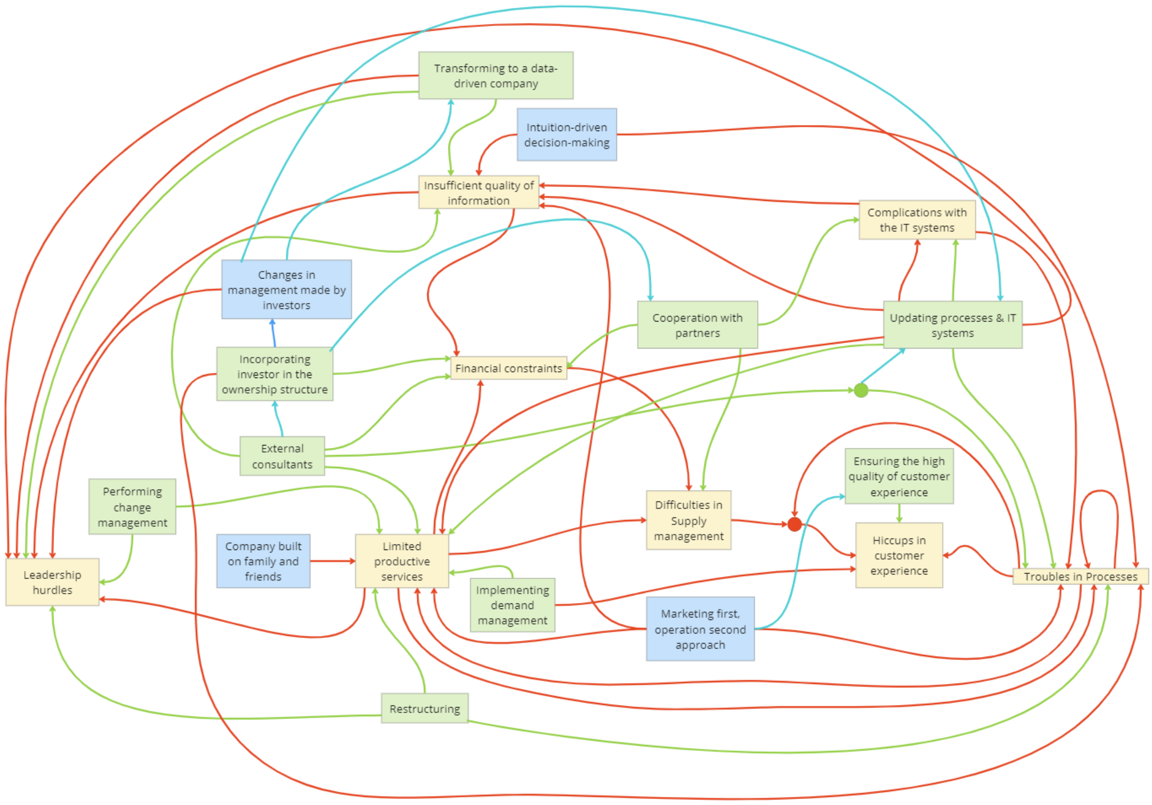

Figure 3: Model of relations among second-order themes of growth challenges, solutions to them, and aspects of their context. (Red lines represent contributing to challenges in the target area, green lines represent mitigating challenges in the target area, dark blue lines represent a change in context, and light blue lines represent catalyzing solutions in the target area.)

When we abstract from specific challenges, contexts, and solutions, we can identify multiple types of relations, which are shown in Figure 4. Our investigation discovered that a specific context could lead to one or more challenges. For example "marketing first, operations second approach" led to challenges in processes, information, and leadership (case a). Similarly, challenges due to the company's productive services limits contributed to challenges in finance and management of supplies which exemplify that one challenge can lead to or amplify other challenges (case b). Moreover, the co-occurence of two challenges can lead to another challenge (case c), as challenges in supply management together with uncontrolled product availability notification resulted in challenges in customer experience.

