

Matti Rautio

# LEVERAGING NEW STARTUP-BASED TECHNOLOGIES THROUGH EFFECTIVE VENTURE CLIENTING

Faculty of Management and Business Master of Science Thesis June 2023

#### **ABSTRACT**

Matti Rautio: Leveraging new startup-based technologies through effective venture clienting

Master of Science Thesis Tampere University

Master's degree Programme in Industrial Engineering and Management Examiners: prof. Miia Martinsuo and assoc. prof. Aki Jääskeläinen

June 2023

Today startups are a major source of innovation which has driven corporations to find more efficient and effective ways to collaborate with them. What started as financial driven corporate ventures mimicking private venture capital firms in the 1960s, and later experienced a corporate accelerator boom in the early 2000s, appears to now have its third resurrection in the form of startup supplier programs. However, even though the different corporate venture programs have existed more than half a century, those still appear to stumble to leverage startups full strategic potential in their innovation and new product development practices. Finding perhaps less severe, but similar type of challenges within a Nordic venture client alliance, then gave me an exceptional opportunity to study eight corporations' best practices to combat typical challenges in their firms' effective use of venture clienting.

To meet the research objective, how Combient Foundry's alliance companies can use venture clienting more effectively, a qualitative multi-method case study on Foundry firms' current venture clienting practices was conducted. The primary data was gathered through (i) semi-structured expert interviews and (ii) two workshop sessions, which were complemented with (iii) archive-mediated observation of Foundry's internal cloud storage, and (iv) direct observation of venture client projects over eight months. Besides interviewing the two chief executive officers of two leading venture client model providers, the interviews covered a total of eleven experts in varying job duties around venture clienting in four Foundry firms. Part of the same experts also participated in the project sourcing and program' scorecard workshops.

The key findings reveal threefold best practices, which include standardized program steering mechanisms, standardized project sourcing practices, and more outcome-driven impact tracking methods. The standardized program steering introduces ways for well-performing company level target setting, steering committee structuring, and methods for raising program awareness. The standardized project sourcing practices on the other hand consider an improved awareness session structure, more systematized project's marketing material, and introduce an option for incentivizing projects to increase their success rates. Finally, impact tracking takes a stand on the importance of projects' initial scoping phase, and how those improvements along with standardized pilot and scaleup project check-ins can shorten and harmonize firms' pilot project timelines.

The case study contributes to the emerging literature of startup supplier programs and strengthens the foundation of outside-in corporate venturing typologies. In addition, it succeeds to provide a practical recommendation to Foundry's research problem, which might benefit alike startup programs as well. Finally, the study suggests investing in a quantitative longitudinal study in venture client projects' value creation as well to focus more research on different types of startup programs and their most suitable use cases in modern corporate venturing.

Keywords: venture client, startup supplier program, startup program, corporate venture effectiveness, corporate venture steering

The originality of this thesis has been checked using the Turnitin OriginalityCheck service.

# TIIVISTELMÄ

Matti Rautio: Uusien startup-yrityslähtöisten teknologioiden tehokas hyödyntäminen venture client -mallin avulla

Diplomitvö

Tampereen yliopisto

Tuotantotalouden diplomi-insinöörin tutkinto-ohjelma

Tarkastajat: prof. Miia Martinsuo ja tenure track -professori Aki Jääskeläinen

Kesäkuu 2023

Startup-yritykset ovat nykyään merkittävä innovaatioiden lähde, mikä on ajanut suuryritykset etsimään yhä tehokkaampia ja tuottoisampia yhteistyötapoja näiden välille. Se mikä 1960-luvulla alkoi sijoitusfunktioiden imitoimisena yrityksiin ja myöhemmin koki yrityskiihdytin ryntäyksen 2000-luvun alussa, vaikuttaa nyt heräävän eloon kolmannen kerran ns. startupyritysten hankintaohjelmina suuryrityksissä. Silti yhä yli puolivuosisataa kestäneen kokeilujakson jälkeen yritykset vaikuttavat jokseenkin yhä hapuilevan pyrkimyksissään valjastaa startup-yritysten koko potentiaali osaksi omia innovaatio- ja tuotekehitysprosessejaan. Havaitessani todennäköisesti vähemmän vakavia, mutta vastaavanlaisia haasteista pohjoismaisessa venture client -allianssissa, sain kuitenkin poikkeuksellisen mahdollisuuden tutkia, miten näihin haasteisiin vastataan allianssin kahdeksassa jäsenyrityksessä.

Lähestyin tutkimuskysymystä, miten Combient Foundry:n allianssiyritykset voisivat käyttää venture client -mallia tehokkaimmin, laadullisella monimenetelmällisellä tapaustutkimuksella. Data kerättiin lähtökohtaisesti (i) puolistrukturoiduilla asiantuntijahaastatteluilla ja (ii) työpajakeskusteluilla, mitä tuettiin (iii) arkistopohjaisella Foundryn pilvipalveluhavainnoinnilla sekä havainnoimalla venture client -projektien toteutusta yhteensä kahdeksan kuukauden ajan. Kahden johtavan venture client -mallin toimitusjohtajien haastattelun lisäksi haastattelut sisälsi yhteensä 11 asiantuntijaa erilaisissa toimitehtävissä mallin ympärillä. Samoja asiantuntijoita osallistui myös työpajoihin, jotka koskivat projektihankinnan tehostamista sekä ohjelman seurantamekanismien kehittämistä.

Päälöydökset sisältävät kolme tehostamiskäytäntöjä, jotka ovat johtamiskäytäntöjen vakiointi, projektihankintakäytäntöjen vakiointi sekä entistä tulosorientoituneempaan mittaamiseen siirtyminen. Vakioidut johtamiskäytännöt ottavat kantaa yritystason tavoiteasetantaan, johtoryhmän strukturointiin sekä tapoihin ohjelman tietoisuuden levittämiseksi. Projektihankintakäytäntöjen vakiointi ehdottaa puolestaan entistä strukturoidumpia tiedonlevitystilaisuuksia, vakioidumpia yritysten sisäisen markkinoinnin materiaaleja sekä kannustinperusteisten projektien mahdollisuutta. Tulosorientoituneempi mittaaminen painottaa projektien ongelmamääritystilanteen tärkeyttä ja sitä, miten se yhdessä entistä vakioidumpien pilottiprojektitapaamisten avulla voisi lyhentää ja harmonisoida eri teknologiakokeiluiden aikatauluja.

Tutkimus edistää orastavaa startup-yritysten hankintaohjelmien kirjallisuutta ja vahvistaa typologioita yritysten ulkoa-sisäänpäin yrityssijoittamisessa. Lisäksi se onnistuu tarjoamaan käytännönläheisen suosituksen Foundryn tutkimusongelmaan, josta voi olla hyötyä myös muille vastaavan tapaisille startup-yritysten hankintaohjelmille. Lopulta, työssä esitetään jatkotutkimustarve kvantitatiiviselle pitkittäistutkimukselle venture client projektien arvonluonnissa sekä tarkempaan selvitykseen siitä, mitä eri startupyritysten hankintaohjelmia on olemassa ja mikä on niiden sopivin käyttökohde osana modernia yrityssijoitustoimintaa.

Avainsanat: venture client, startup ohjelma, startup hankinta, startup toimittaja, startup ohjelman tehokkuus, startup ohjelman johtaminen

Tämän julkaisun alkuperäisyys on tarkastettu Turnitin OriginalityCheck –ohjelmalla.

#### **PREFACE**

First of all, I want to thank professor Miia Martinsuo from Tampere University and Eero Vartiainen from Combient Foundry for steering me throughout the whole master's thesis. Your passionate way to drive different things helped me immensely and is something that I want to take for my future self as well. Second of all, I want to thank the larger networks around you, Tampere University's faculty of industrial engineering and management as well as Foundry alliance who have strengthen my interest to contribute for society through innovation and helping businesses to grow. I hope I am lucky enough to continue my path in small and purpose driven teams first here in Finland and sooner or later abroad. Third, I like to thank my mom and dad, sister and all other unbelievable people that have supported me throughout the master's thesis and have always been there for me. Whether it is you, someone part of my family, or you, someone with whom I got the honour to share my work/study/childhood memories, it is also ultimately you, who gets me to write this thesis, and who keeps me disciplined to self-improvement in different areas of life. Thank you for the journey so far, I will pay you back one day.

"Only those who can see the invisible can do the impossible."

Helsinki, 13.6.2023

Matti Rautio

# **TABLE OF CONTENTS**

1.INTROD	DUCTION	1
1.1	Background of the study	1
1.2	Research objectives and questions	3
1.3	Study structure	4
2.LITERA	TURE REVIEW	6
2.1	Overview to corporate venturing	6
2.2	2.1.1 Corporate venturing motives 2.1.2 Corporate venturing dimensions 2.1.3 Corporate venturing typologies Outside-in corporate venturing modes	7 12
2.3	2.2.1 Overview to outside-in corporate venturing 2.2.2 Outside-in corporate venture capital 2.2.3 Corporate accelerator programs 2.2.4 Startup supplier programs  Effective use of startup supplier programs	15 17 19
2.4	2.3.1 Approaching startup programs' effectiveness	24 25 27
3.METHO	DOLOGY	34
3.1	Research context	34
3.2	Research design and strategy	34
3.3	Data gathering	35
3.4	Data analysis	39
3.5	Evaluation of research design	41
4.FINDING	3S	42
4.1	Factors driving new venture client projects	42
4.2	4.1.1 Foundry firms' sentiment on venture clienting	44 53
4.3	4.2.1 Diversified benefits of venture clienting	56 57 58 60
	4.3.1 Foundry's key performance indicator scorecard	64

5.DISCUS	SSION	70
5.1	Improving effectiveness of venture clienting	70
5.2	5.1.1 Standardizing executive level steering	73 74
6.CONCL	USION	78
6.1	Theoretical contribution	78
6.2	Managerial implications	79
6.3	Research validity and future research	79
REFERENCES		82

# **LIST OF FIGURES**

Figure 1: Illustration of Foundry alliance and a Foundry firm's venture client setup	2
Figure 2: Structure of the thesis	4
Figure 3: A harmonized 3×3 framework of corporate venture mode profiles	
(adapted from Gutmann 2019)	12
Figure 4: Typology of corporate engagement models with startups and their key	
goals (adapted from Weiblen and Chesbrough 2015)	13
Figure 5: Different outside-in CV modes	15
Figure 6: Summary of the three outside-in corporate venturing modes (adapted	
from Kohler 2016; Kurpjuweit & Chesbrough 2020; Weiblen &	
Chesbrough 2015)	22
Figure 7: Thematic analysis for the first research question	39
Figure 8: Illustration of business ideas and challenges that stream both bottom-	
up and top-down to a steering committee who oversee resource	
allocation	55
Figure 9: Aggregated benefit areas from 11 Foundry firm interviews	56

# **LIST OF TABLES**

<b>Table 1</b> : Seven dimensions of corporate venturing (adapted from Gutmann 2019).	
Table 2: Four dimensions to find benchmarkable CV modes with venture clienting	
(adapted from Gutmann 2019)	11
Table 3: Effective use of startup supplier programs (adapted from Dushnitsky)	
2011; Freeman & Engel 2007; Henz et al. 2021; Kohler 2016;	
Weiblen & Chesbrough 2015)	31
Table 4: Main pieces of data per research question in descending order of	
importance	36
Table 5: List of Interviewees (and champions who participated to a workshop)	
session)	38
Table 6: Potential project managers' and project teams' objections to venture	
clienting	48
Table 7: Project related KPIs discussed in the second Foundry workshop	
Table 8: Recommendations for Foundry to boost venture client model	04
effectiveness	76
GIIGUUVGIIGSS	/ 0

# **DEFINITIONS AND ABBREVIATIONS**

Angel Investor A high-net-worth individual who provides financial backing for small

startups or entrepreneurs typically in exchange for equity ownership. Also known as private investor, seed investor, angel funder or busi-

ness angel. (Ganti 2022)

CA Corporate accelerator. A mechanism for corporations to engage with

innovative entrepreneurial firms in exchange for resourcing and

mentoring (Kurpjuweit & Wagner 2020).

Champion An employee that is dedicated to improving certain area in a com-

pany. In this study champions mainly refer to venture client manag-

ers and facilitators inside Foundry's firms.

CV Corporate venturing. A set of corporate mechanisms designated to

accelerate innovation and new business creation (Dushnitsky 2011; Guttmann 2019). Corporate venturing is most typically associated

with startup engagements (Weiblen & Chesbrough 2015).

CVC Corporate venture capital. Financing entrepreneurial activities with

direct equity investments to e.g., track interesting technologies and markets, influence ventures' product designs, and gain financial

profits. (Weiblen and Chesbrough 2015)

CVC&A program Corporate venture capital and accelerator programs.

Foundry company One of the eight companies that form the Foundry alliance.

Innovation A process that begins with a novel idea and concludes with market

introduction. Invention as such is not an innovation. (Freeman & En-

gel 2007)

Startup A company in the first stage of operations. (Grant et al. 2022) In this

study the term startup also refers to early-stage scaleups, which are

slightly more mature companies in terms of company growth.

Startup program A corporate venturing mode abbreviated from (corporate) startup

supplier program. Startup programs are typically characterised for not involving equity investments from parent company. (Kurpjuweit

& Wagner 2020)

Startup technology A technology which is owned and developed by a startup.

VC Venture capital. A form of investment partnerships and financing that

investors provide to startup companies and small businesses which are believed to have a long-term growth potential (Hayes et al.

2022).

Venture client Commercialized and one of the best-known forms of startup supplier

programs. Originally coined by Gregor Gimmy at BMW's Startup

Garage in 2015 (Gimmy et al. 2017).

# 1. INTRODUCTION

#### 1.1 Background of the study

Corporations have globally started investing more money in their startup engagements, and the traditional corporate venturing modes are now complemented with less equity heavy alternatives. From 2013 to 2018 the number of established firms' investments in startups nearly tripled and their value rose from \$19 billion to \$180 billion according to GCCV Analytics, a company tracking corporate venture deals (Prats & Siota 2019). In addition, the traditional type of corporate venture modes that include equity investments, corporate venture capital and accelerator programs, are now witnessing the emergence of lighter collaboration modes such as venture client model (Gimmy et al. 2017) and other startup (supplier) programs. These new collaboration modes neither involve equity investment from corporations' side nor focus on startups' early product development phase but rather target solving firms' well-defined business challenges with new startup-based technologies instead (Kurpjuweit & Wagner 2020).

