UiT The Arctic University of Norway

School of Business and Economics

How to design a startup?

Understanding and shaping the organizational design of a case company

Master's thesis

Master of Business Administration

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Table of Contents

Foreword iii

Abstract iv

1 Introduction 1

1.1 Startups as evolving organizations 1

1.2 A case-study 2

1.3 The term organizational design 2

1.4 Problem statement 2

1.5 Role as employee and researcher 3

2 Empirical context 3

3 Theoretical perspectives 4

3.1 Physical structure (PS) 4

3.2 Visual design (VD) 6

3.3 Organizational culture (OC) 8

3.4 Decision processes (DP) 10

3.5 Team composition (TC) 12

4 Methods 14

4.1 Study aim 14

4.2 Study design 14

4.3 Action research 16

4.4 Case study 16

4.5 Literature search 17

4.6 Semi-structured interviews 18

5 Analysis 19

5.1 Physical structure 20

5.2 Visual design 23

5.3 Organizational culture 25
5.4 Decision process 26
5.5 Team composition 28
6 Discussion and perspectives 30
6.1 'Coverage' and 'relevance' of literature 30
6.2 Theoretical perspective: The case startup seen through a change-endurance lens 34
6.3 Theoretical perspective: The founders' ambitions seen through a translation lens 35
6.4 Action research: Implications for management 37
6.5 Study validity and limitations 38
7 Conclusion 40
References 41
Appendix 45
A. Definitions of key terms and concepts 45
B. Interview guide 46

Foreword

With this Master's thesis I conclude my MBA program (BED 3910) at the UiT School of Business and Economics.

Designing an organization from scratch is an all-encompassing task. For a startup*[1], all pieces are in play and need attention and decision-making repeatedly. My thesis is, for this reason, also very broadly scoped. I acknowledge that this means that I sacrifice some depth and detail – and to a certain degree academic rigor. However, I find the practical relevance important and try to approach the challenges that the case startup, I study, is in fact dealing with.

The practical emphasis is also evident in my attempt to include an action research* dimension. The work documented in this thesis is a single step in an iterative process to plan, learn, and replan actions to help design and develop the case organization.

I would like to thank the founders of the case startup for participating in interviews and candidly sharing their perspectives.

Also, I would like to extend my appreciation to UiT for offering this study program online making continued education flexible and accessible for groups of students – like myself – for whom a traditional MBA program would have been infeasible. Håvar Brattli and Alexander Utne have been accommodating supervisors throughout the process.

While the interviews were conducted in Norwegian all citations in the thesis are in English. I apologize for any misrepresentation owing to my translation.

Mattias Enggaard
Copenhagen, Denmark
May 31, 2023

[1] Key terms and concepts are marked with * and defined in Appendix A

Abstract

How to design a startup? is a question of practical importance to the managers that are building an organization from scratch.

Focusing on a case startup, this thesis seeks to holistically understand its organizational development across five design dimensions (physical structure, visual design, organizational culture, decision processes, and team* composition).

Being inspired by action research, the thesis aims at simultaneously describing and solving the organizational design challenges of the case startup.

For each dimension, key discoveries are drawn from literature and compared to the perspectives surfaced in interviews with the four founders of the case company. Across dimensions, an overall good fit between literature and case organization is found. The research on startup organizations offers rich knowledge that will help any practitioner understand challenges and make research-based decisions.

The discussion addresses some of the areas where discrepancies between literature and founder views prevail. With respect to knowledge culture and decision processes, the thesis seeks to shape the organizational design of the case company by suggesting possible actions. It also suggests adopting a role and personality perspective when seeking to integrate change-persistence in future research on startup organizational design.

Keywords: Organizational design, startups, physical structure, visual design, organizational culture, decision processes, team composition, action research.

1 Introduction

Many startups die within their first years (Eisenmann 2021) – failure to grow often translate into failure to survive (DeSantola and Gulati 2017). As growth - or the lack of - has an organizational dimension, I find it important to study how startups organize themselves to ensure their survival and successful development.

My thesis focuses on the organizational design* of a Norwegian climate tech startup. Serving as case, the startup is rapidly changing in all dimensions, not the least in terms of organization: It grows in headcount, it spreads across new locations, and attracts new staff with new different profiles. These changes require that its management constantly redesigns the organization –something they are not trained to or experienced in doing.

Through this case-centered thesis, I seek to produce a research-based description of the startup's development and help inform its future.

1.1 Startups as evolving organizations

A startup's* lifecycle is seen as a series of phases from idea and market exploration and validation towards scaling and exit (Passaro, Quinto et al. 2016).

This transition moves the startup from an organization pivoting around the founding team and characterized by informality, loose structures, and fluidity. With the first market traction the startup increases its discipline and structure preparing itself of rapid scaling, where informal communication and decision-making may no longer be effective. (Picken 2017)

Along this transition the startup organization is iteratively redesigned. It must overcome many organizational hurdles, but core among them are questions related to culture, people, management, and processes (Picken 2017, Grimpe, Murmann et al. 2019, Kaehr Serra and Thiel 2019).

However, according to DeSantola (2019): *"…resent research tells a scattered and incomplete story….of the internal organizations of entrepreneurial ventures as they develop".* This thesis is a small contribution to this gap.

1.2 A case-study

The aim of my thesis is to explore how the research literature can help create a solid basis for the case company's development as an organization and business. Being true to the all-encompassing job of managers building a startup, my approach is holistic and touches upon many dimensions of organizational design.

In September 2022, the startup's management team announced a set of priorities that impact the organization (Table 1). The priorities announced fall into three design dimensions which – in combination with two extra dimensions - make up the focal areas of this study.

Table 1: Organization design dimensions of the startup management (source: case startup)

Dimension of organization design	Description
Physical structure (PS)	• The company had just onboarded staff in locations away from the headquarters. • It was announced that physical presence was preferrable leaving working from home to special instances. • This was to be supported by paid lunch and noise cancelling headphones.
Visual design (VD)	• A visual design process was initiated with an external design company to be at par with competitors acknowledging that great products do not sell themselves. • The process defined company values and led to the tag line: 'Exploring future landscapes – understanding tomorrow'.
Organizational culture* (OC)	• Culture was a core component in a 'learning organization' goal. • A combination of processes and activities (knowledge* sharing) were announced. • Reference was drawn to the company origins where finding technical solutions involved steep learning curves.
Decision processes (DP)	• Not an announced priority by the startup management, but an overarching topic I have added to the list. • While having a flat hierarchy, the main decision forum is the weekly management forum made up of the four founders in combination with board meetings.
Team composition (TC)	• This perspective was not part of the management September 2022 announcement but surfaced as a clear priority during first founder interview.

1.3 The term organizational design

The term organizational design follows the definition of Blindheim, Klemsdal et al. (2021) that describes it as planned shaping of formal organizations with a view to reach their objectives. In other words: organizations apply design in attempts to create a deliberate order related to culture, market offering, systems and processes, graphics, and much more.

From this does not follow that the design decisions are carried through. One thing is planning, but implementation and shaping of practices are very different matters. However, organization design is a core feature – among several - in explaining how the order of things has been and is being established. (Ahrne and Brunsson 2011)

1.4 Problem statement

The thesis explores the following problem:

How can literature on startup organizational design describe and inform the development of a young case startup?

From this problem statement follows that I will first explore the literature – both general research-based knowledge around organizational design and specific literature on startup organizations. I then compare key discoveries from the literature with the case startup seeking to describe the current organizational design and help inform its development.

1.5 Role as employee and researcher

I am an employee of the case startup in a non-managerial position. My employment took start just before the announcement of the priorities (cf. Table 1 above), which sparked my curiosity and desire to reflect on and study the nature of these organizational design ambitions.

I disclose this to the reader, but I am also very aware that it influences my approach to the topic as a student and researcher. On one side, it provides motivation and inside information that strengthens my work. On the other side, it is also a bias in my selection and reading of the literature, in my data collection, and analysis.

2 Empirical context

Launched in late 2019, the case startup has grown to a current team size of 15. It develops software-as-a-service for nature risk management addressing climate change challenges for business and society. Based on its commercial traction in the Norwegian market the company attracted renewed seed funding mid-2022 and is now looking towards markets overseas.

With a four-person founder team, the functional divisions follow their role-split: CEO, CTO, CCO, and COO[2]. However, all managers maintain overlapping responsibilities centered around the technology development. This resembles the typical 'early-stage startup' of Picken (2017) where all other employees report to a founder and a divisional structure around functions is only emerging.

Similarly in accordance with Picken (2017), the case company is in a situation where further growth and scope of products and markets calls for more staff and new skillsets implying that many short- and medium-term organizational hurdles must be overcome.

[2] Chief Executive, Technology, Commercial, Operating Officer, respectively

3 Theoretical perspectives

This chapter summarizes my literature search and consists of five sections each addressing findings on one organizational design dimension. The sections follow an identical structure:

1. A general perspective on the design dimension.
2. Startup-specific evidence where the general perspective is narrowed down to focus on literature specific to startup organizations.
3. Propositions representing key discoveries in the research within the design dimension.

I draw these propositions from the literature to first inform the interview guide. Secondly, the propositions are taken into the analysis as a basis for describing the case startup and identify similarities and discrepancies between the case and the literature (see 4.2 on study design).

3.1 Physical structure (PS)

Design of an organization's physical structure – location, office, and workspace layout – impact how humans act and interact (Jacobsen 2021). I will address this dimension by first looking at the spatial organization of companies in general before zooming in on startups particular and concluding with a set of propositions to guide my empirical work.