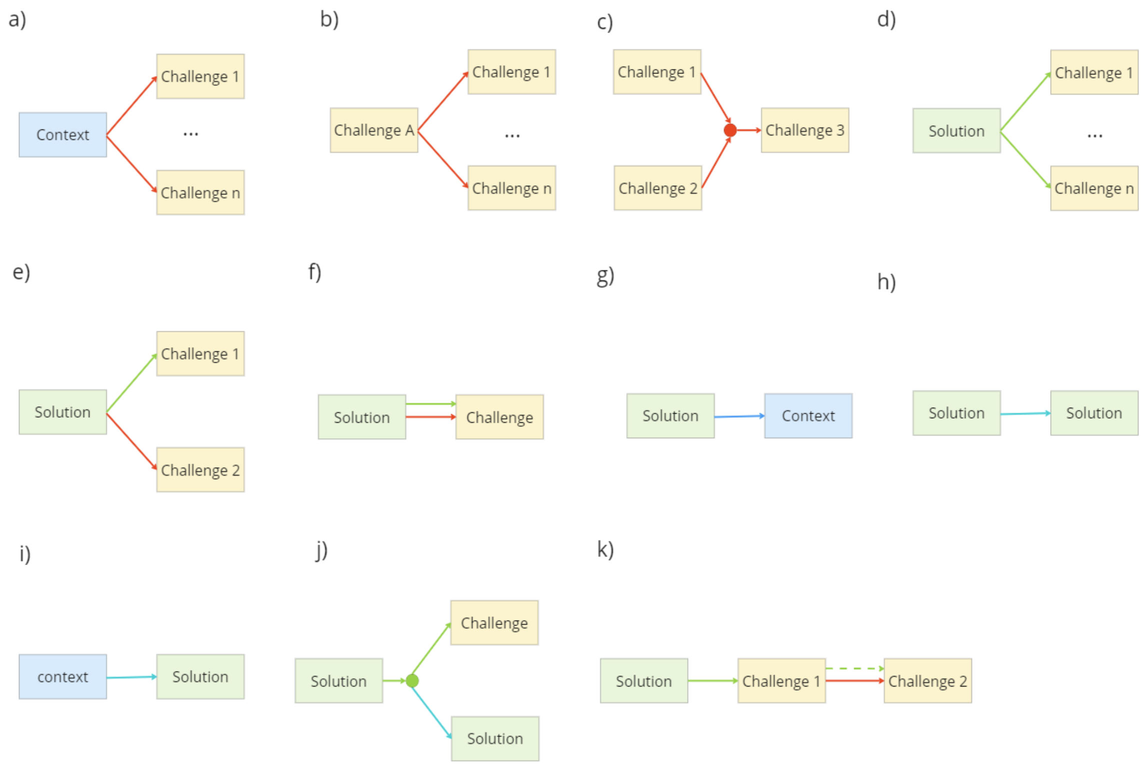

Figure 4: Types of relations among growth challenges, solutions to them, and aspects of their context. (Red lines represent contributing to challenges in the target area, green lines represent mitigating challenges in the target area, dark blue lines represent a change in context, and light blue lines represent catalyzing solutions in the target area.)

As we move to solutions, we can see that one solution could mitigate the impact of one or multiple challenges (case d), such as restructuring helped with leadership, the company's productive services limits, and processes. However, a solution for one challenge can create challenges in different areas (case e) or even different challenges in the area it is helping with (case f). An example of those situations is the improvement of processes and IT systems, which helped with challenges in processes, IT systems, and the company's productive services but at the same time, it led to some challenges in information and different challenges in IT systems and departments' productive services. Mitigating some challenges with a solution also changed some aspects of the context (case g) as when changes in management were made by the investors. Furthermore, one solution can be a catalyst for another solution (case h). For example, when investors who joined the company enabled cooperation with other companies in their portfolio, which became partners of this company. Similarly, some aspects of context can positively influence and even initiate some solutions such as "marketing first, operations second approach" which had a strong positive influence on ensuring high quality of customer care (case i). Additionally, one solution can directly mitigate a challenge by catalyzing solutions in another sphere (case k) as when an external consultant directly helped with challenges in processes by increasing the level of automatization. Finally (case k), when a solution helps with a challenge, it transitively helps to mitigate challenges that were influenced by that challenge. For example, transformation to a data-driven company improved the situation in information and therefore also mitigated challenges in leadership that were caused by challenges in information. We did not include these transitive influences in the graphs in figure 2 and figure 3 as we find them already too complex, and we believe that our readers can deduce the transitive effects by themself. Finally, we note that those relations might have the same source and target, as for example, challenges with some processes led to challenges in a different process.