However, observing corporation's startup engagements, firms do not appear to be fully convinced if their approaches have worked as effectively as initially thought. According to Prats and Siota's (2019) discussions with more than 120 chief innovation officers the success rate of corporate venture initiatives is low: 75% of corporate innovation initiatives fail to deliver the desired results. According to Gimmy et al. (2017) one of the root causes for this is that traditional corporate venture capital and accelerator (CVC&A) programs fail to lure the best startups from private venture capital (VC) investors. Firms simply cannot replicate the deep expertise private VC investors have in starting companies and assisting startups with their complex challenges. In addition, corporations CVC&A programs are often perceived as slow and expensive innovation tools that have inherent difficulties regarding innovation transfer and integration. (Gimmy et al. 2017) On the other hand, this might also be due to corporations' lack of entrepreneurialism. Firms' main business lines may be unwilling to collaborate with the corporations' venturing unit, if they are rooted to firms' traditional performance metrics, or do not appreciate the strategic value of working with startups overall (Prats & Siota 2019). Corporations can then continue working in silos, lack clear objectives and effective key performance indicator

(KPI) measurements or suffer from administrative hurdles, incentive mismatch, and fear of failure (Sanders et al. 2020).

Venture client models, such as Combient Foundry's (hereafter Foundry's) venture client alliance, are trying to combat this ineffectiveness by providing startups what they actually need, faster purchase orders and a big reference customer (Gimmy et al. 2017). Foundry's alliance consists of eight Finnish or Swedish industrial companies which have formed a joint intermediary, Foundry, to help firms first scope their business development needs into startups' language and then search the best startups to help with the business needs. Foundry, the joint intermediary, also helps the companies with their pilot projects and proof of concepts to further validate whether the startups' offering works in practice. Although project level impact assessment is difficult, Foundry's venture client model is approximated to help the firms save up to 6-12 months in their new product development processes. (Combient Foundry 2023). Foundry alliance is illustrated in the figure 1.

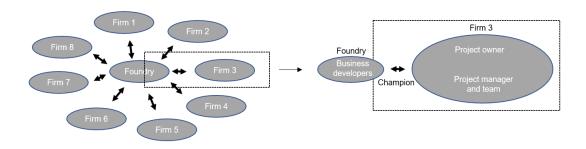


Figure 1: Illustration of Foundry alliance and a Foundry firm's venture client setup

However, in some of the Foundry companies, the venture client model appears to work more effective than in others, which sparks a reasonable topic to study in this master's thesis. Some of the companies might have for example integrated their venture client program more tightly into their everyday business or created efficient steering practices that could significantly help other Foundry firms as well. On the other hand, as employees even within the same Foundry company can have different perceptions towards the model's value, the study also offers an excellent opportunity to reveal if people in different organizational roles perceive the model's benefits and costs systematically differently. For example, if project managers think the benefits of working with startups such as an access to latest technological advancements with flexibility and reduced risk (Hofmeister et al. 2020) are only mere words, and a venture client manager sees only an overly rosy picture, it is naturally important to pinpoint that type of perception mismatch too.

#### 1.2 Research objectives and questions

This study aims to find and distribute Foundry's alliance firms' (hereafter Foundry firms') best practices in effective use of venture clienting. The focus is especially on practices that provoke more and better scoped venture client opportunities, help companies to continue after startup(s) selection phase, and help quantifying program's benefits to justify it is importance to the decision makers. The study does not concentrate on developing the so-called venture client cycle, in which Foundry's business developers scout and assess potential startups and scaleups. The guiding research question is thus:

How can Foundry (alliance) companies use venture clienting more effectively?

The research question can be further divided into three sub questions. The first examines what are the factors influencing venture clienting projects to arise in Foundry companies and what are their employees take, how this could be improved inside the organizations:

RQ1: Which factors drive Foundry companies to launch venture client projects?

The second sub question addresses the research problem more carefully from decision making perspective, and how the value of venture clienting, i.e., its benefits and costs, are perceived. An underlying assumption is that operational level project teams might be more reluctant to drive venture client projects as they would have to take some individual risk of a project success without an adequate compensation for success. The hypothesis can be validated through the second research question:

RQ2: How do employees in Foundry companies perceive the value of venture clienting at different organizational roles?

Finally, the third research question examines how Foundry firms assess the outcomes of venture clienting and how this assessing could be improved in the future for more effective use of venture clienting:

RQ3: How can Foundry companies assess the outcomes of venture clienting?

Although organizations typically use different leading and lagging indicators to measure project success in different time frames, the metrics appear less applicable for venture clienting. As venture clienting is used generally to shorten the new product development process, the noticeable quantitative metrics have mainly circulated around the number of projects launched and their pilot projects' success rates. To better integrate venture

client model into the firms, there is inevitably a strong need for more accurate, and more transparent metrics on both project and company level.

#### 1.3 Study structure

After the introduction chapter has explained the empirical need behind the study, rest of the research follows a structure presented in the figure 2.

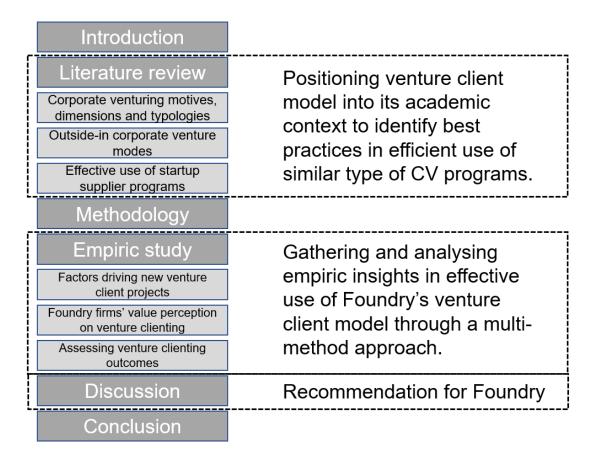


Figure 2: Structure of the thesis

The introduction chapter is followed by a literature review (chapter 2), which starts by describing the overall picture and motives of corporate venturing, second draws a line between different outside-corporate venture models, and third, plunges into effective use of venture clienting and other startup supplier programs. The literature review reveals for example a group of concrete steering models applied in a relatively similar environment and discusses whether those could be utilized in venture clienting.

Next, the methodology section (chapter 3) draws out how the initial findings can be elaborated with an inductive qualitative research design. This chapter explains why for example (i) expert interviews and (ii) workshop sessions were selected as the primary data gathering method, and what are the key considerations in ensuring the data's validity

and reliability. In addition, the data is complemented with (iii) archive-mediated observation of Foundry's internal cloud storage and (iv) direct observation of venture client projects over eight months. Findings in chapter 4 reveal that Foundry firms have remarkable differences in integrating venture clienting to their product development practices, and that some firms are still struggling to assess the program outcomes. The chapter also analyses employees value perceptions, which appear to differ significantly from one Foundry firm to another but also within firms.

The discussion in chapter 5 combines literature and empiric findings to threefold best practices, including standardized program steering mechanisms, standardized project sourcing practices, and more outcome-driven impact tracking methods. The standardized program steering introduces ways for more accurate firm level target setting, steering committee structuring, and methods for raising program awareness. The standardizes project sourcing practices on the other hand consider an improved awareness session structure, more systematized projects' marketing material, and introduce an option for incentivizing projects to increase their success rates. Lastly, impact tracking takes a stand on the importance of projects' initial scoping phase, and how to those improvements as well as standardized pilot and scaleups project check-ins could shorten and standardize firms' pilot project timelines.

Finally, conclusion chapter 6 summarizes the case study's theoretical and managerial implications as well as introduces areas for future research. From existing literature's perspective, the study contributes to the emerging literature of startup supplier programs and strengthens the foundation of outside-in CV typologies. From managerial implications perspective the study on the other hand provides a practical recommendation to Foundry's research problem, which might benefit alike startup programs too. In the end, the study also suggests investing in a longitudinal study in venture client projects' value creation and measuring, and to focus academic research on different types of startup programs and their most suitable use cases in modern corporate venturing.

#### 2. LITERATURE REVIEW

#### 2.1 Overview to corporate venturing

#### 2.1.1 Corporate venturing motives

Whereas corporations have resources, scale power, and the routines needed to run a proven business model efficiently, the startup has none of those but a growing number of promising ideas, organizational agility, willingness to take risk, and aspirations of rapid growth instead. (Freeman & Engel 2007; Kohler 2016) Companies are now looking for those ideas, agility, and so on, more than ever which can be perceived for example in the established firms' investments to startups (Eckblad et al. 2019). Overall, firms' investment in startups are claimed to have nearly tripled and their value risen from \$19 billion to \$180 billion from 2013 to 2018 (Prats & Siota 2019). Corporations are eager to go after both financial benefits, such as generating new revenue streams, growing sales from existing assets, or assisting a cost reduction strategy, as well as strategic benefits such as accessing emerging technologies, educating a corporate a new way of working or having a vehicle to enter new markets (Sanders et al. 2020). In addition, engagements with startups typically promise speed on operational level, and innovative brand image (Bonzon & Netessine 2016). However, while the combination of entrepreneurial activity and a corporation seems like a perfect match, it can be elusive to achieve in practice (e.g., Dushnitsky & Lenox 2006; Kohler 2016).

Startups are becoming a continuously bigger source of innovations, which makes it essential for corporations to find an efficient way to collaborate with them to sustain firms' competitive advantage. Examples such as Facebook and Tesla Motors have already shaped the anticipation that it will be the startups instead of the established firms, who come up with the "next big thing" to create uncontested marketspace and disrupt entire industries (Weiblen & Chesbrough 2015). The 2010s have also witnessed a surge of entrepreneurial activity that seemed nearly impossible in the aftermath of the dot-com bubble, and the founders of tech ventures are now able to bring their ideas to market at much lower cost than in the early 2000s (Battistini 2013; Dushnitsky 2011) An entire system of support institutions such as venture capitalist, startup incubators, co-working spaces, and government-funded support schemes are ready to help steer new ventures through their early days. Founders have access to new methodologies and tools to shape their venture, business schools teach more entrepreneurship classes and offer more

startup clinics, and a growing number of startup competitions are held to inspire especially youths worldwide (Weiblen & Chesbrough 2015).

Setting up and effective corporate venturing program, which has been in the interest of both practitioners and scholars, (e.g., Freeman & Engel 2007; Kohler 2016) suffers from ambiguity between different corporate venturing (CV) modes (Gutmann 2019; Narayanan et al. 2009). Scholars' examination of CV has been fragmented and resulted in a plethora of typologies and definitions that often fail to establish a holistic understanding of the relevant characteristic or differentiators between the CV modes (Gutmann 2019; Narayanan et al. 2009). Second, the definition of corporate venturing itself can be accused of being ambiguous as it varies from a set of corporate mechanisms designated to accelerate innovation and new business creation (Dushnitsky 2011; Gutmann 2019) to efforts to reach out the startup ecosystem (Weiblen & Chesbrough 2015). The rapid emerge of new CV modes, makes the situation even more difficult. The traditional modes such as corporate venture capital (CVC) and corporate accelerator (CA) programs are now complemented with an increasing number of new heterogenic CV modes such as strategic partnerships (Gutmann 2019), startup supplier programs (Kurpjuweit & Wagner 2020), hackathon pitching and one-off-events with startups, open innovation programs, consulting agencies and more. Understanding the landscape and finding a suitable CV mode for corporations' strategic needs thus appears like finding a proverbial needle in the haystack (Gutmann 2019).

# 2.1.2 Corporate venturing dimensions

The lack of academic studies in venture clienting, compels to expand the literature review in other areas of a fragmented CV landscape; and thus, define different dimensions and typologies to reveal the most similar types of CV modes. The CV literature has numerous articles which consider how one form of CV mode differs from another. Now in 2023, one of the most holistic mappings, yields from Tobias Guttmann's (2019) extensive literature review covering a preliminary sample of 349 and final sample of 32 journal articles on the topic. In his paper, Gutmann draws out altogether seven dimensions to describe CV landscape which are *locus of opportunity, prioritization of objectives, ambidexterity, link to the corporate firm, level of investment intermediation, equity involvement, and the direction of innovation flow.* (Gutmann 2019). The dimensions and their conceptual ambiguities are listed in the table 1.

 Table 1: Seven dimensions of corporate venturing (adapted from Gutmann 2019)

Dimension	Explanation	Scholars' conceptual ambiguity
Locus of opportunity	Measures whether a new business opportunity exists inside or outside the company.	Disagreement whether an internal/external label should base on the origin of an idea or whether the resulting entity relies inside or outside a parent company.
Prioritization of objectives	Measures whether the CV goals are primarily financial or strategic.	Question of financial and strategic goals interrelatedness and coexistence.
Ambidexterity	Measures whether the CV mode is exploiting current businesses or exploring new opportunities.	Question whether the same CV mode can flourish in both exploitative and explorative venturing.
Link to the corporate firm	Measures how closely the CV mode is related to the company.	Disagreement whether the links refer into operational links between a firm and startups or into structural links between the firm and its venturing unit.
Level of investment intermediation	Measures to which extent the CV investments are direct or indirect.	Question whether the dimension is too CVC oriented.
Equity involvement	Measures how big of an equity position a firm takes into startups.	
Direction of in- novation flow	Measures whether innovations flow into the company or out of it.	

The first dimension, locus of opportunity, which is also a synonym for focus of venturing and focus of corporate ventures, indicates whether corporate venturing happens totally inside the firm, or with an external intermediary (Gutmann 2019). Some contextual ambiguity exists, for example if the internal / external label should be based on the origin of the idea, i.e., whether the idea comes from the parent company (Biniari et al. 2014; Miles & Covin 2002), or if the resulting legal entity resides, inside or outside a firm (Reimsbach & Hauschild 2012). In addition, the nature of executive sponsorships and other types of company support programs might also affect the designation of internal / external label. Particularly, for example some CV fundings tend to use external resource utilization to determine whether their corporate venturing is internal or external. (Battistini et al. 2013; Gutmann 2019). Venture clienting on the other hand can be carried out either internally, such as 27pilots (2022) approach where they build a venture clienting unit within a firm, or at least partly externally, such as Foundry's (2022) approach, where Foundry works as an intermediary to help all its alliance companies.

The perhaps second most cited CV dimension is the prioritization of objectives which divides CV modes into strategic or financial oriented, or a mixture of those (Gutmann

2019). The label for financial orientation is typically based on CV modes' strong financial goals and risk diversification (Miles & Covin 2002), which is similar behaviour to private venture capitalists. Other types of CV modes with a clearly distinct value proposition can be then labelled strategic (Gutmann 2019). In the latter the value proposition can be for example accelerate the pace of innovation and new business development (Battistini et al. 2013), provide a firm a window on emerging technologies, enable strategic partnerships, or purely foster entrepreneurial culture and internal creation of ideas (Hill & Birkinshaw 2008); Battistini et al. 2013; Miles and Covin 2002). However, separating CV modes into pure financial or strategic is a difficult in practice, as those two are such tightly knit together, and the terms strategy itself can be difficult to define. On the other hand, it appears that more recent CV modes such as CAs and startup supplier programs are starting to label them more and more strategic oriented.