3.1.1 General perspectives

The design of an organization's physical structure has a very direct impact on behavior – walls dictate where we move and what we see. It affects health and moods, but also immaterial concepts such as status. Physical structures combine physiological with symbolic effects that together shape behavior. (Jacobsen 2021)

Jacobsen (2021) regards choice of physical location a decision of decisive nature as its costly to change and may affect access to resources. Trade-offs involve distance to resources such as competence and talent clusters (proximity to sector peers and universities) but also exclusion/inclusion into decision processes both instrumentally (making interaction easy or difficult) and symbolically (distance between entities that are supposed to be apart).

Location across geography or building layout decides how tasks, functions, and people are placed: Interaction is influenced by physical distance or distance measured in time across locations, buildings, and floors (Jacobsen 2021). Face-to-face communication is a function of such distance and research documents lower trust and cooperation at greater physical distances (Nilsson and Mattes 2015).

Physical structure may not be the easiest design element to modify. Micro changes within the same location may be achievable for many organizations, but shifting physical structure across geography is time and money consuming impacting not only ways-of-working but also as for instance the everyday of staff and relationships with clients and partners.

3.1.2 Evidence specific to startups

Startups may gain access to a variety of resources by building relations and networks using spatial proximity to facilitate trust and ties - social ties provide startups with capital, emotional support, advise, and key talent (Hoang and Yi 2015). Organizing the work spatially fragmented may spread these ties over larger areas which implies that co-location is not the only inroad to relations for startups. Also, travelling or temporary co-location could serve to build ties. (Alriksson 2018)

Open creative labs[3] are home to start-ups of many kinds (their main physical structure). A lab may be driven by investors who try to stimulate an interactive and creative environment promoting the development of their investees (community). Such labs are flexible structures that regard innovation as a collective process and emphasize access to heterogeneous knowledge as source of continued creativity. (Schmidt and Brinks 2017)

These investor-led labs are managed by for instance venture capitalists and target namely startups within the digital economy. The startup may hand over an ownership share in return of, e.g., access to and support of the lab. Collaboration is highly competitive and focuses on the realization of business ideas under targeted monitoring and are, hence, not inclined to develop close social links within the lab community. (Schmidt and Brinks 2017).

More generally, my literature search found that research within physical dimension of startups tends to focus on clustering and innovation ecosystems in cities and regions. Relatively few sources focused on startup physical structure.

3.1.3 Propositions

Based on the above literature extract, I conclude that a startup needs to focus on the physical aspects of trust building among employees and in other relations. One reason for this is resource scarcity, weaker formal hierarchy, and less established ways of doing business

[3] Similar terms include co-working spaces and incubators.

(Alriksson 2018). The startup needs to build close ties that transmit information and secure access to resources leading to the following propositions concerning physical structure (PS):

- PS1: The physical structure stimulates a way of working and underscores a tight social work environment.
- PS2: A growing organization and distributed work pose a challenge to the organization and its ability to cooperate and work efficiently.
- PS3: Being located within an investor-led open creative lab gives a community spirit aiding company development and innovation.
- PS4: Being spatially fragmented provides better access to trust-based, relational ties to resources.

3.2 Visual design (VD)

Logos, colors, homepages, and similar visual representations of an organization are increasingly subject to rational design choices aligned with strategic goals. And while visual identity* is well suited for organizational design decisions, it remains difficult to assess the effects of such efforts. (Moldenæs and Pettersen 2021)

3.2.1 General perspectives

Shifting the organization's position and making it easily recognizable are among the areas of importance that are attached to visual design. An importance stemming from the strategic ambitions of organizations with visuals being an easy-to-manipulate measure to try and shift human behavior within and outside the organization. (Moldenæs and Pettersen 2021)

Creating a positive image by applying graphics and symbols is a way to express the organization's identity – identity being a planned and purposeful presentation of an organization (Alessandri 2013) - and a way to shape the impressions of both internal and external stakeholders (Moldenæs and Pettersen 2021).

Visual design is linked to stakeholder evaluation of an organization's brand*. One example of this is the 'visual asymmetry effect' where logos that are not symmetrical arouse individuals more, boosting brand evaluations and *"...positively influence the market's financial valuations of those brands"* (Luffarelli, Stamatogiannakis et al. 2019).

Visual appearance is, however, only one element of an organization's reputation and corporate identity*. Many other factors influence the position of an organization in the eyes of

stakeholders which makes visual design an indirect measure to manage reputation (Alessandri 2013). Further to this, planning and managing how stakeholders perceive and react to visual design is challenging. This is due to a high level of subjectivity where sender's intention differs from receiver perceptions and behavior which again are affected of how stakeholders interpret symbols and how they assess aesthetics. (Moldenæs and Pettersen 2021)

3.2.2 Evidence specific to startups

It has been claimed that visual design plays an important role in the success of startups through positively influencing investors, customers, and talent by building credibility, attractiveness, and overall corporate identity (Sumelius 2022).

Visual design can be a shortcut to market entry: By mimicking visuals of established brands, a startup may establish customer perceptions of the startup's product and services through subconscious association with the market leader (Baxter, Ilicic et al. 2018). Further, the process of creating a visual identity may in itself be a shortcut for entrepreneurs to crystallize what they stand for (Sumelius 2022) and find their market fit.

Nonetheless, an organization's identity develops over longer periods of time and needs effort. Both of these are factors which are in short supply in a startup that focuses on acute topics. Branding tends to be of little priority for entrepreneurs who dive first into e.g. product development (Bresciani and Eppler 2010). Ultimately, the neglect of visuals may negatively impact growth prospects (Reijonen, Laukkanen et al. 2012, Odoom and Mensah 2019).

My literature search confirms the finding of Sumelius (2022) in that: *"Previous research on the correlation between visual identities and start-up performance is scarce".* More – but still scarce – research has focused on the broader term 'brand' of which visual design can be seen as a subcomponent.

3.2.3 Propositions

The literature stresses that visual design is a part of the long-term strategic management of startups and may influence their access to resources and successful development. However, the topic may be suffering lack of attention doing early phases. Combined these observations lead to the following propositions on startup visual design (VD):

- VD1: Visual design is given low importance in early-stage startups.

- VD2: Investment in visual design or the lack thereof may influence startup growth projections especially by building credibility towards investors and customers.

3.3 Organizational culture (OC)

Key here is to what extent culture, as a design variable, can be modified in an attempt to reach the goals of the organization (Høyer, Madsbu et al. 2021). I will focus on culture related to knowledge creation and sharing.

3.3.1 General perspectives

Affecting organizational outcomes by culture design is no easy task; it calls for persistent efforts and results may differ from what was expected. An organization continuously shapes its reality and its reality perception, which is a process that can – to some extent – be modified and impact organizational outcomes. Often, though, cultural change follow alterations in other design elements such as organizational structure that are easier to manipulate. (Wadel 2021)

Høyer, Madsbu et al. (2021) distinguish between institutional and instrumental views on organizational culture design. The former deals with stakeholders' fundamental perceptions of a given organization which are difficult and risky to modify – risky because outcomes of a design intervention may easily end up being unintended and difficult because norms and attitudes are complex and emerges gradually when people interact. The latter emphasizes the more superficial elements where organizations may design visions, state values, or configure visuals to modify the organizational culture. The two perspectives differ on how much a culture can be actively designed and how much it is more a matter of patient nurturing.

In consequence, the research disagrees on whether organizational culture can be purposefully designed – and if yes how. Non-academics such as consultants typically take the instrumental position that culture can be shaped and made to serve ends intentionally. (Wadel 2021)

However, especially for new organizations, culture may more easily be shaped through intentional design (instrumental view) when fundamental values and perceptions by default are in the making. This compares to established organizations where culture has emerged and solidified over time. And even for newer organizations, it may prove difficult to move beyond superficial expressions of culture (value statements, e.g.) and actively design cultural layers that affect – subconscious – behavior. (Wadel 2021)

Turning to organizational knowledge that has a cultural element in the norms and practices that govern knowledge behavior. This cultural element is closely linked to work processes and activities that create and leverage knowledge and the infrastructure that captures, shares, and helps apply it across the organization. (De Long 1997) These – more structural – organizational traits may be easer to design purposefully than knowledge culture itself.

3.3.2 Evidence specific to startups

Acknowledging that startups differ from other businesses with respect to structure, staffing, resources – it also influences startup culture. Startup culture has been described as a task culture with characteristics such as flexibility, internal means of control such as world-saving plans, and common goals centered around a main value of professionalism. (Zsuzsanna 2020)

Knowledge is central to this task culture as expressed by Kwiatkowski (2016): *"Free circulation of ideas is one of the main characteristics of start-up culture because ideas are regarded to be core ingredients of the company competitive advantage."* In turn, according to the author, organizational behaviors (e.g. communication) and hierarchies (e.g. decision-making) are influenced by this norm.

While still emerging, a growing body of literature has dealt with knowledge in startups (Centobelli, Cerchione et al. 2017). Yet, this has been through the lens of knowledge management* which encompasses systems, processes, and activities – and not culture per se.

Because of the resource scarcity of startups, leveraging intangible assets like knowledge and human capital is a necessity. From this emerges the need to adopt knowledge management systems. (Centobelli, Cerchione et al. 2017)

Sekliuckiene, Vaitkiene et al. (2018) conceptualize knowledge management along the startup development phases. When moving from one phase to the next, processes of learning happen repeatedly as the startup translates new problems into actions, undergoes learning-by-doing, and get external response to decisions made. The authors argue that a startup should develop a culture of learning and sharing knowledge from the early days to transition through the development phases successfully.

3.3.3 Propositions

Organizational culture in general and culture related to knowledge may differ between startups and many other organizations. Further, it may also be that an instrumental view of

culture prevails among startups neglecting the dimensions are tacit and closer to norms and values. This brings me to the following propositions on startup organizational culture (OC):

- OC1: Startup culture is different from other businesses also with respect to knowledge.
- OC2: Cultural design efforts must be a persistent effort and accompanied by changes in other design elements to facilitate durable change.
- OC3: An instrumental design effort is used to shape knowledge culture and keep ideas flowing freely.