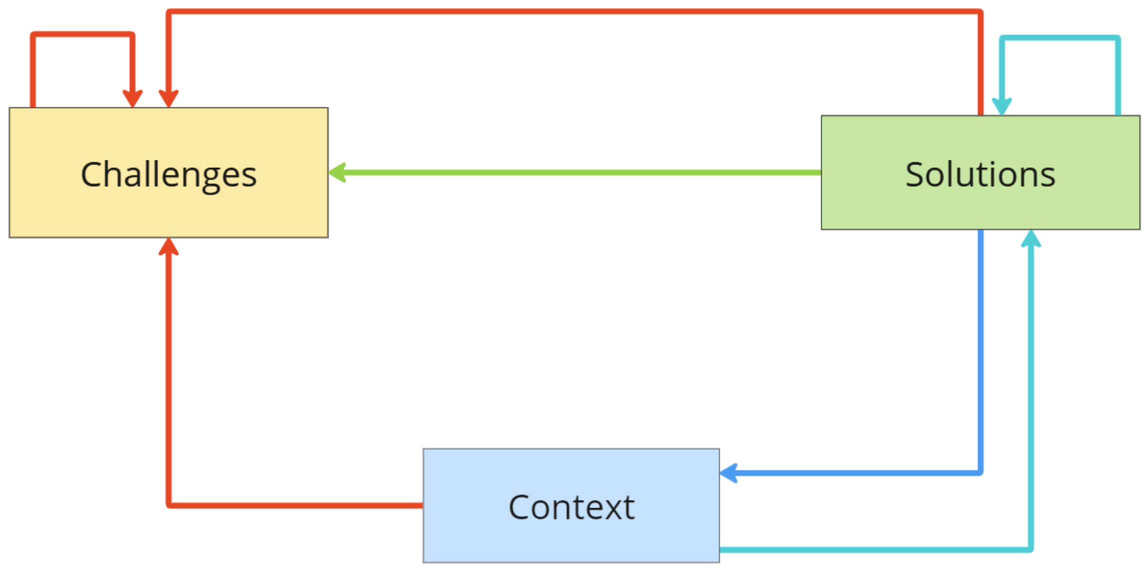

Figure 5: Model of relations at the level of terms challenge, solution and aspects of context (context). (Red lines represent contributing to challenges in target's area, green lines represent mitigating challenges in target's area, dark blue line represents change in context and light blue line represent catalyzing solutions in the target area.)

By putting it all together, we can say that the source of challenges can be context, different, and even the same area of challenges, and paradoxically even solutions could lead to some challenges. A solution can mitigate challenges, catalyze more solutions, and also change aspects of the context of the company. Specific aspects of context can lead to challenges but also catalyze solutions. Visually it is presented in figure 5.

5. Discussion

This study investigated challenges a small or medium-sized company faced due to its growth. We examined what are the challenges, in what context they emerged, what solutions were applied to mitigate them, and what are the effects and relations among them. To do so, we conducted a qualitative study using a single case design. This enabled us to dive deep and study the complexity of the researched phenomena. In this chapter, we present the key findings, contributions to the theory and practice, present limits of our study, and propose suggestions for future research.

5.1. Key findings

Our key findings are threefold. The first key result is a confirmation that growth really is a source of challenges and struggles and finding that as the company grows, the challenges recur. The second type of key findings are specific challenges that the growth brought to the company, solutions they used to address them, and aspects of the context in which those challenges emerged. Identified relations among them and corresponding models on multiple levels of abstraction and types of those relations are the third and the main area of our findings.

5.1.1. Key findings regarding challenges

The first sphere of challenges we identified was related to the company's resources. We found out that obtaining a bank loan and maintaining cash flow that would support growth are financial constraints that a growing company needs to deal with. Tunberg and Anderson (2020) noted the same. These findings match with Hambrick's and Crozier's (1985) claim that even though high-growth companies might generate profit, maintaining cash flow is often a struggle due to the constant need for investments.

By seeing the company as a pool of productive resources providing productive services (Penrose, 1995) we identified the limits of the company's services. One of such limits was the insufficient expertise of employees for their positions. This supports the findings of Kindström, Carlborg, and Nord (2022), who also identified challenges with the competencies of individual employees, however, they categorized them under leadership-related challenges. Similarly, Arbaugh. and Camp (2000) identified challenging transitions from the company's need for generalists to the need for experts and transitions when job requirements outgrew long-term employee capabilities.