Third CV dimension, ambidexterity, refers to corporations' inherent need to both exploit current businesses, and simultaneously explore new business opportunities to adapt in changing market environments. Exploitation-oriented CV modes are thus associated with companies' need for alignment concerning the refinement and extension of existing competencies, i.e., their technologies and paradigms which have positive, proximate, and predictable results. Exploration-oriented modes, on the other hand, are associated with companies' need for adaption, resulting in more uncertain, distant, and often even negative returns requiring experimentation with totally new alternatives. (Gutmann 2019) Balancing the tension between exploitation and exploration then happens through initial project scopes and selected target startups (Biniari et al. 2014). Strategic planning on the right amount of exploitative and explorative venturing or, company growth in general, continues to be a difficult task for any company (McKinsey & company 2009) and the question whether a single CV mode could be superior in both horizons remains still open.

The fourth CV dimension, link to the corporate firm, explains how tightly a CV mode is attached to a company (Gutmann 2019), and its definition is partly overlapping with the locus of opportunity and ambidexterity dimensions. The articles on link to the corporate firm focus either on the operational links between a corporation and a startup or the structural links between the CV mode unit and the corporation itself (Biniari et al. 2014; Gutmann 2019). In other words, some scholars have also assessed the link to a firm based on the degree to which the operations of the investing company and startup are linked or even how the innovation is relatedness to existing business. (Gutmann 2019) Practitioners have also described this as high or low involvement from the corporation's side (Bonzon & Netessine 2016) although the involvement is equally difficult to measure.

Some quantified measures could involve for example tracking origins of cash flows or full-time equivalents (FTEs).

Fifth CV dimension, the level of investment intermediation, refers to the discernment between direct and indirect investments. The dimension is heavily CVC oriented (Gutmann 2019). In indirect investments the corporations typically use autonomous intermediaries who make funding decisions and can add value to the venturing activity by providing managerial support (Miles and Covin 2002). In other words, utilizing an investment intermediary means indirectly investing in young, privately held companies with an external investor or fund entity. In contrast, corporations utilizing direct investments take direct equity stakes from startups, which is typically associated with higher financial risk and more strategic objectives. (Gutmann 2019) Classifying CV modes to ones with an investment intermediary and ones without, helps understanding different CV modes but again partly overlaps with the two other dimensions, locus of opportunity and link to the firm.

Sixth dimension, equity investments, tells whether a company takes an equity position in a target startup or not (Gutmann 2019). Scholars such as Weiblen and Chesbrough (2015) argue that several CV modes without an equity investment have begun to emerge, because the traditional CVC units have started to fail to effectively leverage the complementarities between corporations and startups. The new CV modes with little or no equity investments are also explored by Kohler's (2016) and Pauwels et al. (2016) research on corporate accelerator programs. Drivers towards lighter CV modes without equity investments are studied more in the following subchapters concerning corporate accelerators and particularly startup supplier programs such as venture clienting.

Seventh dimension, the direction of innovation flow (Gutmann 2019), is discussed also primarily by Weiblen and Chesbrough (2015) as well as Kohler (2016). Innovations that flow from inside of the company to outside are referred as inside-out innovations and ones flowing from outside to inside are referred as outside-in innovations (Gutmann 2019). The inside-out activities are dominated by CV modes that license out, incubate and spin-off ventures and thus exploit the speed and agility of startups to push innovations to marketplace (Weiblen & Chesbrough 2015). The outside-in activities, which are perceived perhaps as a more typical type of corporate venturing, can be mapped to CVC investments and other engagement modes that in-source entrepreneurial technologies, and pave way to harness external startups' innovations for new business development and growth.

When trying to find similar CV modes to venture clienting, it appears sufficient to focus on four key dimensions of which two are especially important, the direction of innovation

flow and equity involvement. The two other important dimensions are ambidexterity and link to the corporate firm. The direction of innovation flow is particularly important because it is strongly linked to articles which consider startup supplier programs, and equity in the first place, which have been the main differentiators between different outside-in CV modes. Venture clienting is inevitably a venturing tool to source innovations outside-in. Ambidexterity and link to the corporate firm are also considered in similar type of scientific articles. However, the dimension on locus of opportunity can be excluded because it partly overlaps with less ambiguous dimensions on direction of innovation flow, prioritization of objectives due to its ambiguousness in the context of venture clienting and lastly the level of investment intermediation due to its too heavy CVC orientation. It is important to note that these three dimensions can still be highly useful in other research contexts. The table 2 lists only the four key CV dimensions for finding similar CV modes to venture clienting.

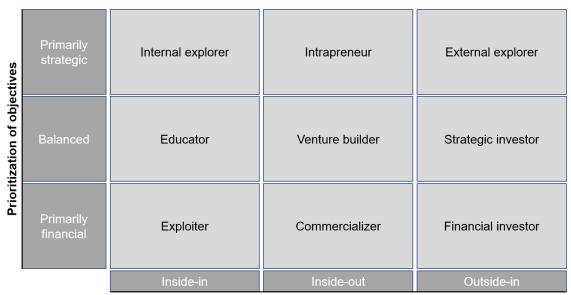
**Table 2**: Four dimensions to find benchmarkable CV modes with venture clienting (adapted from Gutmann 2019)

Dimension	Explanation
Direction of innovation flow (Inside-out / outside-in)	Measures whether innovations flow into the company or out of it.
Equity involvement (Collaboration model)	Measures whether corporate venturing involves equity or favours lighter collaboration methods such CAs or startup (supplier) programs.
Ambidexterity (Exploitative / explorative)	Measures whether the CV mode is exploiting current businesses or exploring new opportunities.
Link to the corporate firm (Use of intermediary)	Measures how closely the CV mode is operationally linked to the company. The dimension can consider for example how much of the venturing is carried out through a firm's own CV function and employees in traditional business streams or through an external CV intermediary.

Before diving deeper into the different CV mappings and typologies, it is important to realize that not a single type of CV mode has performed the best when examined across a stringent performance definition, including technological, financial, and entrepreneurial dimensions. Rather than asking which CV mode works the best, business managers should focus to align CV modes to their strategies with clear and consistent objectives. (Hill & Birkinshaw 2008) Especially when corporations pursue benefits from several different CV modes, those should be even more clearly linked to practical value propositions to be able to create, capture, and deliver value effectively (Gutmann 2019).

#### 2.1.3 Corporate venturing typologies

In addition to Gutmann's (2019) extensive literature research in different CV dimensions, he also proposes a comprehensive typology to map CV mode landscape. However, the rationale behind reconciling into prioritization of objectives and the direction of innovation flow dimensions is somewhat vague as the prior literature has not shed that much light on the idiosyncratic characteristics which would distinguish one CV mode from another. In the end selecting an appropriate CV mode should always be so heavily driven by firm's strategy (Guttmann 2019) and strategic need that creating a theoretical framework for all alternatives is inherently difficult. Nevertheless, Gutmann's 3x3 CV mode framework is still one of the most comprehensive CV typologies existing now in 2023. The frameworks' applicability might be the best, when CV is examined on very broad scope, such as a set of corporate mechanisms designated to accelerate innovation and new business creation (Dushnitsky 2011; Gutmann 2019). Guttman's (2019) framework with its all CV mode labels is illustrated in the figure 3.



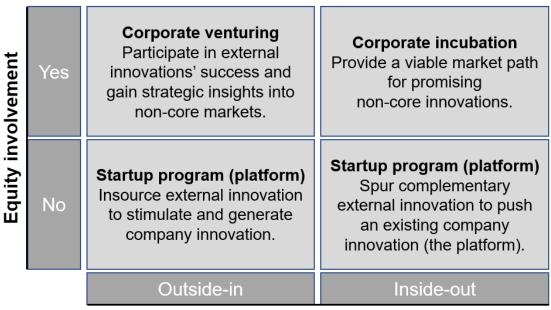
**Direction of innovation flow** 

**Figure 3**: A harmonized 3×3 framework of corporate venture mode profiles (adapted from Gutmann 2019)

To summarize, Gutmann (2019) labels each CV mode based on its primary use case on the horizontal axis, and strategic intent (cf. time horizon and prior explorer / exploiter discussion) on the vertical axis. Interestingly, Gutmann emphasizes that the direction innovation flow' dimension should be complemented with inside-in concept to highlight the complexity of CV activities in modern organizations. These organizations encompass the network of interconnected internal units that may also be sources for novel ideas as well as coordination vehicles involved in a myriad of innovation search and execution

activities. (Gutmann 2019) On one hand, adding the inside-in layer shifts the focus perhaps too much towards traditional R&D and new product development practices within corporations. On the other hand, part of the new product development programs for instance might appear very venturing like as they pursue insights from new technologies and areas where companies lack complementary products and services. Furthermore, the emerging CV modes have begun to steer the conversation around CV more and more towards companies' new product development processes.

Especially practitioners might appreciate more of a simple and concrete typology by Weiblen and Chesbrough (2015) that considers very tangible dimensions, equity involvement and direction of innovation flow. Equity involvement appears arguably more concrete than dividing different CV modes into financial or strategic driven, as strategy-oriented CV modes' outcomes should eventually be measured in financial terms too. Scholars' framework consists of very traditional type of corporate venturing (cf. CVC), outside-in startup programs, as well as inside-out CV modes, which can include or exclude equity in corporate incubation. The main rationale for the two dimensions lays in the rapid emergence of new lightweight CV modes that firms are evolving for their startup engagements. More rapid decision making through lighter collaboration modes is believed to improve firms' ability to attract, support, and retain startups (Weiblen & Chesbrough 2015) as well as other important sources of external innovation (Thompson et al. 2020). Weiblen & Chesbrough's (2015) typology is illustrated in the figure 4.



Direction of innovation flow

**Figure 4**: Typology of corporate engagement models with startups and their key goals (adapted from Weiblen and Chesbrough 2015)

Although on one hand the typology appears clear and well-defined, it on the other hand might still lack some specificness and comprehensiveness particularly from an academic point of view. In addition, the direction of innovation flow dimension is discussed little among other scholars and the inside-out startup program platforms appear as notably small niche among the other three CV modes.

Finally, in the end neither Weiblen and Chesbrough (2015) or Gutmann (2019) believe that their CV mode typologies are mutually exclusive although those can be collectively exhaustive. Even Gutmann (2019) himself admits that some firms CV modes can overlap into more than one CV mode group in his harmonized 3x3 typology. On the other hand, the absence of mutually exclusive categories is claimed to undermine only one of the five robustness criteria for a classification scheme where the other criteria are, adequate specification of the phenomenon to be classified, adequate specification of characteristics, usefulness, and collective exhaustiveness (Gutmann 2019). Nevertheless, as earlier discussed, a one comprehensive CV typology is unlikely an optimal framework for every situation or business need, but the most useful framework is rather based on the firm's strategic need and context.

#### 2.2 Outside-in corporate venturing modes

# 2.2.1 Overview to outside-in corporate venturing

Whereas e.g., Guttman's (2019) or Weiblen and Chesbrough's (2015) CV typologies might work the best to describe modern CV landscape holistically, for this study it is more reasonable to focus only on outside-in CV modes to find best reference examples for effective venture clienting. The outside-in dimension is the perhaps the most important distinguishing factor not only because its applicability for this research setting but also because it was raised up in some of the most credible and recent research papers. Even though on some occasions it can be difficult to separate whether the innovation happens internally or externally, strategic intent is still easy to understand. In the outside-in modes firms need something from the startups to complement (or hedge and thus reduce risk) their offering, whereas inside-out modes, want to exclude some for example product or technology from their portfolio as it survives better apart from the firm.

Although especially the outside-in CV modes are facing new type of lighter CV programs, such as venture clienting, those have two CV modes that are cited remarkably more than others, corporate venture capital and accelerator programs. (Gimmy et al. 2017). These programs then pave the way for the central CV mode of this study, venture client model

and other alike startup supplier programs. On the other hand, when stepping out of the CV mode thinking, one can also interpret one-off events or other unstructured startup engagements such as startups innovation contests as a part of corporate venturing. Although those are worth mentioning in the research context, they are still excluded from the study due to their unstructured nature. Figure 5 illustrates different outside-in CV modes.

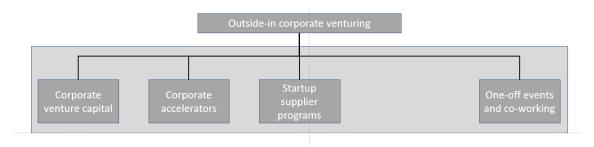


Figure 5: Different outside-in CV modes

Within the outside-in CV dimension, scholars and practitioners have often separated one CV mode from another through equity involvement (e.g., Gimmy et al.2017; Hofmeister et al. 2020, Sanders et al. 2020). On a high level these distinguishing factors revolved around CV modes strategic scope and need, CV program content, and the resources that the CV mode provides for startups. These factors are discussed more in detail in the subchapters below.

# 2.2.2 Outside-in corporate venture capital

The idea of corporate venture capital (CVC) started evolving already in the 1960s from private venture capital with several ups and down since (Battistini 2013; Weiblen & Chesbrough 2015). Whereas in the past, the average lifespan of CVC activity was only 2.5 years, much shorter than the independent venture capital funds (Dushnitsky & Lenox 2006), the CVCs appear to be here longer this time (Dushnitsky 2011). As the oldest mode of corporate venturing, CVC appears to also be the most researched one, and the newer corporate venturing modes such as corporate accelerator or startup supplier programs often compare themselves in it. However, in the emergence of lighter corporate venturing modes (Weiblen & Chesbrough 2015) it is good to bear in mind that CVC programs are not necessarily pure financial instruments for corporations, since some of them have a strong strategic orientation too. Unfortunately, separating the financial oriented and the strategic oriented CVC modes from each other can be difficult due to complex organizational structures (Battistini 2013) and the fact that corporations' venture modes may evolve over time. For example, whereas the financial oriented CVC modes

are often driven by strategic goals the investment are often made using financial criteria. (Gutmann 2019)

The financial-oriented CVC modes can also be described as indirect-external venturing, passive investments, or private equity venturing, which depicts how similar some CVC modes are with the private venture capital firms. Nevertheless, there are still multiple ways a firm can execute its financial oriented CVC unit. Popular methods include becoming a limited partner of an external venture capital fund which is managed by people who are not working in the company, investing in a VC fund, which originates and is managed inside the corporation, or syndicating with independent VC firms (Gutmann 2019). However, financial-oriented CVC modes potential is limited only to the startups to whom it makes sense to accept corporate investors. In addition, shareholders of the corporation might also have opposing opinions in a corporate venture arm that only invest its money for the sake of purely financial returns, which they could in fact do themselves too. (Weiblen & Chesbrough 2015)

Therefore, the strategic oriented CVC units are a much more relevant comparison point for strategic oriented startup supplier programs and venture clienting. Instead of focusing merely on financial investing, these CVC units can leverage their own and their portfolio companies' expertise in the industry, market, and technology to complement their own product offering which can lead to superior selection of valuable ventures. In return they get expert personnel who possesses in-depth knowledge to further help identifying novel technologies that could either threaten or complement the company's core business. The startups on the other hand may leverage companies' complementary assets such as manufacturing capabilities, bargaining power with suppliers or access to professional distribution networks (Dushnitsky & Lenox 2006). This can create a win-win situation, where companies appear more lucrative than private VC investors or other sources of funding, and the firms can benefit even more from startups as their value increases (Prashantham 2019). On the other hand, CVC units must decide how big investments they are willing to pursue. Whereas betting little on early-stage startups can be sufficient for a more explorative approach, sometimes purchasing a young company is the quickest and most impactful way to augment the market position, enter new markets or fill gaps in the company's product portfolio (Narayanan et. al 2009, Weiblen & Chesbrough 2015).