3.4 Decision processes (DP)

Decision processes undergo design in order to create order in how decisions are made (Rommetvedt 2021). I regard this dimension as cross-cutting in the sense that it influences all other areas of how organizations – and startups - are designed.

3.4.1 General perspectives

On the question of how organizations design for order in their decision processes, Rommetvedt (2021) describes various kinds of decision situations and stakeholder preferences*. Each of these has a process, built-in logic, and outcome.

For instance, an ordered process around what Rommentvedt call 'deliberation' could ideally involve stakeholders who have not formed their preferences, but through open communication which is based on arguments and a common good-thinking they reach a situation of qualified consensus. However, strategic thinking could jeopardize the notion of common good and undermine consensus which may lead to processes of 'negotiation' towards a compromise or 'voting' for a majority decision.

The deliberation process is not a fixed recipe for real-life decisions that tend to be compound and uncertain, but it may help to create some level of order and balance intentional and unintentional decision-making (Rommetvedt 2021). To some extent the notion of order is opposed to the 'organized anarchy' of the garbage can decision model (Cohen, March et al. 1972) where choice opportunities are chaotic and dynamic couplings of problems and solutions.

In hierarchical organizations, decision power may formally be designated to specific individuals, but end up being taken by, e.g., a broader management group. This collective aspect of decisions is furthered by the small or large number of people involved in preparing

the decision basis. Quickly, the questions of 'who' is the decision maker(s) also involves a process spanning both preparations and actual decision making. (Rommetvedt 2021)

3.4.2 Evidence specific to startups

The literature puts an emphasis on the tech and market decisions of a startup centered around concepts such as 'lean startup' (Shepherd, Williams et al. 2015, Bortolini, Nogueira Cortimiglia et al. 2021).

However, startup decisions of an organizational design nature have also been studied. For instance, Grimpe, Murmann et al. (2019) highlight the benefits of introducing middle-management early in the life of the startup. The reason here is that founders tend to be caught up with everyday operations preventing them from devoting themselves to the innovation needed for a successful startup development. On the contrary, when professionalizing management Kaehr Serra and Thiel (2019) highlight the risk of losing talent following changes in organizational structure and behavioral norms.

York and Danes (2014) consider ways to improve decision-making in startups via a systematic study of decisions processes. To reduce bias in a startup's decisions, balance between System 1 (intuition) and System 2 (reasoned and rational) decision styles is needed. According to the authors, *"[e]ntrepreneurs tend to be overly active, face time constraints, and hence, tend to rely on intuition",* which increases the risk of bias and poor decisions.

Additional perspectives on start-up decision-making include consequences of speed on start-up decisions (Perlow, Okhuysen et al. 2002), decision-support such as visualization (Aas and Alaassar 2018) and adoption of accounting systems (Davila and Foster 2005). In all, a fair set of topics within startup decision-making have been given attention by researchers.

3.4.3 Propositions

Many of the studies referred to above highlight the repeated and high-stake decision-making in startups and the challenging conditions for doing so. These factors influence organizational design leading to the below propositions on startup decision processes (DP):

- DP1: Common-good thinking dominates startup decision-making producing qualified consensus outcomes.
- DP2: Intuitive reasoning outweighs more ordered and rational approaches to decision processes.

- DP3: Decision-makers in startups are overloaded with management tasks which prevent them from devoting enough time for innovation and development.

3.5 Team composition (TC)

While media may give importance to stories of individual entrepreneurs, a startup is often a team effort (Steffens, Terjesen et al. 2012, Cardon, Post et al. 2017, DeSantola 2019). For this reason, what makes a team come together, work together, and stay together are fundamental questions in startup organizational design.

3.5.1 General perspectives

A sizable body of research indicates that the combination of team member attributes - team composition - has fundamental effects on performance and that *"...some combinations of people work together better than others"* (Bell, Brown et al. 2018). Still, the literature is mixed and *"...there is a lack of coherence, integration, and understanding of how team composition effects relate to important team outcomes"* (Mathieu, Tannenbaum et al. 2014).

Team composition vary across 'surface-level' attributes (age, sex, race, role, reputation) and 'deep-level' attributes (personality, abilities, values, attitudes) (Bell, Brown et al. 2018).

In principle, heterogeneity in how teams are composed make sure that information sources have greater variety than in homogeneous teams and - if information can be expressed openly - more diverse teams reach better decisions (Mello and Ruckes 2006).

3.5.2 Evidence specific to startups

Brattström (2019) takes as a starting point that startup failures tend to stem from the team, not to the product, claiming that two-thirds of startups fail because of issues attributed to the team. Kaplan and Strömberg (2004) surveyed venture capital funds who one hand saw team risks in 61% of investees, but on the other hand also had invested in these companies in the first place because of their strong teams.

Often startups are rather homogeneous with respect to gender and professional backgrounds. This may seem to be at odds with creativity and innovation ambitions, but is a natural consequence of the social networks where new team members are recruited including friends and old co-workers. Startup teams are formed of people who activity choose to work together where the comfort of similarity may be more important than skillset. (Brattström 2019)

Homogeneous teams risk having social and task-wise blind spots (Steffens, Terjesen et al. 2012), but may produce smooth operations as put by Brattström (2019): *"…homogenous teams are efficient and agile, which are important characteristics of successful startups."*

Lazar, Miron-Spektor et al. (2020) further this by calling for a balance between 'interpersonal attraction' related to team homogeneity with 'resource-seeking' related to heterogenic skillsets. This balance facilitates team success in both *"shared understanding, aligned aspirations, cohesion, and trust"* and *"processes (e.g., coordination and specialization processes) for superior performance"*.

Team in the sense applied above is mostly concerned with the founding team, however joiners and board members *"are also well-positioned to shape organizational behavior and outcomes"* (DeSantola 2019), but are less studied in the startup organizational research.

As a glue that keeps the team together, emotions around joy, passion, and energy may be decisive for the team's persistence especially during difficult times (Cardon, Post et al. 2017). However, one common risk to startup team members' wellbeing is stress connected to extreme workloads, high degree of change, uncertainty and modest resources to ease the stressors (Gapeyeva-Yukce, Saukkonen et al. 2022).

While change is the only constant for many startups, oftentimes roles, relationships, and values are – nonetheless - surprisingly rigid. The startup organizational basics formed at the very beginning stay unchanged despite that conditions do change. (Brattström 2019)

3.5.3 Propositions

Many of the above-mentioned studies express views along the line that 'a startup is its team'; the team is the most fundamental resource. Key discoveries from the research on the composition of this team leads to the below propositions on startup team composition (TC):

- TC1: Homogeneity in team composition is common to startups and does influence development.
- TC2: Role and responsibilities stay largely unchanged.
- TC3: Passion is defining for the team and for the organizational outcomes.

4 Methods

First, I show the overall study aim and design of the thesis before – secondly – turning to the detailed methods applied.

4.1 Study aim

Being in a startup manager's shoes, you need to design all elements of your growing organization. This 360° perspective is my starting point for the thesis.

In turn, the study is aimed at creating holistic understanding of a case startup's organizational development, focusing on the paint points raised of the managers of the case company themselves (cf. the five dimensions given theoretical context in chapter 3 above).

By comparing key discoveries from the literature (cf. propositions also in chapter 3) with the views of the case company founders, I seek to describe the startup. This is a literature-vs-case mirror of similarities and discrepancies that builds understanding of the case organization. On this foundation, actions can be forged aimed at shaping the startup going forward.

4.2 Study design

The thesis design is split in two (Figure 1). On one hand, I explore the organizational design literature, relate it to startups, and extract key discoveries (A). On the other hand, I compare my literature findings to a case-startup and suggest actions (B).

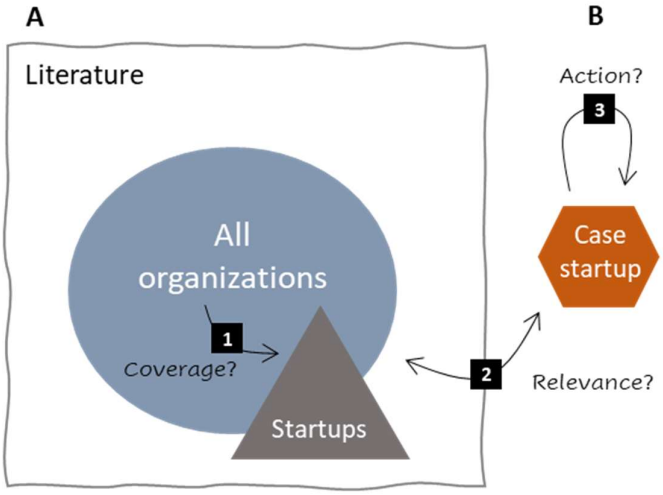

Figure 1: Steps (1-3) in a split study design - A: Literature and B: Case

More specifically, I apply three methodological steps:

1. Organizational design is an extensive research topic, but – for good reasons – focusing mostly on established organizations. I explore the 'coverage' of organizational literature with regards to startups specifically. How well are startups included in the research on organizational design? This vast topic could be studied in multiple literature reviews, but the step – while light touch - provides a search structure for exploring the research.

2. For each of the five dimensions a set of propositions (in chapter 3 above) are lifted into an interview guide (appendix B) seeking to test whether the literature findings are 'relevant' to the reality of the case startup. Does the research effectively describe the reality of the case startup, and does it provide useful insight informing the design efforts of the company?

3. I follow-up the interviews with an iterative dialogue with the case startup aimed a forming 'action'. These actions should be research-based and help the company shape the ongoing organizational design. This third step extends beyond the thesis scope.