Furthermore, we identified challenges with insufficient quality of information. This can be explained by Hicks, Culley, and McMahon (2006), who discovered that information exchange and monitoring; and control, and costing are common issues with information in small and medium-sized enterprises. They pointed out that information identification; location and organization; information completeness and accuracy; and information duplication are issues small and medium-sized companies face; however, these challenges were in the last third of their list. In our findings, on the other hand, all those struggles played an important role which might indicate that the significance of challenges for growing companies might differ from companies that do not grow.

The last theme of challenges with the company's resources we discovered was difficulties in supply management. This follows Penrose's (1995) general claim that "internal obstacles arise when some of the important types of specialized service required for expansion in particular directions are not available in sufficient amounts within the firm" (Penrose, 1995, p.66).

The second aggregate dimension of challenges we identified is in organization and system. Here we identified various leadership hurdles. This is aligned with the study by Kindström, Carlborg, and Nord (2022), who identified themes of Leadership and People as the two main areas of challenges. Challenges they identified related to leadership that are aligned with our results include challenges with building management teams and leadership structures, designing processes, decision-making, and specifying the position of the owner. Obstacles in hiring, competencies of employees, and their motivation, they grouped under challenges related to people.

Their findings also overlap with another category we identified - troubles in processes. Arbaugh and Camp (2000) also pointed out that the absence of a system that is able to absorb growth might be an issue for a growing company.

Additionally, we discovered that this growing company recurrently faces various complications with the IT systems.

Finally, we found out that there were situations when the brand was endangered, as some hiccups in customer experience occurred. As customer relations are part of the business model (Richardson, 2008), we might relate this to, and enrich, the results of Kindström, Carlborg, and Nord (2022), who also identified some challenges in the business model. Additionally, our claim that the company's brand might have been endangered but was not harmed is aligned with their conclusions that significant challenges in the business model are uncommon.

5.1.2. Key findings regarding solutions

In order to solve or mitigate the impact of the challenges mentioned above, the company implemented various solutions. One aggregate dimension of those solutions was seeking support from outside the company. We discovered that the company solved or mitigated multiple issues by making use of external consultants. Getting support from consultants as a success pattern of growing companies also spotted by Hambrick and Crozier (1985) and Kindström, Carlborg, and Nord (2022).

In this sphere of solutions, we also included incorporating investors in the ownership structure. Arbaugh and Camp (2000) suggested preferring funding from private investors over bank loans, as investors can bring more than monetary value to the company. On the one hand, our results support this, as having investors enabled the investigated company to get support from other firms within the same investment group, but on the other hand, investors' entry also changed some aspects of the context that eventually led to challenges in leadership. So it is up to entrepreneurs and managers of the company to judge the positives and negatives of this action.

The last solution we identified in this aggregated dimension is cooperating with partners. That helped the company address financial constraints and difficulties in supply management.

Updating processes and IT systems and transforming to a data-driven company are solutions of the company we consider as transformation towards industry 4.0 standards, even though the company is still at the beginning. Rewards based on performance, which we consider a step in the transformation to a data-driven company, is, according to Hambrick and Crozier (1985), a pattern seen in successfully growing companies. Increasing the level of automation as much as possible and building technological solutions is recommended by Arbaugh and Camp (2000).

We also revealed solutions in strategic management, specifically, implementing demand management, restructuring, and performing change management. According to Moric Milovanovic, Bubas, and Cvjetkovic (2022, p.2): "It is up to the management to help employees overcome psychological barriers in order for the change implementation process to run as smoothly as possible." Hambrick and Crozier (1985) at the end of their work concluded that high-growth companies should actively manage change.

The company built a strong brand which became the driver of the growth, and when it was endangered, ensuring high quality of customer experience kept it unharmed and maintained its strength.

5.1.3. Key findings regarding aspects of context

The aspects of the context of those challenges and solutions in the company investigated in this study could be divided into two categories. First, aspects that were created by the founder's approach to managing the company. He built the company on family and friends, decisions were made based on intuition, and the focus was on the brand and marketing, the rest of the company was in second place. The other category is the influence of the investors, represented by changes they made in the management.

Both of these aspects of context influenced the company in a positive but also in a negative way. Our results imply that a company grows in some context and it is influenced by it.