Unfortunately, past studies have shown that even strategic CVC units' integration and closeness to core business is still typically low, and the time horizons of investments are long (Weiblen & Chesbrough 2015). Some scholars even claim that the traditional CVC activities have had little systematic evidence that those create value and that the benefits are easily overrun by structural deficiencies inherent to CVC units (Dushnitsky & Lenox

2006). The structural deficiencies include things such as misaligned incentives, internal conflicts, and incompatible venturing objectives. Companies' may also suffer for example having to maintain a pay uniformity to avoid inter-departmental jealousy which hinders their ability to compensate the fund managers in the same way as independent venture capitalists. Therefore, because CVC fund managers often do not have the same high-powered incentives, the high-quality fund managers leave CVC units for independent VC investors (Dushnitsky 2011). Lastly, CVC funds also compete over the corporations' scarce resources like any other business unit and if those do not produce substantial immediate returns, top management may be quick to abolish the funds and exit venture capital market. (Dushntisky & Lenox 2006). Hill and Birkinshaw (2008) still add that when venturing is geared towards the exploitation of parent firm assets and capabilities, they tend to survive longer than explorative ventures.

Although the corporate venturing literature is mainly qualitative, one quantitative study found that CVC units can create more value when pursued to harness novel technologies instead of pure financial returns (Dushnitsky & Lenox 2006). When looking narrowly only the financial returns of CVC investments the financial-oriented CVC modes tend to slightly outperform the strategic oriented. To capture the overall value creation more objectively, the researchers adopted market valuation of a firm over the value of firm's tangible assets (Tobin's q) and found that the strategy-oriented CVC modes create the most value measured holistically. Although it is unlikely that these types of findings would have spurred that much of the recently emerged lighter CV modes (Weiblen & Chesbrough 2015), there can certainly be more than meets the eye behind the trend, and what practitioners are finding valuable. Also, scholars keep arguing that a CVC unit can be a vital part of companies' innovation toolkits if entrepreneurial ventures are an important source of innovations in an industry (Dushnitsky & Lenox 2006, Gutmann 2019). In the end the strategic benefits can realize at least through learning, when firms' investors secure startups' board seats or at least observation rights, increased internal innovation rates, or building more demand for companies' offering through their ventures complementary products and services (Dushnitsky & Lenox 2006).

# 2.2.3 Corporate accelerator programs

Corporate accelerator (CA) programs are a much more recent subdivision of outside-in innovation programs and hold still some conceptual ambiguity. While the term is used differently in different contexts, in the corporation world it usually denotes a time-limited program in which the startups can apply if their product falls into a certain category.

(Weiblen & Chesbrough 2015) Startups in the same category are organized in cohorts where they receive company resources for building their first protypes (Kurpjuweit and Wagner 2020). Corporations on the other hand receive a unique platform for long-term growth and corporate renewal. (Kohler 2016). CA programs can also be defined through their three key features, strategic scope, program content, and provided resources (Kurpjuweit & Wagner 2020).

From the strategic scope's perspective, CA programs typically pursue multiple goals such as attracting talent, exploring ideas, closing technological gaps, and rejuvenating company culture. In essence, corporations help early-stage startups to establish businesses, develop business models, raise funding, or grant access to company resources and mentoring. (Kurpjuweit & Wagner 2020) Like strategic oriented CVC modes, CAs are also driven by ambitions to lower costs, increased speed, and fewer risks compared to developing a non-core product or service inside the corporation (Kohler 2016).

From the program content's perspective, CA programs involve cohorts of startups rather than individual companies (Kohler 2016; Kurpjuweit & Wagner 2020; Weiblen & Chesbrough 2015) to whom companies typically provide mentoring, education, and firm specific resources to develop a first prototype. The programs typically last from three to six months (Kurpjuweit & Wagner 2020) although most of them last only three months (Kohler 2016). The CA programs are run internally, in cooperation with other established firms or together with a professional provider such as Techstars, and the number of startups is mainly limited by the number of relationship managers from the CA. (Kurpjuweit & Wagner 2020). The CAs and their standardized approaches thus enable engaging with a larger number of startups than CVC units for example. After the program, CAs can continue collaboration with the most promising startups through five ways which are supporting its pilot project, becoming its customer, becoming its distributor partner, investing in it, or acquiring it. By this classification of collaboration models, pilot projects have typically the least, and acquisitions the most risk for the firm, but an acquisition is naturally also the quickest and most impactful way of collaboration. (Kohler 2016)

From the resourcing perspective, CA programs typically offer financial resources but also education, networking related and product-related resources for startups. The financial resources are a fixed amount of money often in form of equity investments (Kurpjuweit & Wagner 2020), although some researchers have argued that equity investments are not a priority for most CAs anymore (Kohler 2016). On the other hand, these researchers may have studied CA programs already before even the first thoughts of startup supplier programs, a very recent subdivision of corporate venturing modes. Whether discussing about CAs or startup supplier programs, some CV managers have nevertheless realized

that taking too much equity may reduce the entrepreneurial drive of startup teams and it can even reduce the startup's attractiveness for future investors. In addition, later-stage startups might not see the average amount of equity investments (e.g., around six percentages) as an attractive value proposition. (Kohler 2016) The educational resources on the other hand can relate to funding, pitch training or basics in legislation, and the opportunity for networking to not only company employees but also external alumni, entrepreneurs, and investors. The product-related resources are often associated to prototyping facilities and co-working spaces for example (Kurpjuweit & Wagner 2020).

Especially the equity investments have been a key differentiating factor within different corporate venturing modes (Gutmann 2019; Pauwels et al. 2016; Weiblen & Chesbrough 2015) and including both modes that include and do not include equity investments under CA programs would greatly hamper the corporate venturing typologies and increase their ambiguity. Therefore, equity investments should still be used as the key distinguishing factor especially between CA programs and emerging startup supplier programs (Gimmy et al. 2017, Kurpjuweit & Wagner 2020).

#### 2.2.4 Startup supplier programs

Despite the massive resource use and C-level attention, traditional corporate venturing programs, such as CVC and CA programs, have often failed to accomplish their strategic innovation goals (Dushnitsky & Lenox 2006; Gimmy et al. 2017, Weiblen & Chesbrough 2015) which paves a way for lighter CV modes. Specifically, companies tend to fail in three critical requirements to meet their strategic innovation goals: Luring the best startups from private VCs (Gimmy et al. 2017), transferring and integrating innovations to existing business lines (Gimmy et al. 2017; Kurpjuweit & Wagner 2020), and making the corporate venture mode easy and affordable to operate (Dushnitsky & Lenox 2006; Gimmy et al. 2017). Luring the best startups from private VC investors is difficult because startup founders know that firms can rarely replicate the deep expertise that they have in starting companies, nor their expertise in assisting startups with complex challenges such as early deal making, business modelling, resolving disputes among founders or carrying out a successful initial public offering (IPO) (Gimmy et al. 2017). Second, traditional CV modes are often perceived as somewhat separate programs that have loose connections to research and development (R&D) teams as well as product and category managers (Gimmy et al. 2020; Kurpjuweit & Wagner 2020). The loose connections are also closely related to corporations' lack of entrepreneurial culture when the firms' main business lines do not appreciate the strategic value of working with startups, do not want to collaborate with the venturing unit, or are too rooted to traditional performance metrics (Prats & Siota 2019).

Therefore, companies have begun to launch a fully new type of corporate venturing modes which are referred as startup supplier programs (Kurpjuweit & Wagner 2020) or startup programs (Weiblen & Chesbrough 2015). Unlike traditional corporate venturing modes, these programs do not involve equity or accelerator type of services (Gimmy et al. 2017, Kurpjuweit & Wagner 2020; Weiblen & Chesbrough 2015) but focus providing startups purchase orders, something that private VC investors and other professional investors cannot (Gimmy et al. 2017). In other words, the programs offer the startup technologies a path into corporations' supply base outside the standard processes and regulations that can only be met by large established suppliers. Although the major difference between corporate accelerator and startup supplier programs stands in equity involvement, the distinguishing factors can again be depicted more comprehensively into three key perspectives, strategic scope, program content, and resourcing. (Kurpjuweit & Wagner 2020)

From the strategic scopes' perspective, startup supplier programs tend to focus more on rapid selecting, integrating, and developing supplier into firms' core business (Kurpjuweit & Wagner 2020; Weiblen & Chesbrough 2015) than CAs for example. The programs focus on mid-/later stage startups to make the startups become suppliers as soon as possible. (Kurpjuweit & Wagner 2020). On one hand, since the startup supplier programs appear more exploitative by nature, their commercialization potential is typically higher (Weiblen & Chesbrough 2015). On the other hand, integrating startup's offering as a part of the firm is also greatly affected by other factors too, such as managerial will to drive the venturing initiative forward and collaborate. However, not involving equity should in general help making the collaboration faster because there is less need for due diligence and the firms can have a standardized processes to engage with startups (Kurpjuweit & Wagner 2020).

From the program content's perspective, these programs focus on the customization of the startups' technology, implementing the solution and testing its market fit with a contact person from the company's business unit. Advanced prototypes or functioning product are a prerequisite, and the startups may have completed an accelerator program or received funding from a venture capitalist already. Unlike in many of the CAs, external accelerator programs are not involved in startup supplier programs since business unit managers often have a better sense where the business problems lie and what kind of technologies they need. (Kurpjuweit & Wagner 2020) The startup supplier programs can also be run partly externally or through a startup supplier alliance, such as Combient

Foundry's (2023) venture client model. The application procedure for startups can be continuous, and program duration flexible (Kurpjuweit & Wagner 2020), but those can also be cyclical and timely fixed (Combient Foundry 2023). In addition, different startup supplier programs have significant similarities with the popularized new product development processes (Cooper & Kleinschmidt 1991) from the 1990s. The number of startups in the program is limited to business managers, as the program managers only support the collaboration (Kurpjuweit & Wagner 2020).

From the resourcing perspective, startup supplier programs offer financial resources as well as education, networking, or product-related resources (Kurpjuweit & Wagner 2020), much less than CA programs (Gimmy et al. 2017; Weiblen & Chesbrough 2015). The financial resources, for example, are flexible payments that accounts as revenues and the education is very much company related, typically associated with industry specifics or companies' purchasing processes. Company networking on the other hand happens mainly through decision makers in the company customer's business units and other relevant functions, such as purchasing, supply chain management or legal, sometimes also with the selected established suppliers. The stakeholders can also offer testing and production facilities for startups. (Kurpjuweit & Wagner 2020).

Finally, the key differentiators in the three outside-in CV modes CVC, CAs and startup programs can be summarized based on their strategic scope, program content, and their provided resources as in figure 6.

Startup (supplier) programs	<ul> <li>Objective is to select, integrate, and develop startups to suppliers and integrate entrepreneurial innovations into the company.</li> <li>Focus is on turning mid-/later stage startups into official suppliers.</li> </ul>	<ul> <li>Customizing startup's technology according to company's requirements.</li> <li>Programs are run primarily internally and their durations' and application periods may vary from one program to another.</li> <li>Number of startups is limited by managers from the core business.</li> </ul>	<ul> <li>Flexible payments through company' purchases.</li> <li>Testing and prototyping facilities.</li> <li>Company-related education for example in industry's specifics and purchasing processes as well as networking with business units and relevant stakeholders.</li> </ul>	~2010s
Corporate accelerator programs	<ul> <li>Objectives can range from attracting talent, or exploring ideas, to closing technological gaps and rejuvenating company culture.</li> <li>Focus on helping early-stage startups by for example, developing business models, raising funding, and granting access to resources and mentoring</li> </ul>	<ul> <li>Developing a first prototype with a cohort of startups typically within 3-6 months.</li> <li>Duration and application dates are typically fixed and the program can be run internally, in co-operation with other established firms, or with a professional accelerator provider.</li> </ul>	<ul> <li>Fixed amount of money typically in the form of equity investments.</li> <li>Prototyping facilities, co-working space, etc.</li> <li>Startup-related education for example in fund raising, pitch training or legal matter as well as networking opportunities with the firm, alumni, entrepreneurs and investors.</li> </ul>	~2000s
Corporate venture capital	Objectives can be financial or strategy driven, affecting to a degree in which firms' and startups operations are interlinked.     Focus on emerging high-growth companies which can help gaining insights into noncore markets or access to external capabilities.	<ul> <li>Several execution methods, which typically come down to investing corporate funds either directly or indirectly to promising startups.</li> <li>Long-term engagements with a small number of startups.</li> </ul>	<ul> <li>Primarily financial resourcing through equity investments in the beginning.</li> <li>Flexible resourcing that varies based on strategic objectives and guidelines.</li> </ul>	~1960s
	Strategic scope	Program content	Provided resources	

**Figure 6**: Summary of the three outside-in corporate venturing modes (adapted from Kohler 2016; Kurpjuweit & Chesbrough 2020; Weiblen & Chesbrough 2015)

In retrospective, the figure 6 also reveals that newer startup engagement models indeed seem to have developed from their ancestor programs with an increased strategic orientation to exploit startup technologies directly. However, it is important to note that this does not mean that older models would be somehow less viable, but that managers now have a wider range of CV tools for differing purposes. For example, a traditional CVC unit is still likely be the best option for far-seeing business opportunities and working with less mature startups. Startup supplier programs or venture clienting might on the other hand be better alternatives for capturing technological technologies directly from more mature startups without a need to develop those much further.

#### 2.3 Effective use of startup supplier programs

#### 2.3.1 Approaching startup programs' effectiveness

Due to the lack of academic research in startup programs, the best practices for effective venture clienting were studied also regarding corporate accelerators as well as other alike outside-in CV modes. Since the term startup program is not yet that established, it is reasonable to assume that for example the existing CA literature might consider startup programs as a one special case of corporate accelerators. For example, Kohler (2016) has bundled all three CV modes that either invest directly into startup, support startups building their initial offering, or help more mature startups to customize their offering under CAs. The same has likely happened with different CV modes in the past, when for example the CA programs were introduced for the first time to complement the existing CVC landscape.