In my approach to the three steps, I will draw on a selection of methods. These are summarized here and detailed in separate sections below. The applied methods comprise of:

- *Action research**: French and Bell (1995) describe this method as a process designed to improve the functioning of an organization. It requires facts and data about the organization for planning improvement actions while also generating research knowledge.
- *Case-study*: The thesis focuses on one organization alone. Following Rendtorff (2010), the approach is practical and serves to illustrate general tendencies observed in the organizational literature.
- *Literature search:* Creating the theoretical basis for analyzing the case organization across five dimensions as reported in the chapter on theoretical perspectives (chapter 3 above).
- *Empirical data collection:* Semi-structured interviews based on themes that reflect the findings from the literature search.

Now, I turn to detailing each of the above methods which together form the basis for the thesis work.

4.3 Action research

With a dual role as student/researcher and employee of the case startup, I am one hand not a 'neutral observer' as my perceptions are tainted by own experiences and opinions. On the other hand, I do know the organization from the inside and have a profound wish to turn research finding into actions.

Hence, my approach is an instance of action research. French and Bell (1995) define this as *"…research on action with the goals of making that action more effective while simultaneously building a body of scientific knowledge".*

The research is centered around solving problems and could involve a scientist that emerges herself in a situation, diagnoses it, and makes recommendations that are intuitively derived. It could as well involve the people who are to take action ensuring implementation and recommendations that are feasible and workable. (French and Bell 1995)

Action research ideally goes through iterative cycles of planning, action, observation, reflection, and re-planning. Such repeated learning may be used to understand and improve practice. (Van Mierlo, Van Paassen et al. 2021)

I propose actions by integrating literature-based theories with empirical information on the case organization. This will help coin potential actions to design the startup's future organization followed by testing these actions against stakeholders. Actions will subsequently be revised and the learnings from the process will be compared back to the body of literature; potentially pointing to new areas of research within organizational design of startups.

Due to the time-wise limitation of my thesis work (February-May 2023), I only complete the first rounds of iterative dialogue and action planning. Ongoing revision and learning will follow after the submission of the thesis and not be documented here.

4.4 Case study[4]

Studying cases is a way of diving into a specific context while surfacing knowledge of a more general nature. Conversely, it may also illustrate general theories in concise and practical ways.

[4] The section is based on Rendtorff (2010).

By default, case studies are limited to single or low-number observations. It tones down theoretical universality for the sake of meaningful applications with narratives, particularity, and context. Cases are difficult to generalize from and pose an inherent risk of errors, which is why new theory cannot be based on individual cases. Rather, cases should serve to illustrate and nuance.

In social sciences, case studies have also been central for teaching purposes where an organization is basis for discussions on actions options. The objective being to train students in decision-making in the intersection between theory and reality.

Due to the real-life nature of cases, the researcher is directly part of knowledge generation and interpretation. Through questions, experiences, and reflection the research turns plain facts into meaningful narratives. One practical consequence of this is that a case study ought to base itself on several sources (multiple interviewees, observations).

In its specificity and decision focus, I regard case studies as a natural fit to the action research approach (section 4.3 above).

4.5 Literature search

In the thesis, a high-level literature search serves to (1) review how well the organizational design literature extends to startups and (2) populate the theoretical perspectives chapter above and, in turn, form basis for the interview guide as well as analysis and actions.

I carry out the search in Google Scholar using search terms (Table 2) for each of the dimensions of organizational design. I review the first 30 hits for relevance on the level of abstracts. Articles found relevant are shortlisted and subject to detailed scrutiny. Finally, I review the citations of shortlisted articles.

Table 2: Literature search operators

Dimension of organization design	Search terms in combination with 'startup'
Physical structure	Spatial organization; organization space; physical structure; spatial work organization
Visual design	Visual identity; design; corporate identity
Culture	Organizational culture; knowledge; knowledge culture; learning
Decision processes	Decisions; decision-makring; organizational decisions
Team composition	Team composition

4.6 Semi-structured interviews[5]

The interviews focus on the four founders to gather information, explore the propositions, and create a basis for action planning. Later, the interviewees will review actions. This implies that they will influence the action research as active participants who subsequently will implement the actions in real life.

Semi-structured interview use pre-defined topics, but allow for flexible explorations of themes that emerge doing the session. Here, the structure is given in the interview guide (Appendix B).

Interviews aim to gather personal views and interpretations of how things are constituted from interviewees with relevant knowledge. It must be acknowledged that humans create meaning and the interview data represent individual impressions of reality only. On a similar note, the interviewers own perceptions are continuously being activated which calls for self-reflections and critical views on ideas. To address this, I apply propositions (section 3) based on literature findings and use the interviews to test them. This dynamic helps to challenge perceptions of both interviewer and interviewees.

Semi-structured interviews can span probing interviews targeted at collecting data on topics where little is known and all the way to in-depth interviews investigating narrower themes. The thesis interviews are at the middle of this span with some depth, but also – at the expense of detail - covering several organizational design dimensions at once. When pieced together, the four interviews on the same case are, irrespectively, a source of empirical depth.

I record and transcribe interviews followed by categorization of passages and coding of specific points. Good practice within qualitative interviews further lays out that loyalty towards the interviewees' perspectives should be sought. That means keeping quotations and own interpretations separate.

I carry out and transcribe the interviews in Norwegian and translate the quotes that are presented in the thesis into English.

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[5] The section is based on Kristensen (2010)

4.6.1 Informant selection

Organizational design shapes an organization and drives it towards its goals (cf. 1.3 above). This implies a causality where designers of the organization can impact its outcomes.

Selecting the four founders of the case startup as interviewees builds on an assumption that they are the organizational designers. In other words: Their views are the best representations of the current organizational design, but also its roots and future trajectory.

Staff or other stakeholders could bring valuable information on the current situation. I choose not to regard them as designers, but more as members or outside influencers with a less instrumental importance. I do not carry out additional interviews with these groups.

While the case business carries similarities with other startups it has not been selected to be representative. In line with the action research ambition (section 4.3 above), my study is practically oriented and seeks to generate suggestions for design actions of the case startup. And not the other way around: use the case to advance academic understanding of the field.

4.6.2 Ethics

As part of the interview introduction, recording of the interview and anonymity was presented to the interviewees and the sensitivity of information discussed.

While neither I nor the interviewees regard the topics and the information shared to be of sensitive nature, I opt not to disclose the company name and keep the informants anonymous. This is done as an extra precaution and similarly both recordings and transcripts are kept on password protected online storage where only I have access.

5 Analysis

In the analysis, I compare the propositions drawn from literature with the views held by the interviewees on the organizational design of the case company. The analytical aim is to test the relevance of the literature findings in the specific case. The chapter is divided into the five dimensions of organizational design which were theoretically described above (cf. chapter 3).

5.1 Physical structure

The interviews largely support the literature on startup organizational design regarding the importance of and challenges related to the physical dimensions of the company.

The physical structure stimulates a way of working and underscores a tight social work environment (PS1)

Spun out of the environment around the oil and gas sector in the Norwegian city of Bergen, the case company was born local both in terms of founders, employees, clients, and investors. It soon, however, extended its connections to other regions of the country – especially the capital city of Oslo - and internationally. The spread has been driven by a mix of new staff, projects, clients, and investors.

The founders – especially those in charge of technology and products – found great importance in physical proximity. They created the company in a close physical environment and saw no way around it when solving creative challenges as expressed by founder 2 (F2): *"The tech team needs to stick together. Also physically, to ensure good product development"* and expanded by founder 4 (F4): *"Having a close professional environment – just shouting across the table – is so much more efficient than being in different places"*.

Even with the prospect of growing the developer team, their preference was to maintain the structure as is with the team sitting together: *"We mostly feel like building on the tech team here in Bergen…Knowledge, technology, and innovation is right here"* (F1).

The physical location was clearly on the mind of the founders, who articulated a desire to protect and fight for the tight work environment that – in their eyes – had brought the company to its current stage. On the question on whether the company could have made it this far if the four founders had been in different locations, the answer was a clear: *"No. I have no doubt"* (F1).

A growing organization and distributed work pose a challenge to the organization and its ability to cooperate and work efficiently (PS2)

Growing from a headcount of two in 2020 to 15 in May 2023 and moving towards 20 through an ongoing recruitment round, the case startup is still small but the changes have been and will be substantial. In 2022, a small branch opened in Oslo with one full-time and two part-time staff and I was hired to the team out of Copenhagen.

In the interviews, the trade-offs of this organizational change surfaced: *"It is my great headache how we build good relations, environment, and organization in Oslo".* (F1)

The founder views also included the standpoint that the company should not grow significantly in terms of staff, but rather maintain its innovative powers and *"…do things smart to advance rapidly"* (F2).

Already today, large shares of well-defined development tasks are outsourced to externals. This extra capacity is seen as *"flexibility solution"* (F2) to *"balance out some resource peaks"* (F1) and only for front-end pieces of the development activities with fewer complexities and innovation demands. Also, extending business reach through *"good partnerships"* (F3) has served as a useful model already, and using other corporations' platforms and sales networks could be a way forward securing a *"lean"* (F3) organization.

Concentrating more on the commercial aspects of the company, F3 was open to extend the core team to other locations close to clients. He focused more on personality and ways-of-working rather than location: *"It largely depends on who you work with. With some it is extremely easy to work remotely. With others it is much more demanding"*.

Besides clients, access to talent was another factor driving the spread of the organization. Here, the tech-focused founders emphasized the need to build small hubs in new locations: *"You need to be more than one. You need a small team"* (F2) and further *"It might be that many of the bright minds we need are in Oslo, making us establish a twin environment there"* (F1).

In this, a more nuanced view of the physical structure emerges. It is not about the location itself and the daily interactions and social ties, it is more about efficient face-to-face communication and immediately solving complex issues around *"a whiteboard*….[or]*…on a run…and its very easy not to be fast when you have to call via Teams"* (F1). And similarly: *"It is a must that the tech team sits together, there are so many discussions and interactions that take place especially if you are creating something brand new"* (F4).