5.1.4. Key findings regarding the interconnectedness

Tunberg and Anderson (2020), based on their findings, claim that growth is a complex process and illustrates that various elements of growth are interconnected, however, in that work, they did not investigate the interconnectedness much deeper.

Our findings support and enrich their result as we analyzed that interconnectedness and explored the relations among specific challenges, solutions, and aspects of context we identified. Our findings at the highest level of abstraction imply that a challenge can lead to one or more challenges in different, but also the same sphere of hurdles.

One solution can mitigate the impact of one or multiple challenges but it also might change context. Deploying a solution to solve or mitigate some challenges may lead to other challenges, and paradoxically, it can even lead to different struggles in the same field of challenges that the solution is mitigating. On the other hand, implementing a solution from one sphere can contribute to another sphere of solutions, and it can also catalyze some solutions.

Finally, some characteristics of context can result in challenges, but they can also have a positive effect on solutions.

We consider the relations among identified specific challenges, solutions, and context as significant findings but due to the complexity of the network, we do not summarize it here and kindly refer our readers to the previous chapter where we provided the description of the relations at lower levels of abstraction.

5.2. Theoretical contributions

There is a great number of studies focusing on SMEs' growth. A lot of them examined antecedents of growth, mainly what drives growth and what are obstacles to growth. Hambrick and Crozier (1985), Arbaugh and Camp (2000), and Kindström, Carlborg, and Nord (2022) investigated the effect of growth in terms of challenges it brings to the company, and they even provided some success patterns and suggested solutions. Tunberg and Anderson (2020) focus on understanding how small companies make sense of the growth process. We discussed the relations of our findings to those studies in the previous section. Those works provide valuable insights, however, the challenges that the growth brings to small and medium-sized companies are still understudied. Available studies provide even less knowledge about the relations among various challenges, solutions to them, and their context.

Our work helps to fill that gap. We conducted an in-depth study from the standpoint of constructionism and interpretivism, which enabled us to discover new concepts and understand the causal effects of the challenges, solutions, and aspects of context.

Our study contributes to the theory of small and medium-sized firms' growth by exploring the specific categories of challenges that growth brings to a company. It supports some of the previous findings in this realm but also provides new discoveries. Further, we contributed to the theory by identifying categories and aggregated dimensions of solutions for those challenges. The novelty and the main contribution, however, lays in our exploration and identification of specific relations and their types among challenges, their solutions, and aspects of context. With this knowledge, scholars can, for example, individually study various challenges, their solutions, and aspects of the context in which they emerge and examine all the relations around that one specific element and together incrementally build deep comprehensive knowledge about the growth of small and medium-sized companies.

Finally, the identified relations together with our illustration that managers are aware of those causal effects and also the recurrent nature of some challenges we are answering Kindström, Carlborg, and Nord (2022) who asked

> "How firms actually manage the challenges they face. Are there, for example, broader solutions to multiple challenges that can be applied in different focal areas, simultaneously? Can we refer to the practice of 'challenge management' – that is, how SMEs and their managers understand and face the sequential nature of some challenges, as well as the compounding of challenges, as their firms grow?" (Kindström, Carlborg & Nord, 2022, p.19)

Our findings imply that yes, one solution can mitigate multiple challenges, and yes, managers understand that one challenge can lead to another one and that cooccurrence of a group of issues might lead to another struggle, so we think we can be brave enough and say that our findings grounded in empirical data indicates that, yes, we can "refer to the practice of 'challenge management'" as Kindström, Carlborg, and Nord (2022, p.19) asked.

5.3. Contribution for practitioners

Supported by the literature (Schwab et al., 2017; Hambrick & Crozier, 1985; Arbaugh & Camp, 2000; Tunberg & Anderson, 2020; Kindström, Carlborg & Nord 2022) and our empirical data, we can confidently say that handling growth and all the challenges it brings is a tricky quest and as Arbaugh and Camp (2000) claimed that managers need to understand and be able to control the complexity of growth.

Our contribution to practitioners is twofold. First, entrepreneurs and managers can evaluate if some challenges identified in this study are present or emerging in their companies. This could help them with preventing the impacts of the challenges. If they find out that their company faces some of those challenges or recognize similarities in the context of their company with the context of the company examined in this study, they can see what challenges that can lead to. That could be beneficial for mitigating potential future challenges. Speaking about mitigations, our work provides a list of potential solutions for specific challenges. Practitioners can be inspired by that or implement exactly some of the described solutions.