Aggregating the insights from the literature of startup supplier programs, other alike CV modes, and practitioners' publications, the startup program effectiveness can be studied in four categories, which are program goals, project sourcing, projects' integration to business, and overall impact tracking. The classification aims to minimize categories overlapping and build a somewhat chronological, easy-to-follow structure. Even though the scholars did not necessarily address the effectiveness of startup supplier programs directly, it still appeared as one of the key areas for scholars and practitioners, especially in the case study -based articles. Whereas for example Kurpjuweit and Wagner (2020) discuss about the startup program process, Kohler (2016) about the different CA design dimensions and Henz et al. (2021) about collaboration practices between corporations and startups overall, those all offered good insights to also increase the venture client program's effectiveness at Foundry.

#### 2.3.2 Clear program goals

Startup supplier programs, like any other CV programs, must begin with clearly defined company level program goals. Scholars have referred to the same necessity in several closely related terms such as clear strategic program scope (Kurpjuweit & Wagner 2020), (value) proposition (Kohler 2016) or strategic clarity (Henz et al. 2021). With a completely new CV model, this can be significantly difficult, and companies may bundle similar sounding program goals and mechanisms to reach those in together too much. If a company wants to for example get a foothold in an emerging technology, it requires a different mechanism and capabilities than when it is for example aiming to replace a declining core business. Second, even if a company knows what type of innovations and technologies it needs, executives tend to underestimate the required work in turning the ideas into startups' language and reaping the benefits from external startup ecosystems. (Henz et al. 2021) The firms should also bear in mind that strategic goals are linked to everything in their startup engagements, from interplay of processes to people and place. Even when projects start with a business need, such as it does in the Combient Foundry's (2023) and 27Pilots (2023) venture clienting models, it does not automatically mean that the project would be well-framed or scoped as such. Each project must still consider the firms strategic goals individually, and only then decide how exploitative or explorative the project scope should be (Kohler 2016).

In general, scholars have argued that if venturing is geared towards exploitation rather than exploration of new technologies, it tends to survive longer. Programs that focus on explorative venturing, are thus at increased risk of early termination, regardless of their performance track-record. (Hill & Birkinshaw 2008) The more innovative the new venture is, the less likely it is often to succeed. For example, an incremental innovation that is an extension or improvement of an existing product is much easier to evaluate than a completely new product in a totally new market. Also, the more radical the innovation is the more likely it is to have conflict with existing business models or strategic initiatives. At worse, an extremely innovative project could 'start cannibalizing company's current market position, which would then increase employees' resistance towards the CV mode even more (Freeman & Engel 2007). Lastly, as newly introduced programs may take several years in which they only produce costs and do not generate revenue (Weblen & Chesbrough 2015), executives typically tend to favour drive projects that offer more immediate proof of value.

It is also advisable to turn strategic objectives, into numbers and concrete technology search fields (Tour et al. 2017). In the past, some startup supplier programs have pursued a very strong engagement such as Siemens' startup program called TTB (Technology to Business). TTB has signed a multi-year master contract which details technology search fields, budgets, the number of projects and transfers aimed for, and more with its subset of the firms' nine divisions. A two-level relationship, operational and strategic then safeguards the contractual goals for the nine divisions. More specifically, high-level division representatives, such as chief technology officers and sometimes even a chief executive officer (CEO), come together with TTB heads and technology scouts twice a year to review project pipeline topics and track the progress of the ones currently running. By contrasts on the operational level, a dedicated contact person at each division and at TTB's side is appointed to ensure that a TTB request ends up with the right contact in the division. (Weiblen & Chesbrough 2015). Steering or executive committees can also work for example on a business unit level, which often leads to more agile and frequent performance monitoring and cooperation (Tour et al. 2017).

## 2.3.3 Project sourcing practices at program and project levels

After having strategic clarity in program's goals, academic literature identifies several best practices to help the program in project sourcing. On a program level these practices involve having strategic and operative level champions, strong top-down project sourcing approach and establishing robust reporting practices. On a project level, the practices include for example targeting certain type of project managers for future projects and tackling the so-called problem of agency. Also, having a centralized budget to harmonize venturing efforts, defining strict and transparent accountability standards, and enabling a robust company culture in the background help a firm to reach its objectives (Sanders et al. 2020)

Once the strategic goals of a startup program are clarified, the next challenge of finding project topics, managers and resourcing, can be mitigated with program champions. These champions work as liaisons who bridge the venture client unit and firm's traditional business units. For example, Siemens TTB (Weiblen & Chesbrough 2015) incorporated their champion to work as operative level liaisons that ensure the external innovation ventures are truly meaningful enough for the corporation. The challenge is then to find champions who not only know about working with startups but are also skilled in navigating company structures. Champions' task can be fortunately supported from above, deriving authority from the executive level. Weiblen and Chesbrough (2015) found that

the program may work the most effectively when it first involves key decision makers, who delegate employees into projects with secured sponsorships and budgets.

Executive commitment is noted to increases the programs internal buy-in and get people involved elsewhere too (e.g., Kohler 2016) and especially when firms innovate top-down. The political aspects of budgeting and resource acquisition are less severe although not eliminated. Also, the ownership of these innovations process might be less obscure at the start and the decisions to commit resources may be subject to less scrutiny. On the other hand, the downside is that top-down driven innovations can become costlier, and if employees are not fully committed to executives' approach in solving a technological challenge, they can be less passionate about executing it. Creativity and recognition for that creativity are muted even more, the higher up the decisions are communicated as every manager takes some credit for the project success. (Freeman & Engel 2007)

When firms innovate bottom-up, or more often in the middle, engineers or marketing managers must begin the invention process by first persuading those above them in the hierarchy to support it, which makes the process slower. Bottom-up innovation efforts are usually organized in teams with intense lateral communication and a joint decision need, and those easily lack sufficient level of authority. Therefore, such innovator teams in particular are in the need of the forementioned champions, or protectors, who then should not be the same technology people but rather general managers that have the required political skills, contacts, and reputation to secure the needed resources. In addition, the protectors can also buffer teams from interference emanating from internal rivalry or cultural incompatibility. As the budgets and resources to support the innovation processes eventually come from others' budgets, the project may still suffer from a slow launch. Thus, the project teams should focus aligning incentives so that the ones providing especially financial resources succeed along with the innovators who are ready to engage in risky activities which typically requiring extraordinary levels of effort. (Freeman & Engel 2007)

On the other hand, if the startup program requires more project topics, the venturing unit can start finding potential project managers from newcomers, people facing transition or those who need to take a risk. These employees can also be the best positioned to encourage cross-unit collaboration, protect startup projects from internal turf battles, and eventually build disruptive businesses. These are ambitious people whose job does not end up with a successful protype or proof concept ready to be transferred to a regular business unit for market launch. (Kohler 2016) The venturing unit needs people who have their own incentives to push the external innovation internally to make sure its market launch will happen, and the project's results do not fall into the gap between the two.

(Kohler 2016, Weiblen & Chesbrough 2015). However, finding these people might be difficult as there are likely some other stakeholders searching for the same ambitious people to drive their projects.

Whether the innovations arise top-down or bottom-up, and even if they include seemingly ambitious people in it, those might suffer from a so-called problem of agency. The problem of agency refers to the fact that what is good for the individual is not always good for the company. (Freeman & Engel 2007) In other words, people involved pushing the new kind of ideas forward are put in a position of risking much in personal terms for unclear payoff (Freeman & Engel 2007). The phenomenon is already witnessed among people who work with corporate venture capital (Dushnitsky 2011). Unclear payoff for the risk turns both employees and executives to think fear of failure and all the resources they must commit for the project. The resources can include not only employee allocations and money, but also space, equipment, and time on production lines, which could also be making products and money elsewhere. Considering all the alternative costs can then lead decision makers to feel that they are playing a so-called constant sum game, where the winnings in fact equal only the sum of losings. (Freeman & Engel 2007)

## 2.3.4 Business integration after startup selection

As important as it is to get the projects initially started, it is at least equally important to not to drop the proverbial ball, after the project's startup selection phase. Therefore, for example Siemens TTB's startup program has allocated at least 50% of the unit's staff time internally towards the business units, and only the remaining time with startups. This illustrates the importance of interfacing internally inside the corporations to make sure promising startup programs do not go by the wayside. (Weiblen & Chesbrough 2015) In addition, to have an effective venturing unit, there needs to be enough mandate to work with startups (Tour et al. 2017). Finally, from time to time it can also be beneficial to foster the entrepreneurial culture for example through shared events, idea contests or mentor programs (Tour et al. 2017).

Even though a venture client program would have a flying start, different CV modes are prone to start losing the executive interest over time which makes it essential to set well defined guidelines from the start. Even if the program is initially launched by for example by a corporate development team, firm chief financial officer, or the prior CEO, it is no news if that starts lacking commitment from the full executive team at some point. At worst, this in turn results that the whole CV model is started to treat as a side project.

The impact is first seen in resource allocation but later also in the whole project management as there are less people from the corporation side to lead the projects, which results to startups to navigating firms alone and inefficiently. This is particularly detrimental as big firms tend to have slow internal project management compared to startups, and they easily get stuck to pilot projects even in the good times. (Henz 2021) The pitfall of long innovation cycles and organizational bureaucratic impediments are recognized to decrease business units' interests in program by other scholars as well (E.g., Kohler 2016). To combat this challenge, AT&T's startup supplier program (which is also called Foundry) has a fixed timeframe of 12 weeks for every project to deliver a usable proof of concept prototype which can be presented to the regular business units. (Weiblen & Chesbrough 2015) When venturing program's pilot or proof of concept is fixed to 12 weeks, it works as a sort of a shield for startups. The venturing managers have then a concrete objective to which towards they can aim, and thus tear down barriers between startups and a firm to accordingly. In the piloting phase, champions key task is to prevent startups from being trampled in slow decision making. Again, formalities can be kept straightforward, when the programs have enough autonomy, and the startup contracts are simple and founder friendly. (Kohler 2016)

Later stage reluctance to allocate resources in startup projects can also occur if there is a chance for conflicts with existing business models or some other strategic initiatives. Employees' assumptions of a startup cannibalizing company's current market position may generate opposition from the ones who are responsible for managing the manufacturing or market position of a similar product. Furthermore, external innovations typically lack organizational legitimacy and, at worst, are even be considered to imply that firm employees are less technically sophisticated than they should be, since they did not come up with the invention themselves. Fortunately, the political defensiveness or intentional slowing of the innovation process is likely less severe than in case of startup acquisitions because employees rarely have their jobs so directly at stake. On the other hand, all the issues above are exacerbated when the startup technology is new, exceptional, or radical, and disrupt existing market and production processes. Technological disruptions that destroy competence and render management skills and business models obsolete are organizationally the most problematic. Finally, also the so-called not invented here type of mentality can spread in varying parts of the firm. In an extreme, as the process of invention proceeds, innovators may begin to use language that their colleagues do not recognize. Eventually all these factors then slow down the redeployment of resources from existing allocation partners to those required by startups' innovations. (Freeman & Engel 2007)

#### 2.3.5 Impact tracking

Finally, only a continuous assessment of the startup program's outcomes can ensure that firm's strategic goals and objectives are fully met. From the process perspective, compounded performance measures often capture the strategic value of the venturing activities incompletely (Battistani et al. 2013). Righteous project success rate is typically the best quantitative indicator of strategic value. The metric simply measures the number of projects, the number of projects that succeed in the pilot phase, and the number of projects that are successfully transferred to the core business and further to the markets (Battistini et al. 2013; Weiblen & Chesbrough 2015). On the other hand, it is important to bear in mind the rate of failed projects should not be too low either, as this would indicate that not enough risk is taken. (Weiblen & Chesbrough 2015)

Siemen TTB's program gives some guideline of the number of projects and their success rates. TTB screens around 1200 potential project pipeline ideas per year, goes into a detailed evaluation for 80 of them and eventually starts a project with only 16 startups. Siemens TTB's office in Berkeley alone has claimed to have run 72 projects since 1999, resulting in 13 new products or entire product lines by 2015, with a few more in pipeline. Also, the business impact resulting from those products is claimed to be noticeable even though the exact number stays confidential. What is more, TTB has won three industry awards from innovations that illustrate its mission to bring radical technology to market. (Weiblen & Chesbrough 2015) These performance indicators are an indispensable feedback mechanism to improve the venturing activities and determine their contribution to the company's innovation and growth targets (Battistani et al. 2013). After the process metrics are working, firms can also start considering more sophisticated metrics and quantitative indicators which can include for example the increase in sales of related products and technology or the number of technological innovations such as patents or new products (Battistani et al. 2013). Other potential metrics to estimate final success include projects internal rate of return (IRR), investment multiples or market value (Tour et al. 2017)

On a single project's level, each project naturally needs its own success indicators, such as meeting the cost-efficiency and safety requirements for instance. In traditional projects corporations are typically looking at lagging metrics, such as revenue and profit, but with startup collaboration they should rather think about strategic so-called leading metrics. An R&D project could for example estimate and track the total addressable market, and a commercial project could track on how many customers have you taken a new offering and with what success rate. These leading metrics then enable gauging the success of

projects' strategic rationale instead of looking only the lagging metrics in financial terms. On a project level, companies, and especially their champions and managers of a startup program, should keep in mind that there are also well-known, established metrics across private venture investors to evaluate the health of startups. (Henz et al. 2021) Lastly, it is also important to have enough principals or managing directors in your corporate venture program, so that they are not stretched too thin when managing startup projects. As a rule of thumb, there should be no more than eight startups per executive. It is essential that these people have their fingers on the pulse of what is happening at each startup, and whether it still has a path to scaleup the way it was expected. Eventually, no dash-board could track all the startups perfectly in the way it should, why each partnership, and its metrics needs to be individually tailored. (Henz et al. 2021)

The concrete best practices for an effective use of a startup supplier programs such as venture clienting are summarized in the table 3. Most of the methods circulate around strong program steering from the executive level as could have been expected, but the literature also appears to take a stand on the strategic scope, on how for instance the startup program's goal setting should be initially set, and the program be used. Although this thesis studies methods for effective venture clienting in corporations that have already started using the model, practitioners who are yet starting to roll out a collaboration program should begin conservatively, improve the setup progressively, and explore new territories as business evolves and matures. (Tour et al. 2017)

**Table 3**: Effective use of startup supplier programs (adapted from Dushnitsky 2011; Freeman & Engel 2007; Henz et al. 2021; Kohler 2016; Weiblen & Chesbrough 2015)