Still, at the current development stage of the case startup, distributed work challenges remain hypothetical: *"When we are big enough and the core system is in place, it is more a question of scaling and then you can be in different locations"* (F4) and *"We may still not have felt entirely, how it is to have a very distant organization"* (F3). While acknowledging the

uncertainty of how the organization will proceed, all interviewees expressed a wish to protect the successful core of the organization, keep it physically together, not grow for the sake of growth but emphasize speed and efficiency instead.

Being located within an investor-led open creative lab gives a community spirit aiding company development and innovation (PS3)

Sitting in an open creative lab among other startups, the case company has access to cheap resources. Chief among these is low-cost rent, but also legal and financial services.

None of the interviewees mentioned a community feel, but the benefit of being close to peers was highlighted: *"It is really useful to chat with other startups – how they raise capital, hire new staff, or choose server supplier"* (F1).

Still, and in following the literature on investor-led labs, the value of being located in an open creative lab remained transactional rather than emotional: *"The main reason we are here is the network with other companies and the networks Startuplab has and pushes us towards"* (F1). Several of the case startup's first clients were found in the network around the lab.

The network element is also core to the lab's self-image as expressed on www.startuplab.no:

> *"Our network is the core asset at StartupLab. Our team, members, alumni and external network – consisting of engaged industry experts, serial entrepreneurs, investors and scientists; actively share their network, knowledge and experiences that benefit the group as a whole. We believe this is what it takes to enable just a few people to create something great in a short time span, that would usually require the work of hundreds."*

This, however, also means that the investor-led element is of less importance. The lab was an initial investor in the case startup, but *"…it has nothing to say. They* [the lab] *treat all the companies equally"* (F1) irrespective of ownership or just lab membership.

Being spatially fragmented provides better access to trust-based, relational ties to resources (PS4)

Partly in contrast with the literature finding of the benefits of be spatially fragmented, the case startup has harvested the value of being Bergen based. It established an early innovation partnership with the municipality, its angel and lead investor are from the city, and its partner

on the US market also. This logic resonates more with the benefits of co-locations in spatial clusters by Porter (1998).

At the time of forging the partnerships, physical proximity may not have been of obvious importance, but in hindsight: *"It could have been decisive. They know us well as they are also located in Bergen. They met us on many occasions, which may have been a process of maturing. It may have been the final straw"* (F3).

Furthermore, the online tools have made it possible to run development projects across continents: *"…we have managed technical matters pretty well without being over there in person"* (F4).

Irrespective of this local dimension, the case startup does exemplify that spatial fragmentation can provide access to resources through trust-based ties. Travelling to especially Oslo is of growing importance as the company increasingly finds innovation partners and investors there: *"It does involve evermore travels. I must show up in person. It keeps you from producing things, which is not optimal, but it is necessary"* (F1).

Similarly, there is a believe that partner and client relationships require on-the-ground presence: *"…with respects to sales, a physical matchup is best…I do not believe you can create anything in the UK from Bergen. You need to build a network"* (F4). As the company scales, spatial fragmentation will likely follow.

5.2 Visual design

The interviews mirror the literature findings with respect to the visual design of startups and the case is also an example of how the topic shifts importance over time.

Visual design is given low importance in early-stage startups (VD1)

The case startup had a logo professionally designed early on, but other visuals such as products and homepage were haphazardly put together by the non-expert team members – *"We just did it ourselves"* (F3).

A thorough process around visual identity was only initiated in the company's third year of operation. Here, an external design company led a corporate and visual identity process leading to new logo, graphics, tagline, homepage, etc.

"We have worked with the new branding in over a year…it has to be insanely good" (F3) and while visual identity has been given low importance in the company's early stages that has come to an end: *"I doubt that any other startup in Norway of our size and stage, has put in so much effort in branding as we have"* (F3).

Visual design was not close to the hearts of all the four founders, but they and the board supported allocating budget for the purpose without further ado. Nonetheless, it remains without doubt that visual identity is relatively low on the to do-list: *"...it is clear that if we lacked funds, this would not have been prioritized"* (F3). And even after having invested substantially in visuals, impacts remain uncertain: *"…hoping that the money are well-spent even though we will never be able to prove it"* (F4).

Timing-wise, this stage of the case company's development is ripe for improving its visual design: *"We have the money…we have gotten sufficiently far, and the next capital round is ahead of us. If we wait too long, it will end up being difficult to change stuff"* (F4).

Investment in visual design or the lack thereof may influence startup growth projections especially by building credibility towards investors and customers (VD2)

A statement as *"I do find that branding is super important. It is one of the things that decide whether you are successful or not"* (F3) evidently supports the literature finding on the links between visuals and startup growth. Further, the importance is underscored by external stakeholders: *"From investors we keep getting that branding is important"* (F4).

However, there are some nuances to bring forward. The term branding is used by the interviewees referring to corporate identity more broadly, rather than just visual identity which was the context. Besides graphics and other design elements, corporate identity also incorporates products, market positioning, company values, and strategy (Sumelius 2022).

Further, when asked about the impacts of the earlier poor visuals on the relationships with investors or clients more nuances emerged: *"We were very professional in creating our data room* [information library for potential investors]*…which may have counterbalanced the fact that we did not look too good visually"* (F3) and further *"It* [visual design] *has not surfaced as anything super important. We have sold ourselves on delivering products fast"* (F4). The impression is that it has been possible to achieve a similar level of credibility by other means.

Building credibility was, as pointed out in the literature, a key driver to the whole visual identity process: *"If it looks nice and well-made it creates credibility"* (F4) and *"Credibility is the most important piece…we have to be taken seriously and maybe appear more solid and more well-established than we really are"* (F3).

Credibility has growing significance when the company moves beyond the reach of mouth and into new segments and geographies: *"If we no longer market ourselves through others and have to rely on own platform under own logo…you need to appear advanced and trustworthy"* (F4) and *"We can suddenly be head-to-head with actors like Google and we need a super-strong brand"* (F3).

5.3 Organizational culture

Being a new venture, small, and on a mission to create something new impact ways-of-working and the organizational culture. The focus is on the knowledge component of culture.

Startup culture is different from other businesses also with respect to knowledge (OC1)
The idea that startup culture differs from other organizations resonates with the interviewees, e.g., with respect to a very flat hierarchy: *"…from one perspective, none of us are in fact managers"* (F4). However, emphasis is given to the role of innovative minds on a mission, which also could be found in established organizations: *"It is not about size at all…but you need many innovative people"* (F2).

Still, some traits are unique: *"Ideas are converted much quicker here…there is a lot more trial and error"* (F4). Another area where the culture in the case startup distinguishes itself is around the free flow of ideas: *"In other organizations where I have worked before, people are divided into separate departments, and they talk very little with someone from the other side…you have to break such silos down to build something new"* (F1).

As the organization develops, this culture may change: *"When we are just a few it is very easy as everybody needs to work with everything"* (F1) and, further, *"…such things are important when you recruit…are they from a setting with a high degree of innovation"* (F2).

However, increasing specialization and formalization of culture and knowledge can also be seen as consequence of learning and improvements: *"Best practice….when we have done things in clever ways and agreed on a good process, we have to safeguard it"* (F4).

Cultural design must be a persistent effort and accompanied by changes in other design elements to facilitate durable change (OC2) and **An instrumental design effort is used to shape knowledge culture and keep ideas flowing freely (OC3)**
Keeping the knowledge flowing freely *"…is actually the main focus of our company. We have to work across disciplines to build the products we want. The geologist must talk to the hydrologist. Technology must talk to sales"* (F1). This comes down to each individual, too: *"We are in fact doing stuff we are not trained at. You must be your own teacher and understand all the things coming at you"* (F4).

To maintain the knowledge culture, the startup has initiated a meeting structure comprising of weekly check-ins (15-30 min.), monthly knowledge sharing where staff present their own work (30-60 min.), and quarterly deep dives (3-4 hrs.). Further to the internal structure, the case company has undertaken an external communication effort centered around knowledge. This involves both knowledge-based text on social media and more formal contributions to journals. In accordance with literature, these are elements in an instrumental design effort, which can be regarded as an emerging knowledge management system.

Between the lines, the interviewees expressed concerns that these structural efforts would prove insufficient in keeping up a culture where knowledge flows easily: *"It will be even more important to gather everybody often enough for all of us to understand our products. It is just something we need to focus on"* (F1). The persistence of this effort remains to be seen, making it impossible to compare it to the literature proposition on durable change.

In addition, for the interviewees, the knowledge culture ultimately resides with each and every one: *"…are you able to get the* [knowledge] *dynamic in the work environment right. And that is very, very dependent on personalities"* (F1). And on a similar note: *"You need to get hold of the 2% who are innovative and like change…you cannot transform people"* (F2). With this focus on individuals, a large part of the question of knowledge culture is left to a matter of recruitment and team composition (section 5.4).

5.4 Decision process

The interviewees report a consistent picture of how decisions are made in a trust-based environment like the literature finds.

Common-good thinking dominates startup decision-making producing qualified consensus outcomes (DP1)

A shared view of goals and direction based on mutual trust characterizes management: *"We have a plan, we follow"* (F1) and *"We have large trust towards one another"* (F2).

This culture translates into an amiable environment that tends to produce consensus decisions: *"It is perhaps mostly consensus. We have that culture among us. We know each other really well and have worked together for ages."* (F3) and *"We remain good friends despite disagreeing much at times…none of us are afraid of speaking our opinion...That is what we spend much time on at management meetings, to reach some kind of consensus"* (F1).