Moving to the higher level of abstraction, based on our findings, practitioners can benefit from being aware of various types of effects and relations between challenges, solutions, and context characteristics. We suggest having these relations in mind during the evaluation of the severity of a challenge or planning actions to mitigate issues. In other words, with the knowledge, for example, that a solution can lead to a change of aspects of the company or even to some challenges, entrepreneurs and managers can execute better actions for addressing any struggles they are facing.

5.4. Limits and recommendations for future research

We acknowledge that there are multiple limitations in this study and its design. First, the common critique of qualitative studies includes concerns about subjectivity, replications problems, issues with transparency, and problems with generalization (Bell, Bryman & Harley, 2019). We tried to mitigate those issues by cautiously choosing Gioia's method, which is often advocated for its rigor (Gioia, Corley & Hamilton, 2013; Gioia et al., 2022), describing in detail and explaining reasons for our methodological steps, discussing the analysis among researchers until we reached consensus, providing informants' quotes for all our claims, focusing on quotes that say what really happened instead of hypotheses and opinions of our interviewees, asking multiple informants about the same situations, consulting emergent themes with existing literature and building model at the level of general terms: challenge, solution, and aspects of context. Even though we admit that this study is based on data collected from a single company with its own characteristics, and it was still us who interviewed people there and our interviewing skills might have influenced the collected data, and it was still us who interpreted and grouped informants-centered first order concepts into theoretical themes which were influenced by our abilities and knowledge.

The main concern of many scholars, including Gioia, about Gioia's method is about its usage as a template (Pratt, Sonenshein & Feldman, 2022; Gioia et al., 2022). To not fall into this trap, we tailored our analytical moves to our research aim, as suggested by Pratt, Sonenshein, and Feldman (2022). We leave it to our readers to judge if they find our analytical moves appropriate.

By presenting informants' quotes and building models at the level of second-order themes, we tried to address Peattie's (2001 cited in Flyvbjerg, 2006) concern about losing the value of a single case study by summarizing it into general concepts. However, it is true that some details and interesting paradoxes or conflicts in views were just lost in the process as the data were simply too rich and detailed to present it all here.

Another limiting factor was time. The time that the company could dedicate to our research, in other words, the time we had for collecting data but also the time we had for the whole study. This might have influenced our literature review, even though we tried to be thorough, as well as analysis.

These limits lead us to several suggestions for future research. We encourage researchers to conduct similar studies in order to discover challenges, solutions, and aspects of context that were not present in the examined company or we did not recognize them or analyzed them differently than others would do, but also to validate, find contradictions or prove wrong our findings. Choosing companies for investigation with different characteristics, such as age, industry, and other, might help to discover a wider set of challenges that occur, solutions to them, and aspects of their context.

Another question that remains open is how significant various challenges are and, similarly, how big of an impact various solutions have on challenges. We suggest studying this both qualitatively and quantitatively.

Additionally, we propose quantitative studies that would validate, find contradictions or prove wrong our findings and also investigate frequencies of occurrence of individual challenges or reveal typical or the best solutions to them. Another quantitative study could help to understand what are the typical patterns - what relations among challenges, solutions, and aspects of context, occur in statistically significant counts.

Finally, we suggest investigating the life cycles of growth challenges, their predictability, and their recurrent nature. Such studies could help to understand how challenges can be spotted and mitigated before they have a noticeable impact on a company.

We believe that answering those open questions and collecting knowledge in this field can help scholars to better understand the complexity of growth of small and medium-sized enterprises, and help entrepreneurs and managers manage the growth of their companies sustainably.

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Appendix: Interview guide

- When did you join the company?
- What challenges did emerge?
- Tell us about them
- When did they emerge?
- Why did they emerge?
- Did you see them coming?
- How did they influence you and the company?
- Did you solve them immediately as they emerge or did you solve them at more critical stage?
- Did you expect them, or did they surprise you?
- if you expect them, did you try to prepare for/mitigate them?
- did you need to solve something different before you could XY/ before you could solve XY?
- How did you solve them?
- What happened after you solved them?
- Did those challenges lead to another issue?
- What happened next?
- Did some challenges reoccur?
- What challenges are you dealing with right now? go to g.
- What challenges do you expect in the near future?
- Why?
- What influence do you expect?
- Is there anything else you think we should ask you about this topic?