Topic	Method for effective use of a startup supplier program
Clear	Transparent company level objectives: Set accurate and transparent
program	firm level goals that steer people in project level goals.
goals	Exploitative value proposition: Emphasize programs exploitative na-
	ture and ability to shorten time-to-market in new product development.
	Multi-year contracts: Agree technology search fields, budgets, and the
	target number of projects/transfers to secure executives commitment.
Project	Co-creating and reporting: Involve senior executives to monitor tech-
sourcing	nology scouts, review project pipeline topics, and track current projects
practices	on regular basis to stay on track with the firm's strategic venturing goals.
(program	Strategic and operative level champions: Have well connected startup
and project	experts to bridge venture and business unit on two hierarchical levels.
levels)	<b>Start with top-down projects:</b> Ensure executive commitment, resourc-
	ing, and coordination by beginning with meaningful projects for decision
	makers.
	Add bottom-up project sourcing later: Embrace sales representatives and engineers to work in a new way for company success later.
	Ambitious project managers: Search new project managers in new-
	comers, people facing transition and people who need to take a risk.
	<b>Tackle problem of agency:</b> Consider alternative incentive models if pro-
	ject owners and managers feel their personal benefit is misaligned with
	the risks.
Business	<b>Program authority:</b> Ensure the program executives have enough au-
integration	thority to speed up decision making in ad-hoc challenges to stick to time-
after startup	lines.
selection	Holistic business integration guidelines: Define clear timelines (e.g.,
	12 weeks / pilot project) and measuring guidelines also for the piloting
	and scaleup phase.
	Staff time allocation to pilot and scaleup phases: Consider allocating
	e.g., ~50% of champions time to help existing projects to succeed.
	Mitigate reluctancy: Communicate transparently how projects intervene
	with existing business and strategic initiatives to mitigate organizational
	inertia. Also communicate what follows the startup selection with past
	project examples.
Impact	Project success rates: Start with simple, process related success met-
tracking	rics which can cover the number of projects, number of transfers to pilot
tracking	projects, and the number of projects transferred to firms' core business
	and markets. Bear in mind that too high success rates may indicate too
	little risk.
	Project specific metrics and financial estimates: Determine clear,
	tangible success indicators for each project. Avoid traditional lagging
	metrics but use leading metrics such as estimates on number of new
	customers instead. There rates should be as closely linked to financial
	value as possible.
	<b>Sufficient supervision:</b> Ensure there are enough time from executives
	and senior managers to look after projects (e.g., max. 8 pilot projects /
	executive).

#### 2.4 Literature review synthesis

To address the research problem, how can Foundry alliance use venture clienting more effectively, it is good to summarize the key findings from prior research as a starting point for the empirical section. First, literature review quickly revealed that there is still little knowledge, on venture clienting and its direct alternatives, startup programs. Therefore, best practices for effective venture clienting were sought also on a slightly broader scope, deriving more insights also from their "ancestor models", CVC and CA programs. This approach revealed that practitioners have had similar kind of challenges in launching different CV modes previously as well, and that the initial three research questions are more tightly knit to each other's than first expected. Although literature already offers good insights on how to improve effectiveness in Foundry's venture client model, the tangible measures fall a little short. Secondly, especially the actions applicability in this specific alliance setting is still difficult to estimate only based on literature review. In the beginning of this study, it is partly unclear which of the best practices are used in which Foundry firms.

From the first research questions perspective, which factors drive Foundry companies to launch venture client projects, the key findings revolve around executive level steering. The better the steering, the better the outcomes, and the more future projects. Steering is needed in each program phase, from its initial set up, all the way to project sourcing practices, business integration, and outcome's assessing. The better the program kick-start, the better chance it has to survive and yield more projects. First, clear program goals, enable pursuing right type objectives, and to more tangible those can be pushed with executives' assistance, the more likely those individual projects are to succeed. Second, especially the case studies revealed good practices for efficient project sourcing, such as two-level champions on strategic and operative levels. Both champions are needed to communicate projects relevancy to the company, boost the projects' success rates, and eventually help deriving more projects in the future. Similarly, clear guidelines and executive authority in the projects' piloting and scaleup phase strengthen the project survival into something that can be eventually measured, and which can convince the ultimate decision makers also for new projects as well.

From the second research questions perspective, how do employees in venture clienting perceive the program's value at different organizational roles, the literature review did not grasp that much knowledge. Past literature has heavily focused on describing the different benefits of the CV programs but practically always only on a company level. Two subtle but interesting findings were found. First, people on the executive level might

be more open to these type of CV modes, and thus perceive the benefits more optimistically. They are typically in a better position to see the big picture, and do not necessarily feel that their career development would be at risk with this type of trials. Project workers on the other hand, may feel that the program yields more individual risk than benefits. The same idea was also presented by the Foundry team in the beginning of this study. The second finding was that, for example venture client project managers may be less willing to take part in projects if they feel that they are compensated less than in a typical venturing business. The overall knowledge for the second research questions, is still very limited, and highlights the importance of empiric findings on that front. Lastly, on the other hand, if most prior literature has ignored the topic, it can also indicate that the question is yet for example too difficult to measure holistically.

From the third research question's point of view, how can Foundry companies assess the outcomes of venture clienting, the literature gives some advice on both operational process metrics and more sophisticated financial metrics. The literature also stresses the importance of focusing on later phases of a startup program, to increase the chances to turn projects into something measurable. First, and especially after the program's launch, the most important metric is the program's success rate, which tells how many projects succeed or fail in each stage of a project. This on the other hand, requires more active defining of success for each project phase, which again requires more active pushing of companies' business units once they engage with venture clienting. Only this can then yield to the following financial metrics, which are preferably estimated already in the projects' scoping phase, and then validated and fixed throughout the projects. Eventually those metrics can be compared against backword looking financial data. The financial metrics and estimates, such as revenue generated from new products' sales, or the cost-saving from acquiring a new technology are often the only factors that have an effect on the executive level decision making.

#### 3. METHODOLOGY

#### 3.1 Research context

Foundry's venture client alliance is a one form of the recently emerged startup supplier programs. It operates globally and brings together both leading industrial companies and the most innovative startups to co-create new services and solutions with speed and scale. Foundry itself is an intermediary that works directly with its eight partner firms to scope business development needs and identify opportunities for new startup technologies. (Combient Foundry 2023) The eight partner companies are large manufacturing firms of which some have won awards in company-startup collaboration contests. The firms do not directly compete with one another. Until now, Foundry and the companies have opened a joint open call for their business opportunities three times a year, in which a Foundry's dedicated team scouts the globally best startups solving the opportunity from different angles. After finding and shortlisting the solution providers, Foundry helps the startups to crystallize their value proposition. The best-fitting startups and scaleups are invited to meet with the Foundry companies' key decision makers to clarify a mutual value proposition and create an outline for a scalable project. (Combient Foundry 2023)

Foundry, and venture clienting in general, focuses on fast execution to get both startups and the companies to reach the market faster. Their value proposition is to help firms to save up to 6-12 months in business development. Therefore, after the so-called startup cycles, in which the startups are scouted, Foundry helps scaling the new partnership and executing the project from pilot to scaled solution. The support can refer for example setting up project scopes and KPIs or drafting legal templates for a smooth execution between the odd couple. All partnerships are claimed to be showcased to Foundry's wider network and 60% of the launched Foundry projects should continue to create new services and solutions or lead to new projects with one or more of the Foundry firms. (Combient Foundry 2023)

## 3.2 Research design and strategy

Immersing myself to the world of corporate venturing for a year, has made it evident that non-equity involving corporate venturing has become in an increased interest. However, corporations becoming interested in activities such as venture clienting is only the first step in realizing the effective program use. It is also natural that the venture clienting firms in this study had also different level of maturity in terms of integrating their new

program to company structures. The little integration could appear, for example, as a lack of suitable topics for venture client program which then hinders the firms' goal to engage effectively with startups. Further, it appeared ambiguous how employees truly value the program initiative, i.e., its benefits, and costs. Weighing the benefits and the costs of venture client method is what eventually causes employees to either engage in in the program or dismiss it. Better understanding of the program's value can also enable to establish more tangible metrics to assess venture clienting outcomes holistically and how it succeeds to fulfil firms' strategic objectives.

To best address the unexamined topic of efficient venture clienting, I chose to use the inductive qualitative research approach, often associated with an interpretive philosophy. Qualitative research suits the research questions particularly well because it is designed to study participants attributed meanings and associated relationships (Saunders et al. 2019, p.179-180). The research design is mostly exploratory in which research questions typically begin with words "What" and "How" (Saunders et al. 2019, p.186-187). This also reflects to questions asked during data collection. The findings section is descriptive or explanatory by nature to standardize interviewees responses, but turns to evaluative in the discussion section, where Foundry firms' alternatives, such as whether they should establish a steering committee or not, are compared against each other.

The study follows a case study method, which allows an in-depth inquiry into a research phenomenon (Yin 2018) i.e., the practices that increase or decrease effectiveness of venture clienting. Corporations are often highly protective with their innovation practices, which is why working at Foundry opened a marvellous opportunity to research the phenomenon in a real-life setting. Having a direct access to a real-life setting is a common difficulty with case studies (Voss et al. 2002). Although scholars' have criticized the case studies to have limited ability to produce generalisable, reliable, and theoretical contributions (Saunders et al. 2019, p. 197-198), the method appeared to work well in an alliance environment. Alliance companies venturing models with a joint intermediary can change fast, which stressed the importance of capturing the insights, such as expert interviews, in a short period of time.

# 3.3 Data gathering

Another benefit of a case study is that it fits well for using a combination of different methods in studying the selected phenomena (Voss et al. 2002) which in turn increases the research validity. The two primary data gathering methods were (i) expert interviews with the venture client champions and people having participated in the venture client

projects from Foundry companies' side in the past, and (ii) workshops which were conducted between champions and Foundry's business developers. In addition, the data is complemented with (iii) archive-mediated observation of Foundry's internal cloud storage, and (iv) direct observation of venture client cycles over eight months. The first workshop with Foundry companies considered internal project sourcing with its bottlenecks and best practices. The second workshop focused on building a company specific venture clienting scorecard to better assess and track programs success through key performance indicators (KPIs). The archive-mediated observation of Foundry's cloud storage helped especially as a starting point to map the manyfold benefits of venture clienting. In addition, prior documentation helped to understand how companies had previously been incorporated to venture client facilitation as well as understand what type of metrics Foundry already had in use to track the status of pilot projects. Lastly, direct observation of Foundry cycles enabled better sensing the different phases of a venture client project and initiate the starting hypotheses. All data was gathered during 2022, although the gathering focused on the summer 2022 and some of the materials from Foundry archives can date even back to 2018. Table 4 summarizes the approach in data gathering.

Table 4: Main pieces of data per research question in descending order of importance

Research question	Main pieces of data
RQ1: Which factors drive Foundry companies to launch venture client pro- jects?	<ul> <li>Interviews with venture client experts from the Foundry companies</li> <li>Workshop 1: Venture client project sourcing – bottlenecks and best practices</li> <li>Documentation: Combient Foundry – Playbook</li> <li>Documentation: Feedback learnings: Copy of learnings from case owner's feedback</li> </ul>
RQ2: How do employees perceive the value of venture clienting at different organizational levels?	<ul> <li>Interviews with venture client experts from the Foundry companies</li> <li>Documentation of Foundry specific benefits: Information and execution benefits</li> </ul>
RQ3: How can companies assess the outcomes of venture clienting?	<ul> <li>Workshop 2: Firm X Scorecard - Foundry engagement KPI's</li> <li>Interviews with venture client experts from the Foundry companies</li> <li>Documentation: Tracking pilot and scaleup projects</li> </ul>

Data gathering in the interviews was carried out through a non-probability sampling technique, which is typical in qualitative research approach (Saunders et al. 2019, p. 179). The sampling was begun by finding the most purposeful interviewees first, which lead to contacting Lauri Lehtovuori, a co-founder and a CEO of Foundry, as well as Gregor

Gimmy, founder of the 27 Pilots and the person coining the venture client model. Lehtovuori and Gimmy were not interviewed until the end of summer 2022 to create an unbiased understanding on how firm practitioners perceive the benefits and costs associated with the venture client model. Finding the rest of the interviewees started by selecting predetermined criteria for the interviewee sampling:

- 1. The interviewee is working or has worked directly with Foundry on the company's side (the longer and more recently the better).
- 2. The sample represents Foundry firms as equally as possible.
- 3. The sample reflects viewpoints from different roles and layers of hierarchy.

Setting the predefined sampling criteria is typically used to find and select the most relevant interviewees (Saunders et al. 2019, p.321). Contacting relevant people began from champions, the people who work as Foundry's connection on the company's side. In other words, they are the startup program managers who typically help facilitating the process, spread awareness of the venture client program in Foundry firms and follow-up with the past projects. All champions were also asked to name experienced project leaders or project owners, who have preferably participated to more than one project to find relevant interviewees from the firms' business units. This resulted in altogether 11 interviews with seven champions and four project owners or managers in total. All champions had worked with minimum of two cycles consisting of one or more venture client projects and three out of four project owners or managers had participated to more than one project. Projects had ranged from finding new raw materials to exploring unprecedented digital solutions. The interviews covered four large Finnish or Swedish firms working in traditional industries. The pseudonymised table of interviewee aliases, titles, and roles regarding venture clienting, as well as interview lengths are presented in the table 5.

**Table 5**: List of interviewees (and champions who participated only in a workshop)

Alias	Titles and role in venture clienting (Pseudonymised from aliases)		Length (hh:mm)
Amundsen	CEO	CEO of a firm providing venture client services	01:40
Armstrong	CEO	CEO of a firm providing venture client services	01:25
Columbus	Champion	Acceleration manager	01:16
Cook	Champion	Digital acceleration manager	01:12
Cousteau	Champion	Director of innovation and R&D	01:01
Gagarin	Champion	Head of venturing	01:00
Heyerdahl	Champion	Head of digital innovation	00:59
Hillary	Champion	Senior co-innovation manager	00:59
Magellan	Ex-champion	Senior manager of strategic partnerships	00:57
Polo	Project manager	Manager of components	00:55
Shackleton	Project owner	Director of strategy and innova- tion	00:55
Meriwether	Project owner	Director	00:47
da Gama	Project owner	Director	00:45
Livingstone	N/A	Champion	N/A
Nansen	N/A	Champion	N/A

The interview outline was semi-structured with several sub questions backing up the discussion flow. If an interviewee had extensive knowledge in a certain topic, they were given the opportunity to talk about it more freely in a non-directive manner, which is typical to unstructured in-depth interviews (Saunders et al. 2019, p. 438-439). Semi-structured and in-depth interviews are often used in exploratory studies and those provide an opportunity to probe a response if the interviewee wants the interviewee to for example elaborate on their previous answers. (Saunders et al. 2019, p. 444) The interview questions can be found from the appendix A (in English) and B (in Finnish).