Besides the ability to find consensus, the decision-making can also be characterized by common-good thinking as described in the literature: *"It is fairly easy. As a group, we largely agree on the goals…If someone brings in a suggestion and it is not in conflict with the goals, then we follow through"* (F2). In all, this matches the decision process of deliberation (cf. section 3.4.1 above).

Intuitive reasoning outweighs more ordered and rational approaches to decision processes (DP2)

There are divergent views on how the decision processes of the case company unfold, but none report very formal and structured approaches to decision-making. The emphasis is more on the dichotomy between trust and easy-going decisions versus passionate discussions.

So, on one hand: *"It is always a lengthy discussion. On tech is relatively easy, but for instance on hiring is more demanding discussions"* (F1) and the other: "*Our management culture is probably more easy-going than elsewhere"* (F3).

The general feeling it that the founders are good a taking qualified decisions and it is not a tiresome process: *"We have a very transparent setup – a strategic plan and activicies. Decisions are just a matter of prioritizing activities"* (F2). None of the interviewees expressed lack of structure or consistency nor a high level of complexity or uncertainty, which without it being stated explicitly could signal the reliance on intuitive reasoning.

However, the ease of decision-making may relate to the startup's development stage: *"Most decisions have been fairly clear. No really tough decisions. Yet. So far, it has mainly been small incremental decisions"* (F4).

Decision-makers in startups are overloaded with management tasks which prevent them from devoting enough time for innovation and development (DP3)

The founders report spending ½-1 days each week on management tasks with a weekly management team meeting as the pivotal activity. However, activities such as capital raises and hiring can in certain periods consume much time.

Still, none of the founders feel overwhelmed with management and administrative tasks. On the question of whether the share is reasonable they find it fair, potentially to the lower side of what would be optimal as great priority is given to tech and clients: *"I might have too little focus on the management piece….I spend everything I have got on making the customers satisfied and developing the products"* (F1).

Nonetheless, the capacity of founders may implicitly impede growth at the current stage: *"It is the same persons who drive the technical and commercial development and who drive the hiring process…it keeps us from seeing any rapid growth"* (F4). From this perspective, the company hires fewer people than it may have done otherwise simply because of time constraints and the heavy investment needed to find and onboard new staff.

Still, in sum, the role split between the four founders leaves sufficient time for innovation and development and for managing the organization. This is contrary to the literature proposition.

5.5 Team composition

I added this organizational design dimension in response to a request put forward in the conversations around the thesis. Team composition was high on the agenda and especially because of an ongoing recruitment process taking the company from 15 to 20 people.

Homogeneity in team composition is common to startups and does influence development (TC1)

The founders do regard the management team as very homogeneous: *"Seen from the outside we are four geologists from the oil sector"* (F1) and that is also the case for the rest of the staff and the particular job market*: "…when you look at the sector its extremely male dominated and 9 out of 10 applicants are men"* (F3).

As described in the literature, the similarity in backgrounds can be a strength in getting a startup on its feet: *"This understanding of how things are connected in data and decisions. We all four have that strongly. If only one or two had it, it would have been very tricky"* (F3).

The similarity also includes a shared work history from other startups, worldviews, and even friendship: *"We know each other and have been on a journey together. It works out well between us…continue to be good friends"* (F1) and *"We agree on the basic philosophy. You start out of a reason. We are united."* (F3).

However, the founders try to change the company profile especially with respect to gender: *"We are gender skewed, though trying the opposite in fact"* (F1) and *"It is a bit too homogeneous. We are working on that"* (F3).

Simultaneously, they also distinguish between surface-level and deep-level attributes (cf. section 3.5.1 above) and basically regard themselves as very heterogeneous on the latter: *"We are white and male, yes, but we are also very different"* (F2), *"We are very diverse as persons, our personalities, and abilities"* (F3) and *"I don't see us as a homogeneous group. When you meet us, you'll feel we are very distinct"* (F1).

Role and responsibilities stay largely unchanged (TC2)

On one hand, the roles of the members of the management team have been fairly constant and caused no friction so far: *"The role split has been very natural"* (F1). At the same time – potentially owing to shifts in responsibilities – founders also express a drift: *"There has been constant change. We did not know what roles we would take on from the beginning"* (F3) and *"We all had a technical starting-point but have drifted towards other areas to different degrees"* (F2).

Acknowledging that role requirements evolve as the business shifts, the founders appear open to change or let go of their positions, and, thus, addressing one of the risks identified in the literature: *"I can surely move on and do other stuff. I am motivated by challenges not titles"* (F2) and *"Time will show. It would be fun to learn something new. I have an appetite for learning to be a real manager, but it is not something I must"* (F1).

Protecting the innovative capabilities of the company may also require that an external management is brought into the business: *"If we continue to grow, we need someone on the team who is a real executive manager without any technical responsibility"* (F4).

Passion is defining for the team and for the organizational outcomes (TC3)

As for the other above propositions on team composition, there is also good alignment between the literature and the interviewee perspectives with respect to the role of passion: *"I*

have a burning passion for what I do…It has been a painful effort building what we have got. Pitch black at times, but technology always has a solution" (F1).

Beyond being a fuel through difficult times, passion is also seen as a key design ambition for the startup culture: *"I am not afraid of an argument – or putting it behind me. We need an organization that reacts on impulses. If not, we cannot be innovative"* (F2) and *"Most of us on the management team are highly competitive and do whatever is needed. We try to let that influence the culture we are building"* (F1).

6 Discussion and perspectives

In this chapter, I discuss the elements of literature, case, and action as outlined in the thesis' study design (section 4.1 above).

More specifically the discussion is divided into 'coverage' (section 6.1.1 below), 'relevance' (6.1.2), and 'action' (6.4). I also discuss the validity and limitations of the study (6.5).

In addition, I integrate two theoretical lenses (6.2 and 6.3) to give meaning to the observations made. These lenses deal with the case startup in a change-endurance perspective and a perspective of translation between early and current startup culture, respectively.

6.1 'Coverage' and 'relevance' of literature

First, I present an overview of how startups are included in the organizational design literature (coverage). Second, I discuss how effectively the propositions drawn from the research literature (relevance) describe the design of the case organization.

6.1.1 Coverage: How well are startups included in the research on organizational design?

Startups are not an overlooked topic in scientific research. A search on startup organizations yields thousands of hits (44,100/131,900[6]) and this is also the case for startup organizational design (16,100/3,500[7]), specifically.

[6] Number of results when 'startup+organi*' is entered into Google Scholar/Social Science Database, respectively.

[7] Search results for 'startup+"organizational design"'

However, the focus of the current research is far from uniform. While not a full literature review, my literature search on the dimensions of startup organizational design shows that some areas are well-covered and others less so.

I speculate that some of the well-researched areas have particular interest from stakeholders in the startup ecosystem*. This may for instance be the case of open creative labs/co-working spaces/incubators (47,900/21,700[8]) where universities, governments, investors, or large companies initiate a space for early-stage startups. The initiators may be motivated by stimulating economic activity, innovation, or investment opportunities and request for research-based insights as part of the process which drives up the publication figures.

A topic of similar research interest is related to the startup management team (40,300/16,300[9]) regarding for instance the importance of founder traits or introduction of an external CEO. Such research may be sought by venture capitalists and others that look to assess a potential investment or develop a startup after investing.

On the other hand, some topics remain understudied. Relevant to the scope of this thesis are the dimensions of visual identity (2,400/440[10]), and physical structure (5,400/450[11]). DeSantola and Gulati (2017) also highlights the *"…paucity of…work that has examined cultural processes…"* and *"…much remains unknown about the employees who comprise the organization's lower levels"* as examples of understudied dimensions of startup design.

The scientific literature may, thus, not cover all dimensions of startup organizational design equally well, but in combination with a high number of books, articles, blogs, etc. there is lots of information out there which can help one understand and shape the development of startups. Bringing in research-based knowledge can be particularly important for startups as they constantly are put in front of new challenges – also organizational – and startup managers often do not have preexisting experience from similar issues (see also 6.4 below).

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[8] Search results for 'startup+incubator'

[9] Search results for 'startup+"management team"'

[10] Search results for 'startup+"visual identity"'

[11] Search results for 'startup+"physical structure"' of which many relate to structural topics within physics and not organizations.

6.1.2 Relevance: Does the research effectively describe the reality of the case startup, and does it provide useful insight informing the design efforts of the company?

Overall, the propositions that I draw from the literature fit well with the design of the case startup as expressed by the founders and presented in the analysis above (cf. chapter 5).

I recognize that this is in part the result of confirmation bias. As an employee, I have built my own interpretations and views, which to a smaller or greater extent have influenced my reading of the literature. This does not undermine the alignment of literature and case on specific aspects. However, had I selected other design dimensions and identified different propositions, the ability of the literature to describe the case may have been weaker.

I see particularly good descriptive alignment in the following dimensions:

- *Physical structure:* The case startup is an example of an organization with a tight social environment where co-location is important all the while its growth and distributed work pose a challenge to the current ways of working. Being in an open creative lab is seen as advantageous; not because of a community feel as much as due to the access to resources, network, and peer experiences. Although time consuming, frequent travel is found to be an effective means to build ties to partners and clients across geography.
- *Visual design:* During the first years of the case startup, the visual identity was given little attention. Now, the startup has upped its visual game significantly and finds it of great importance in building credibility towards stakeholders. This is a clear example of the impact of time when studying these new ventures. If I had looked at the same topic for the same case company six months earlier, the observations would have been entirely different. My study is a snapshot, but so are lots of the studies found in literature. For many aspects of startup organizational development, longitudinal studies would give valuable knowledge, but it remains only sparsely used in the research (DeSantola 2019).
- *Team composition:* Based on formal traits such as education and professional experience as well as gender and ethnicity, the founder team is very homogeneous. The founders claim that homogeneity positively influences their ability to successfully create a business and drive it forward. Simultaneously, the founders see themselves as a very heterogenic group when looking at skills and personality, which they also find closely related to the startup's development till now. In addition, the roles of each founder had largely remained the same over the first years. Balances and responsibilities have changed slightly, and they

do appear to be open to shifts in roles going forward. This fluidity in roles may be important for the ability of the business to adapt to new internal and external challenges, which the original setup may not be suitable for. Finally, passion – interpreted by the interviewees as both friendship between them and as a competitive drive to solve challenges and make the company a success – has been characteristic for the organization; not the least when times have been tough.