The main interview questions (bolded in the appendix) were sent to the interviewees beforehand to help them get acquainted with the topic in advance. The structure of the interviews was similar in all the interviews although some participants naturally knew some topics better than others. In addition to writing notes during the interviews, all interviewees consented to record the sessions for transcribing purposes. The interviews were one hour long on average and varied typically because of interviewees personal differences in self-expression.

#### 3.4 Data analysis

Primary data, the interviews, and the workshops, were analysed through a data-driven thematic analysis, which is a general approach to analyse qualitative data. The essential purpose of the thematical analysis is to search teams or patterns that occur across a data set, and it provides a systematic yet flexible and accessible approach to analyse qualitative data. (Saunders et al. 2019, p.651) The data analysis followed a typical procedure first becoming familiar with the data, coding the data, searching for themes and recognizing relationships, refining themes and testing propositions, and finally evaluating the analysis. (Saunders et al. 2019, p. 652-660)

To answer the first research question, the primary data was organized into first order concepts, second order themes, and aggregated dimensions The first order concepts were identified by first highlighting (colour coding) the essential interview and workshop findings. Second, a comprehensive Excel spreadsheet was created to conclude the initial themes which rose from the first order concepts. The Excel sheet then consisted of three first-order dimensions which reflected the research questions, second-order themes, such as ways to raise venture client awareness in Foundry firms, and the experts' direct quotes which were also later re-colour-coloured in the Excel by their relevancy. Each quote was paired with the interviewee until the very end. To also increase data validity, the analysis was begun right after first interviews, which allowed to adjust the interview questions after the first insights. The figure 7 illustrates the initial thematic analysis.

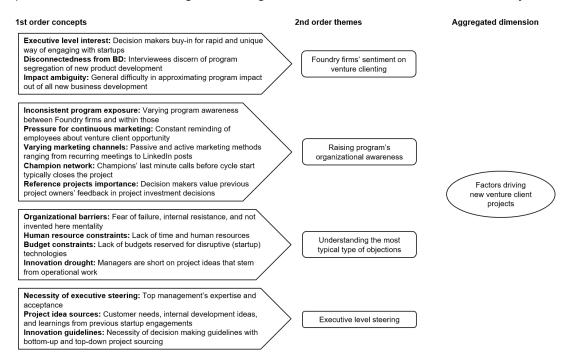


Figure 7: Thematic analysis for the first research question.

The same thematic analysis was also used to analyse the other two research questions, but due to empiric findings' imperfection and vagueness, those eventually required a slightly different study approach. First, interviewee's insights around value were less consistent and more difficult to back up with concrete benefits or costs than initially thought. This led to restructuring the initiated benefits several times and think how those benefits would overlap with each other's as little as possible. In addition, since interviewees from time to time appeared to recall different benefit areas from their memory, determining how people truly perceived the benefits became increasingly difficult. Therefore, analysing the venture client model's benefits and costs had to take a step back, and concentrate analysing how respondents' insights could be quantified even to some extent. Interviewees' insights on program's outcome assessing on the other hand, were compared against a Foundry scorecard workshops, where Foundry's assessment methods were calibrated holistically. Compared to the discussions around Foundry scorecard, most of the interviewees' insights appeared then remarkably less detailed and were used mainly to complement the workshop insights and earlier documentation.

In some sense, the data gathering and analysing for the research question 1, appeared thus a bit more explorative, whereas the insights for research questions 2 and 3 relied more on Foundry's prior studies in benefit area perceptions and outcome assessing. As illustrated earlier in the table 4, the latter research questions partly reflected to Foundry's prior material from their internal archives which were used as a starting point for initial conclusions in the primary data. The cloud-based archives worked well to spur thinking why certain things were done in a certain manner, or why certain people consider venture clienting in a certain way for example. These overarching insights on venture clienting, were complemented further by my eight-month employment in the Foundry team, which also influenced my thinking and conclusions.

Eventually the findings and conclusions were presented to Foundry team and discussed more in detail with a couple of key business developers from the core team. Although the final recommendation in the discussion section still follows an aggregated, somewhat chronological order of both literature and empiric insights, the discussion helped to better understand what the most impactful and feasible action points for Foundry are. In addition to validating for example that the standardized steering committee thinking is very valuable for Foundry, the discussion also worked as a validation point for me to confirm that Foundry's venture clienting model had not changed so drastically during my master's thesis period that it would effect on the final recommendation.

#### 3.5 Evaluation of research design

All research is prone to several data quality issues in data validity and reliability that must be considered carefully to ensure adequate results (Saunders et al. 2019, p.447). In interview-based research the data quality is typically best ensured through careful preparation of interviews (Saunders et al. 2019, p. 489) for example concentrating to research questions objectiveness and finding a representative interviewee sample. In this study, the threats to validity and reliability were further reduced by data triangulation with a mixture of other methods to complement the interviews.

Other factors that could have influenced to data validity in the two main data sources, interviews and workshops, include the interviewer bias, interviewee (response) bias and participation bias. First, the interviewer bias, where an interviewer's comments, tone or non-verbal behaviour creates bias in a way that interviewees answer (Saunders et al. 2019, p.447), was attempted to minimize by focusing on listening in the interviews and preparing for each interview the same way. Preparation included preliminary search of the interviewee, familiarizing myself with their past venture client projects, and ensuring a calm interview setting with enough time to cover the topics. The same preparation methods also helped with the interviewee bias, where interviewee's perception of the interviewee could hinder them from revealing too sensitive information (Saunders et al. 2019, p.447-448). Having worked for a couple of months at Foundry, and sending the interview questions beforehand, was seen to decrease this bias as well. Third, to overcome the participation bias, which refers to the fact that the time required for an interview may result in unwillingness to take part in the interview (Saunders et al. 2019), more authority was derived from the more experiences Foundry members and champions. On the other hand, the much likely issue of not reaching the busiest executives with my interviews was tried to take into consideration in the beginning of the study by adjusting the research questions to foremost address the more topic in a more operative context.

### 4. FINDINGS

### 4.1 Factors driving new venture client projects

#### 4.1.1 Foundry firms' sentiment on venture clienting

Based on empiric findings, Foundry firms view venture clienting as a structured way of engaging with startups in general, and an essential part of their companies' innovation activities. Although the novel CV model is still perceived as a separate entity apart from the day-to-day business, its proposed value is well recognized by many of the executives and people who are working or have worked around it.

Foundry is considered to be a critical action and there's even one of our vice presidents [...] I would say it's a strategic initiative, initiated by the head office and cascaded down into the organization. (Columbus)

It was a very important strategic pillar when it was built, then it survived the reorganization 2.5 years ago [....] the new CEO also saw the importance of it. (Gagarin)

It (venture clienting) is kind of apart from our day-to-day innovation [...] it's having an outside perspective on innovations and on the markets and things like that. (Armstrong)

Today a lot of technology, a lot of business models, and a lot of new business is made in startups and scaleups, especially venture funded scaleups. Foundry is a really efficient tool to get a really effective output. (Polo)

Many of the interviewees also claimed that venture clienting was the company's only CV mode, whereas only a handful knew that their organization had other modes such as corporate venture capital and accelerator programs too. On the other hand, when employees felt that they only needed to benchmark a certain startup's offering or capabilities with established suppliers, interviewees felt that there was usually no need to start a whole venture clienting project and wait for the next Foundry cycle's launch.

I am not aware that we have similar startup programs [...] of course we also screen the market etc. ourselves, but in such a structure way we do it with Combient [Foundry], we don't have [those] according to my knowledge and the environment I am responsible for. (Columbus) When pushing interviewees to come up with accurate estimates of venture client model's role across all innovation activities, the interviewees could only come up with relatively vague answers. Trying to estimate the business models' significance in terms of time, money or number of initiatives turned out to be more qualitative describing than originally thought and only a few could come up with numeric estimates. In general the interviewees perceived venture clienting as a small avenue for novel innovations and its place in companies' new product development was not typically fully established.

It's very hard to divide [...] If I scope it, and I take the daily business away, and then we keep only the new proof of concepts or pilots and this type of project, and then if we also include those kind capex projects [...] if you count all of this, maybe 10% would be this kind of with the startups. If we don't count those types of suggestive or these smaller companies that are in our support systems with the digitization projects, and then we narrow to only those small startup resources, it's less than 10%. [...] maybe 80% of that total (10%) would be from Foundry. (Gagarin)

That is difficult to say but I would say based on the first 2 years we have been doing now, let's say 25-30% of the new suppliers [in his functional area] are coming through the Combient [Foundry's] process, but I might be wrong there. (Columbus)

I would say it's still a fairly small percentage of our innovation because it's so new. Less than 10%. (Cook)

Most of the innovation is internal. Percentage wise it's really difficult to say [...] maybe it would be somewhere around 5 at maximum. (Cousteau)

I can't say, we don't have any ratios on how much we're doing something. But this venture clienting is still very little. (Magellan)

Since most of the interviewees were not sitting on top of any function or product area's budget nor staff allocations, they tended to be unaware of specific resource allocations. In addition, some of the interviewees also underlined the confidentiality of these numbers. Second, measuring venture client project outcomes is tremendously difficult because startups' technologies are not usually ready to markets as such but most of the time still need lots of work after the initial startup selection phase. Furthermore, once project teams take control of the startup engagement in the projects' pilot phases, the teams have a decreasing interest from where the technology came in the first place. Project teams then steer their full focus on fixing the remaining technological difficulties and commercializing the product as fast as possible. From that end, most of the interviewees considered pilot phase collaboration with startups and scaleups like business

as usual. One of the interviewees who had worked closely with similar type of initiatives earlier with the Finnish Technological Research Center (VTT), reflected the collaboration as follows:

It (the similarity of collaboration) depends quite a bit from the startups background. If people come from the university and research world with an innovation, the collaboration does not differ too much in practice. (Cousteau)

The new product development should not become too venture clienting oriented either, which was emphasized by two highly experienced venture client experts as follows.

Venture client model is not that you're looking for startups because startups are cool, but you're looking for startups if they have the best solution. So, it is also the responsibility of venture clienting unit to say that this startup is not better than we currently have: "Don't do it. Do not work with this startup". (da Gama)

The corporations should always approach their problems with the most agile and scaling manners by default. On the other hand, if we look at the situation on how this could be, now when nearly 100% of the (R&D) budgets go to internal use, there's potential for tens of percentages for this kind of startup or external innovation. (Meriwether)

However, the typical problem is that many employees might not know in which industries the startups and scaleups could be a better choice than the established suppliers. In an even worse case, employees do not even know that the venture clienting model exists in the company.

## 4.1.2 Raising program's organizational awareness

Overall, the awareness of venture clienting within the analysed eight Foundry companies differed a lot. Whereas in one of the organisations the venture clienting was practically embedded in the innovation process, especially regarding the digital innovations, in most of the organisations the program facilitator, champion, had to work hard to find suitable business challenges and project managers for the program. Champions other job duties also covered for example spreading program awareness, helping with the venture client cycle, and leading the communication matters. Some champions' job duties appeared to be too heavily focused only on the internal selling of new venture client opportunities for business units. The following quotes from companies with good, and moderate levels of program awareness elaborate their situations.

People have a good awareness, because Foundry is one of the tools in our centralized Digi Team from where different business units ask for help with their innovation experiments. (Shackleton)

A big barrier for us is that many people don't even know about the opportunity of venture clienting. (Magellan)

Our innovation organization is not aware of it (venture clienting). It has just passed us unnoticed among other things. (Heyerdahl)

Although raising awareness in startups and the program has been perhaps the most important job duty of a champion, it is understandable if some firms find the model still relatively unknown regardless of champions' all the effort. Big companies constantly have several competing initiatives which all fight for same employees' attention. Champions do their best with resources they have, which often translates to them contacting people in the business units and teams directly.

So far venture clienting cases have been very ad-hoc. I started only in September (nine months ago) but to my understanding it has been giving phone calls and asking people to participate previously as well. (Magellan)

When a new cycle is approaching, we are constructing an email to the main stakeholders to the different departments and if they are not replying we send them a reminder and maybe we can also include steering committee to put more authority to the communication (Amundsen)

Once a new cycle is launching, we practically ask teams and people in different departments whether they would have some specific business need in mind for the next cycle. (Cousteau)

Apart from the busiest weeks before startup cycle launch, champions raise program awareness through several methods which range from prepared presentations to being active in firms' internal forums and information channels. Albeit occasionally business units come ask champions if they could talk about venture clienting, most of the times everything is about having a discussion with someone or knowing when to try bringing the topic into conversation. Bringing venture clienting into conversations at a right time, can seal a presentation time which may later convert to a venture client project. Overall champions described their awareness raising methods as follows.

It (presenting) is a bit ad-hoc. A couple of months ago I was presenting to multiple different groups and some divisional teams. [...] Sometimes the presentations are

more on the managerial level of division or group function, sometimes for a more specific team focusing on something more specific area. (Shackleton)

Last year we did a lot of marketing internally so now basically anyone can approach us directly and we can discuss about new potential case. [...] We (also) just launched a new intranet site with a lot of examples of what we've been doing. (Armstrong)

Similar ways, we have presentations with everyone interested and we have contacted 3 (the CEO of Foundry) when needed. (Livingstone)

We do a lot of missionary information about these opportunities towards case owners and management [...] I am hunting with both a shotgun, widely, and a rifle, more strategically. So, we are working with the ones who are likely to have cases and have had cases before or have management that is interested. [...] But people are shifting from roles and moving in organization, so you need to sell, sell, sell internally. (Polo)

One of the interviewees emphasized how he thinks that awareness sessions should be divided into formal and informal ones. The quotes explain well how these two types of awareness raising sessions could work in practice.

You can do a series of formal and informal events on a continuous basis. You can do something really informal which is during once a month in a cool location inside a company where you share stories about startups for example. [...] You know, you invite people to pizza where they can see a startup speaking and it's free for everybody. [...] Something more formal and we do for example a networking session of startups within the corporation. (da Gama)

Da Gama continues that the sessions should typically be two to three-hour workshops that are organized across the company and have three objectives: 1. Make sure employees understand why startups are strategically relevant. 2. Make employees understand what you do as a venture client unit. 3. Start talking about the problems the company has or more specifically the problems that the people have in the room.

On one hand, as Foundry champions are not working for any division but on a company level, they are in a good position to have a bird's eye view on several business divisions. On the other hand, this also leads them to be further away from truly understanding the challenges of individual project teams. That is why they need to first connect with the project teams, or more so with project managers, division heads as well as technology and innovation officers who can eventually help them securing sufficient resourcing for

this type of startup engagements. A more integrated manner to communicate with the middle managers and executives could be seen in some of the Foundry companies.