On other dimensions, the alignment was mixed. Here, some propositions are relevant in describing the startup's design, whereas others are off to a greater or lesser degree:

- *Organizational culture:* The case company does exemplify a unique startup culture that is not found in established organizations. However, according to two interviewees (F2, F4) the case culture shares traits with any team on an innovation mission which is not limited to startups. The founder team puts significant emphasis on the importance of a strong knowledge and learning culture. They work with instruments (hiring and knowledge sharing activities) in seeking to shape the culture and keep ideas flowing freely. Still, a more holistic approach focusing on relations, norms, and ways-of-working in combination with addressing the topic as a question of change management, may well be needed in order to facilitate a durable culture with respect to knowledge (see also 6.3 and 6.4 below).
- *Decision process:* The management team is clearly characterized by trust and its consensus decisions are made based on common-good thinking. The founders convey the impression that they are satisfied with their ability to make decisions, but from the interviews it remain unclear how ordered and rational vs intuitive the processes are. I would have to dig deeper and potentially observe decision processes to get a full picture. Nonetheless, as the complexity of the business increases the decision-making ability becomes more and more important. None of the founders feel overloaded with management and administrative tasks. Contrary to the proposition drawn from literature, they found themselves able to devote sufficient time to innovation, development, and clients. This could follow from the fact that the case startup has a management team of four which spreads out the load especially when compared to a total headcount of only 15.

Many of the identified studies in the literature do not prescribe how a startup should organize itself but focus more on describing organizational patterns. This implies that the academic literature does not directly provide plentiful inspiration that can shape the design of the case company (inform action), but it does give perspectives that can help understand the startup's

situation. Based on this improved understanding, I seek to establish suggestions for actions that the management team can implement (cf. 6.4 below).

6.2 Theoretical perspective: The case startup seen through a change-endurance lens

Beside the above descriptions of the startup design based on propositions from the scientific research, the literature also provides perspectives that can help create meaning to the observations. One of these lenses is presented by DeSantola and Gulati (2017). They split the literature on startup organizations in two: (1) 'endurance' which regards organizational features from the time of founding as the persistent foundation for the next growth stages, and (2) 'change' where emphasis is on the evolving complexity of startups and their environments which follows growth and is mirrored in the way they are organized internally.

The authors refer to research that describes how startups have a *"…surprising heterogeneity in the organizational design"* owning among other things to the logics founders bring in early on: What is put in place first may endure and affect development. However, a startup is also likely to change away from for instance being a fluid organization and into a more specialized one with larger administration and management as the complexity of tasks grows.

As a way to integrate endurance and change, DeSantola and Gulati (2017) describe how the two perspectives can exist in parallel. One suggested form of integration assumes variation by organizational feature: *"…some aspects of the internal organization endure and some aspects change during growth."*

I believe that the case I study in this thesis could represent an additional perspective to this concept of feature variation. While the four founders represent different aspects of the organization with some being more focused on tech and others more on commerce, they also look differently on the organization with respect to change-endurance.

An example of this relates to the physical structure of the organization in a future with greater headcount. Parts of the founder team obviously prefer to build the existing HQ team rather than spread the organization across locations – especially with regards to technology development (Panel A in Figure 2). This also means that the original structure and interaction would have better chances to 'endure' growth.

Other parts of the founder team emphasize the need to be close to clients for the sake of sales and relationships but also technology co-development and support (Panel B). This view points out that - as the organization grows - it sees itself in a more complex stakeholder landscape and needs to 'change' its organization in response.

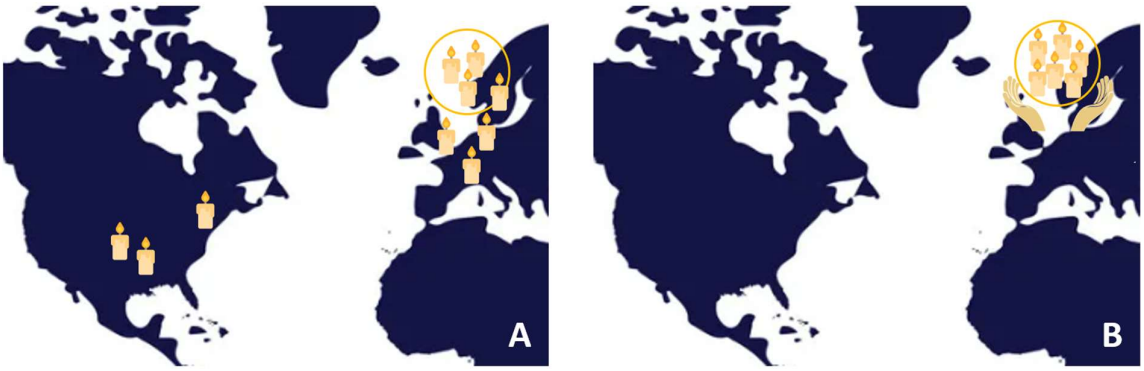

Figure 2: Illustration of parallel change (panel A) and endurance (panel B) perspectives in the founder team on the topic of future physical structure – candles depict hypothetical company presence (source: own illustration)

I suggest that DeSantola and Gulati (2017)'s assumption of change-endurance variation by organization feature could be extended with variation by position and maybe even personality and workstyle. Rather than having one informant within a startup, it could be worthwhile to include several in some instances. This extension may be important as it captures a potential source of internal friction in the startup impacting its ability to develop.

6.3 Theoretical perspective: The founders' ambitions seen through a translation lens

When managers take on reforming an organization they may do so in response to a specific challenge, but another reform driver may be ideas from the outside world. Design ideas may reach a startup or other organizations through media, academia, or consultants. One thing that can help the longevity of such ideas in an organization is the ability to translate from the sender to the receiver context - this is the concept of translation (Røvik 2007).

According to Røvik (2007), the successful translator must able to first decontextualize the design idea from the original organizational setting (sender) and then recontextualize the idea to the receiving organization (receiver).

The lens of translation sheds light on the case startup's ambitions of a learning culture. The founder team wishes to maintain the ability to innovate through learning as in the early days of the company when the team was only made up of the founders (cf. endurance as discussed

above). In their communication to staff, direct reference to outside ideas have been made e.g. on learning styles (Kolb 1984) and high performance organizational culture (UoR 2021).

The managers' translation spans the early founder culture (sender: 2020-2021; Figure 3) to the current mixed founder-employee culture (receiver: 2022-). In their decontextualization, they emphasize the individual drive for learning as well as ownership of problems and solutions as in the company's first years. This is an effective story close to the purpose and direction of the startup and substantiated by reference to research and best practice.

In the process of recontextualization into today's organization, the founders express the challenges of finding the right individuals and nurturing their approach to learning and tasks. In fact, this concern was the main reason why the topic of team composition was added to the scope of this thesis.

Further, the management team has put in place activities to ensure the implementation of the idea (i.e., the learning culture from the young organization). These activities involve weekly, monthly, and annual meetings where knowledge is shared.

This means that the founders recontextualize through hiring and formal knowledge sharing.

It remains to be seen whether the translation will be successful, and if the culture will persist.

However, it appears as if the startup's management fail to include the following two dimensions which may be fundamental parts of a coherent recontextualization:

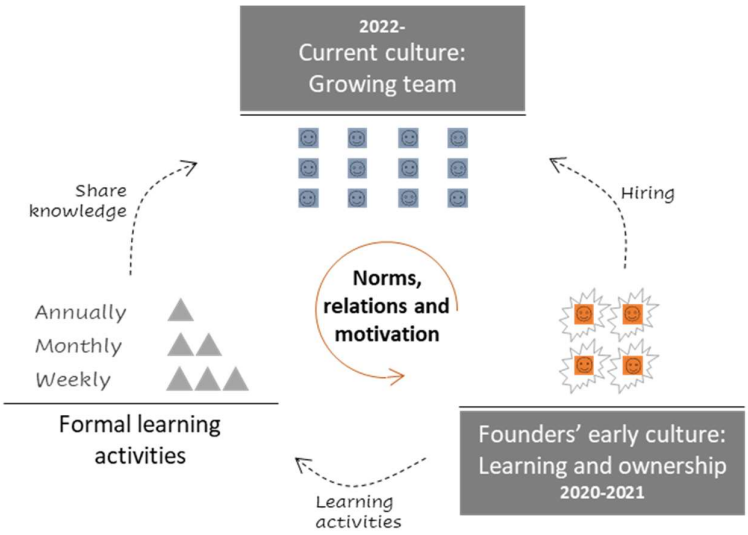

Figure 3: Founders' translation of the early culture to today's growing team focusing on instruments (formal activities and hiring) and less to on norms, relations, and motivation (source: own illustration)

- *Capturing the relational aspects.* Organizational culture - including one focused on learning - consists of norms and values. Individuals and formal activities are only bits and

pieces and not the glue. Culture emerges over time through interactions between individuals and as such exists between the members of the organization and guides their actions and beliefs (Høyer, Madsbu et al. 2021). The relations where this surfaces and where management may look for fertile land to saw their ideas include how tasks are defined, how quality is assured, how project teams are pieced together, and how founders mentor new staff.

- *Addressing it as change management.* As the team grows, new team members are onboarded and become part of the company culture. This is a change as the shared understanding and ways-of-working are continuously renegotiated, but also for the individual that must adapt from earlier work cultures to the one of the startup. According to Battilana, Gilmartin et al. (2010), managing such change demands communication of the need for change, mobilization of employee support, and ongoing evaluation. The authors outline both task-oriented initiatives (structure, routines, control) as well as people-oriented elements (cooperation, interaction, motivation) as leadership competencies for change management. Today, the founders focus primarily on the former, but may benefit from increasing emphasis on the latter.

Including relations and motivation in the effort to translate and implement a learning culture may increase the chances of success. As the headcount grows, it will only become more important that the organization as a whole is designed to deliver on its objectives without the involvement of a founder in each and every activity.

6.4 Action research: Implications for management

The research in this thesis should be seen as an iterative dialogue with the case startup aimed a forming action. These actions should be research-based and help the company in the ongoing organizational design.

In many ways, the thesis could have benefited from leaving out the action research perspective. The document at hand would have been clearer and more concise, potentially. However, as an employee and student/researcher it has been a major share of my motivation and approach to the work.

The clearest example of iteration - and of including the people who are to act into the research - is the design dimension of team composition. This dimension was added to the scope based on the first conversations around the thesis as it was high on the agenda of the founders.

As a company that strives to build a strong learning and knowledge culture, I find it natural to make learning around organizational topics a core component just as learning around technology topics already is. This thesis is a part of that ambition – my findings are to be presented and actions formed followed by re-iterative reflection and new action planning. Hopefully becoming part of company DNA going forward.

Based on the above analysis and discussion, my suggestions for actions are two-fold:

1. Translating the early founder culture of learning and responsibility into today's organization should be extended to include additional elements:
    a. Regarding it as a topic of change management (see also section 6.3 above)
    b. Initiating way-of-working activities that address learning culture norms and relationships between members of the organization, examples could be structured peer training, learning considerations as part of staffing new projects, seeking feedback from colleagues and clients, or using quality assurance as a lever.

2. Increasing the transparency and rationality of decision-making. As business complexity grows, the management team may benefit from more structured decision making. The literature offers many suggestions of how to reduce risks of bias and maintain quality and speed of startup decisions even in environments of high uncertainty and intricacy.

I focus on these two areas of action because I find that the topics were given importance by the founders (learning culture), but also that the literature may serve to enlighten some blind spots which could grow in importance in the near term (both learning culture and decision processes).

6.5 Study validity and limitations

Approaching the topic of startup organizational design with a single case and few informants clearly has its limitations. No generalization can be made based on my work. I do, nevertheless, engage in a dialogue with the literature trying to replicate the findings from other settings. On the aspects where my case confirms existing research, it serves as a practical illustration of general theories. On aspects where it goes against the literature, it offers a nuanced narrative, which to some degree can explain the discrepancies.

The thesis focusses on describing the development of a case organization and turning that description into informed actions. Exploring the literature across multiple topics and

contrasting it with four interviews – the full management team - gives a representative image of the organization and its design. The applied theoretical lenses help give meaning to the observations and piece together a useful description of the case organization.

This follows the understanding of study validity by Jacobsen (2005, pp19-20), where collected data must be relevant to analyze the stated problem and that what is sought to be measured, actually gets measured. Collecting data through interviews, furthermore, ensures that informants are free to express their views on the problems being studied which increases the validity of the approach (Jacobsen 2005, p129).

However valid, the data gathered from the interviews may have limited reliability. While they are candid expressions of how the interviewees perceive the organization, they are also snapshots on topics that are somehow unfamiliar to the informants.

The founders are of course very familiar with the startup and the design decisions made, but they are also unexperienced organization builders that are not used to thinking along the lines represented in the thesis.

Likewise, having five different dimensions of organizational design in a 45-minute interview means that depth is sacrificed at times. This benefits the holistic nature of the thesis but may impact reliability and detail.

Triangulation with observed practices, for instance in job interviews when hiring new staff or on management meetings when the decision-making process unfolds, would significantly improve the quality of the study. Similarly, adding an additional researcher to be part of the thesis work would counteract biases related to my double role as employee and student/researcher.

7 Conclusion

How do you design a startup organization? As a minimum, it requires that you understand the building blocks of the organization and its environment and can make well-informed and well-reflected decisions on how to shape its development.

This thesis demonstrates that the research literature on startup organizational design offers rich knowledge and good 'coverage' of startups, which will help any practitioner understand challenges and make research-based decisions.

By comparing the case startup with key discoveries from the literature it is possible to describe large parts of the startup's organizational design. The literature 'relevance' for the case is especially good for the design dimensions of physical structure, visual design, and team composition. With respect to the design dimensions of organizational culture and decision process the ability of the literature to describe the case organization is more mixed.

Further light is shed on the case startup through two theoretical lenses, namely change-endurance and translation. These concepts provide meaningful perspectives on a central challenge for the founders of the case startup: How to preserve the cultural core of the company from the early days while adapting it to the current and future organization which is larger, more diverse, and physically spread.

Even in a hectic startup everyday with large uncertainty and inexperience with organizational design – and potentially even more so because of this – the thesis seeks to show that it is a worthwhile investment exploring the challenges at hand and informing them with qualified outside knowledge. The thesis suggests 'actions' within knowledge culture and decisions processes that may help shape the development of the case startup.

Personally, I conclude the thesis with insights into the holistic design effort that my workplace undergoes. While still small, the case startup has over the last year doubled staff numbers and grown from sitting in one to sitting in multiple locations. Such fundamental changes impact how employees and managers interact in so many ways. And while the changes feel fuzzy, they are the result of a deliberate order and are formed by management decisions (or the lack of).

I have an appetite for advancing the action research element of the thesis and feel equipped to draw in research literature to best inform this continued exercise.

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Appendix

A. Definitions of key terms and concepts

Action research	Action research is a research method that aims to simultaneously investigate and solve an issue.
Brand	A brand is an intangible concept that helps people identify a company (or product or individual). It can be thought of as the personality of the company which is communicated with marketing tools such as visual design.
Corporate identity	A holistic term that describes how a company is viewed by stakeholders. Visual identify is an element of corporate identity, but is also includes culture, strategy, values, products, and services.
Knowledge	Combination of information and human context that enhances the capacity for action. It has multiple levels (individual, group, or organizational level) and characteristics (explicit or tacit, or structured and unstructured)
Knowledge management	Knowledge management is a process of identifying, organizing, storing, and disseminating information within an organization. It can be supported by knowledge management tools (databases, forums, portals).
Organizational culture	Culture may be defined as a common core referring to a shared frame of reference, including, among other elements, beliefs, values, and norms, expressed in symbols and artifacts, through which organizational members make sense of their world and by which their action is guided.
Organizational design	Planned shaping of formal organizations with a view to reach objectives. Organizations apply design in attempts to create a deliberate order related to culture, market offering, systems and processes, visual brand, etc
Preferences	The decision-maker has to a varying degree preferences to certain characteristics of an alternative potentially enabling her to rank this alternative over another.
Startup	Organization formed to search for a repeatable and scalable business model
Startup ecosystem	Universities, governments, investors, companies and other that provide resources, influence the development of, but also buy the services and products of the startup
Team	Two or more individuals who socially interact and are brought together to perform tasks and work towards common goal(s) while having interdependence with respect to workflows, but also different roles and responsibilities
Visual identity	Visual identity is a company's look and feel being a combination of company name, logo, typography, color(s), etc. Visual identity is a prominent and recognizable part of a corporate identity and a touch point for exchanges in the marketplace.

B. Interview guide

Intro

- Research literature on what is important for organizational design of startups
- Test against a case and come back with ideas or focus areas
- Information sensitivity
- Recording
- Anonymity

1. Where do you see the company in two years? (size, location, ownership, products etc)

Physical structure

2. What are the benefits and challenges of having staff in multiple locations?

   PS4 Being spatially fragmented provides better access to trust-based, relational ties to resources

3. In which ways is it important from where staff work physically?

   PS1 The physical structure stimulates a way of working and underscores a tight social work environment.
   PS2 A growing organization and distributed work pose a challenge to the organization and its ability to cooperate and work efficiently.

4. How has being located within Startuplab benefitted our development?

   PS3 Being located within an investor-led open creative lab gives a community spirit aiding company development and innovation.

Visual design

5. What has been the approach to logo, graphics, etc. till now?

   VD1 Visual design is given low importance in early-stage .startups.

6. Why initiate a visual design process?

   VD2 Investment in visual design or the lack thereof may influence startup growth projections especially by building credibility towards investors and customers .

Knowledge culture

7. Does culture differ in a startup compared to an established organization? Does this apply specifically to knowledge?

   OC1 Startup culture is different from other businesses also with respect to knowledge

8. How can knowledge affect the company's development – and what can be done to enhance these effects?

   OC2 Cultural design efforts must be a persistent effort and accompanied by changes in other design elements to facilitate durable change

   OC3 An instrumental design effort is used to shape knowledge culture and keep ideas flowing freely.

Decision processes

9. How are decisions made in the management group? Give an example.

   DP1 Common-good thinking dominates startup decision-making producing qualified consensus outcomes.

   DP2 Intuitive reasoning outweighs more ordered and rational approaches to decision processes

10. How much time (%) do you spend on administration and similar tasks which are not innovation, development, or commercial activities? Is that a fair share?

    DP3 Decision-makers in startups are overloaded with management tasks which prevent them from devoting enough time for innovation and development.

Team composition

11. Do you consider the team homogeneous, and how has this impacted development of the company?

    TC1 Homogeneity in team composition is common to startups and does influence development.

12. How has the role split in the founder group changed over time?

    TC 2 Role and responsibilities stay largely unchanged.

13. How do you see passion or other positive emotions play out in the company?

    TC 3 Passion is defining for the team and for the organizational outcomes.

Closing

14. Any closing thoughts?