Now very lately some divisions have started to activate themselves [...] they have started also sending out emails like "Hey the case sourcing is ongoing do you have a need". They know their stakeholders; they know who are relevant. [...] I think the best case would if there would be certain exclusivity. We're maybe not there yet, because we still must find many of the projects ourselves. (Shackleton) Internally we have a setup, we're calling it internal steering committee, where there's a representative from each business area. [...] We're keeping close contact with them to keep the transparency in terms of what we're doing in terms of organization. (Armstrong)

Armstrong's comment in a steering committee was a one of the key findings that started revealing why certain companies might be able to use venture clienting more efficiently. Although this type of control mechanism can appear somewhat rigid on the outside, and as an expert in another firm noted that every organization should find their own methods, the steering committee could still work as the best approach for many of the Foundry firms. Steering committee can for example make people more committed to the projects as executives emphasize the projects importance, results are more strictly monitored, and suitable project ideas are sought more actively inside the firms. However, if some firms have not taken all best practices in use when launching their program, those might be difficult to add later. This may have happened also for either one of the two big Finnish corporations who initially pioneered with the Foundry initiative. The next subchapters aim to identify more similar type of best practices by first understanding employees' typical objections once they consider venture clienting. The last subchapter then dives deeper to the business case analysis behind final decision to launch the project.

# 4.1.3 Understanding the most typical type of objections

When asked why potential project managers or other firm employees would not want to participate in venture clienting cycles, the interviewees on different organizational levels, could come up with several objections. Champions could also aggregate typical objections they had heard in the past. Whereas companies with a strong executive support appeared to suffer less of the objections none of the companies was completely immune on any of those. The key objections are aggregated in the table 6.

Table 6: Potential project managers' and project teams' objections to venture clienting

Objection	Explanation
Fear-of-failure, internal resistance, not-invented-here -mentality	Interviewees collectively argued that the biggest objection towards venture clienting is the scepticism in startups' offering. In addition, individuals may consider that participating to a venture client cycle has a too big of a risk compared to its reward on an individual level (i.e., the problem of agency).
Lack of time and human resources	Even after employees understand the strategic significance of working with globally best startups, many simply pass the opportunity saying that they do not have time or employees to allocate for it.
Lack of budget	Some of the interviewees who could have invested their time for venture clienting, perceived that it was too unlikely that there would be anyone to budget the opportunity. Whereas some firms appeared to have a reserved budget for pilot projects after the venture client cycle, every company did not have those.
Lack of suitable project topics	Some executives who were interested in the program and had people and budget needed, lacked relevant venture client project topics from their teams and business units.

Interviewees most typical explanation why someone did not participate to a venture client program was so-called not invented here mentality or other similar type of internal resistance. Even though champions from two of the Foundry firms claimed that most of this type of resistance had already been weed out, the situation was worse in other firms.

Some people might share attitudes that we can do this by ourselves too, although those are becoming rarer. (Hillary)

I guess there's a lot of internal resistance from our end because we're a bit protective (Nansen)

A big challenge for us is to get to the mindset of people within the firm to embrace working with startups this way. [...] We are an engineering driven company. Everyone can do everything by themselves. [Livingstone]

On the other hand, some interviewees emphasized that the internal resistance can be even more severe on an operational level.

The business says I could have developed this myself, but they're not saying that I don't have resources for it, I don't have time and by the way this would probably take us 5-10 years while we can buy a ready solution right now. [...] This is not part of our business; our business is to design a product and use Combient (Foundry) to create a process for startups to support this. [...] it's a bit like not invented here. (Columbus)

Every supplier adds their own margins, so can we really reach the intended costefficiencies if were outsourcing? For that question I don't have an answer. (Heyerdahl)

On one hand, the operative level employees might be even more sceptical to venture client projects as they for example tend to have an even narrower view on what has happened with the previous venture client projects. On the other hand, sometimes they might not have a say whether to participate in this project or not, which may further decrease the initial willingness to put all efforts into the project. From that perspective, briefing everyone in the (potential) venture client project team is overly important in the beginning.

People might not have time for this kind of projects: you have some clear job duties of which you get paid so why bother? (Magellan)

I'd argue that the biggest obstacle is the time, and that you must commit for two months for the project. It's like an additional task on your table. (Heyerdahl)

However, another champion from the same company, did not think projects as additional labour. This indicates that either he was unaware how employees perceived venture clienting or that some of the venture client cases were better briefed and coordinated as they had felt like any other job duty. Finally, the matter of internal resistance is also closely related to so-called fear of failure.

I have heard from the past project teams that the fear-of-failure is just something that is perceived as a so big of a risk: What happens if this (venture client project) is made a big deal and it flops? How do I look like in an organization? (Meriwether)

Thus, based on many interviewees' insights, Foundry firm employees appeared to sometimes share the idea that startup suppliers should be considered only as a last option after being sure that the organization cannot solve the problem themselves or with existing suppliers. One interviewee explains the situations as follows.

Our company is really big so we try to find it internally [...] or if this is actually really easy, and a centralized digifund could provide some money, we can go for a supplier that can deliver it. If neither of them works, then we go to Foundry. (Gagarin)

One venture client expert argues that venture clienting and traditional sourcing could work in parallel. In practice, one could send an email asking for help from both an employee working in the purchasing department and one working with venture clienting. Nevertheless, it is still easy to understand if a new supplier method, is not integrated into corporations' new product development processes instantly. In addition, what several

interviewees emphasized, is that people's attitude towards venture clienting had often changed drastically after running their first venture client cycle. Most employees in general, had had very limited understanding of venture clienting and startups before that.

The fear of failure might also be a rationale for many employees' tendency to explain low venture clienting rates with lack of time and human resources. The interviewees claimed to typically face this argument with parsimonious managers allocating their time and resources to their projects. Managers that are not confident enough with venture clienting or do not see its importance for new business development do not use it. Interviewees from the perhaps two most effectively working Foundry companies describe their situations thinking that their firms have faced similar type of objections as well.

People might already be doing too many projects simultaneously. It is a bottleneck and steers to prioritize. [...] It is always the business owner who makes a decision based on the estimated value. (Shackleton)

You have to prioritize putting people on the right thing. It's never about the money, it's very often about who can drive this case, who can commit to this for a long period of time. And there you also need a person to drive for PoC and the pilot. Those take a lot of time. If you put a normal person from the daily work, no one's doing the daily work and that could slow down other things. (Gagarin)

It's mainly the resources internally. (Columbus)

The resourcing issue was particularly difficult regarding the pilot project, not the venture client cycle itself which "only" includes a process of scoping, screening, and evaluating potential startup suppliers with Foundry. Finding a free and motivated person for such an effort did not seem to be a simple task.

For the pilot phase you need one person driving that 100% or at least 50%. It's often very hard to find a person to drive that 100%. [...] You need one FTE for three months to drive it, and then you may need another FTE divided by two or three people to support it. (Gagarin)

Although Gagarin exaggerated that taking part to a venture client cycle is never about the money, another interviewee from the same company felt that that finding a budget of e.g., 50 000€ for a pilot project, could in truth be the dealbreaker. Therefore, the lack of budget still appears to be a challenge in some of the Foundry companies. Some firms on the other hand, have tried overcoming the issue with centralized innovation budgets which have their pros and cons. Although it is good that the division or unit has some money reserved for this kind of perhaps more radical or far-sighted new technologies, the money should never be too loose either. Otherwise, employees may end up using

someone else's money just because they have a chance, and not a real need with 100% motivation to drive the case. Finally, if the venture client project's payback time is only years after finishing the venture client cycle, it is natural if people are unwilling to invest in it.

Do you think that they (potential project owners) would have a coffee with you and say let's like try to look at the AI technology and something that can potentially give them revenue after five years, and that the winning rate is 30% and then he has to sacrifice 2 salespeople for 100% who could bring him revenue so that he can bonus this year? I mean in five years he might not work in the company anymore. (Gagarin)

Gagarin continued that this type of complexity has typically led her to go find very creative, innovative, and passionate individuals to secure the business unit's competitiveness in long-term. Discussing later whether other champions and business case owners have faced similar kind of challenges, the interviewees agreed:

Maybe the main challenge is around triggering benefits really more in the future. So, when we don't have the return on investment in the next months it maybe harder to sell or market the case. (Armstrong)

It is natural what you're saying. When you're on a management level in these company functions, we think very much strategic. So, I would say you think for the next let's say five to ten years and then these companies (startups) offer great potential. Of course, if you go down organization, you go then on an engineering level and they have a project to finish. [...] If you come up to them with your innovative ideas, it's maybe more work to them and maybe not so much appreciated. (Columbus)

After finishing his thoughts, Columbus jumps to a question of timing the venture client projects launch.

So, this comes to a big question, of which I think we're solving right now with the change of organization: How to ensure that those innovative startup companies are considered in the earliest design phase possible? [...] We really feed the organization with this technology, even when you have this idea in mind, not even started the project. [...] Try to adapt this into a project which is 75% ready, then it's not getting accepted. (Columbus)

However, since Columbus' organization has had a strong steering committee in charge of the case sourcing, it is reasonable to assume venture clienting cases have not gotten as many neglects from the operational level as in other Foundry companies in the first place. In their firm venture clienting appears more of a business as usual, whereas in some other Foundry companies the champions must not only find the good business challenges and people to drive those, but to also convince managers to resource and ensure the projects are important enough to continue to the markets if the venture client cycle succeeds.

We have seen a lot of interest on the R&D department, but there we have the challenge, should they really be the case owners? Because if they are successful, they should put it on the market. (A participant in the project sourcing workshop)

Thus, the fourth objection for a lack of venture client projects is that the companies do **not** automatically generate enough suitable topics. As discussed in the literature review chapter, the project topics can normally arise either top-down or bottom-up, but it is not necessarily understood how much work does scoping a project to startups language actually take. In several of the interviews this then steered the conversation to lack of integration between the venture client unit and traditional business teams. Integration refers here on how systematically venture clienting is considered in firms' all business problems and new product-service development processes. Interviewees described the lack of integration as follows.

It (venture clienting) should be integrated better to the innovation process, now it's only halfway done. We could take it further so that all the ongoing innovation projects could check if it was reasonable to use Foundry or what additional value it could bring into table (Hillary)

I wouldn't say it (venture clienting) is integrated in any way. [...] But we're getting there. I am working hard to establish it more as the part of the strategy and part of the decision forum. (Polo)

Eventually only two companies appeared to have "integrated" their venture client models. In one Foundry firm the integration could be seen especially in their digital innovations side, where it was one of the tools that a centralized Digi Team had in use. In essence, any employee could reach out the Digi Team who in turn could forward the problem to either internal experts, provide funding to collaborate with existing suppliers, or if neither of those work, forward the case to venture clienting unit. On traditional manufacturing's side the firm had rather "divisional champions" than real integration, but it helped a lot with project sourcing too. In the second company, the whole venture clienting program was launched with big excitement in the beginning. The company had then set up a formal steering committee for the program right from the beginning, which had helped the company secure relevant project topics top-down. These two corporations appeared

to have a drastically better view to product portfolio management which helped finding good project topics. Interviewees who told that venture client model was integrated only partly, could not tell the why they had not similar type of practices implemented.

Finally, in addition to the key finding that some Foundry firms had been able to integrate venture clienting to existing new product development processes with effective executive steering, there were some other objections or improvement ideas to raise up in the end. Few of the interviewees brought into the discussions that Foundry's venture client model could be faster, or less cycle-oriented so it could help more ad-hoc the project teams. Foundry has tested this type of comprised venture client project and is designing a more explorative-oriented tool for mapping startup landscapes. Although both ideas are worth mentioning in the study, those are already under heavy consideration or development at Foundry and thus mostly excluded of this study.

#### 4.1.4 Executive level steering

Although this study was primarily scoped to analyse Foundry firms' operative practices around venture clienting, the key findings seemed to still revolve on executive steering or the lack of it. The following subchapter concludes what I managed to find out in one form of executive steering that appeared the most effective from outside.

Both venture client programs on a company level as well as venture client projects on a project level should always start with a business need, which could be particularly clearly seen in one of the Foundry firms. There executives had decided to launch the venture client program to test several business opportunities they had gathered so far, which indicated for a strong need for this sort of sourcing process in the first place. Executives could immediately test if the program worked as expected or if it needed to be adjusted to work better with firm's new product development or outsourcing practices for example. Once the minor adjustments were made and the top management then saw results they wanted, it was then easy to start cascading venture clienting into the organization and eventually start entrusting process facilitation to operative level champions. However, now that the executives' imaginary backpack of venture clienting topics was empty, the focus was steered to attract and educate business units who had already had a glimpse on how the program works and its potential.

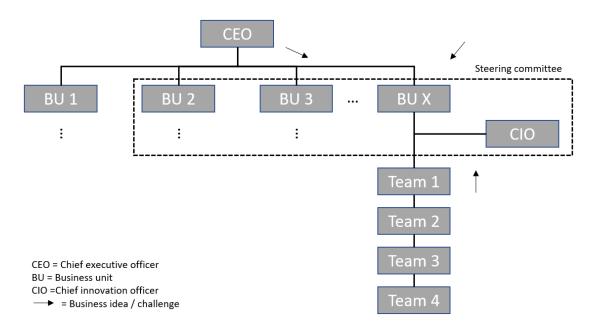
The above example illustrates well how the first prerequisite for a functioning venture client program is the top managements' need and acceptance. Companies' business unit heads, typically product division or some company functions executives, are the key stakeholders to orientate in the importance of startup engagements and venture clienting

before rest of the company employees. They are the ones overseeing and resourcing the project managers and business teams who carry out the projects, and the ones who can also communicate the project significance downwards. On one hand, they are close enough to firm's strategic decision makers to understand the company level need for leveraging external startup technologies. On the other hand, they are typically also close enough to individual engineering and sales representative team managers to sense which could be the emerging technologies and with that information decide which of those appear the most lucrative in a big picture. However, in practice also the business unit heads are prone to missing opportunities and require proactive middle managers or other support groups to help them identify the suitable venture client project topics. To make the task easier, it is also necessary to understand more specifically where and how these business ideas then arise in practice.

On a high level, the typical sources for venture client project topics can be divided in three: direct customer needs, firms' internal development ideas, and learnings from the past startup engagements. The direct customer needs were received directly from the firms' customers after sensing the markets and competitor landscapes on varying company levels. This demand is often referred as market pull. The firms' internal ideas on the other hand arise from employees finding that something in the firms' internal processes or in the product portfolio could be fixed or improved (especially in terms of speed or cost efficiency). This type of innovation on the other hand is typically referred as technological push. Thirdly, also the prior startup engagements can work as a steppingstone for new projects with an improved initial knowledge to scope the next project. Unfortunately, the downside of this classification is that the business needs are often more or less of a result of joint discussions with both internal and external experts, which hinders the applicability of the threefold classification to some extent.

From another point of view, business challenges can be classified to emerge bottom-up from operative actions or top down-down from the strategic level. A bottom-up idea can, for example, arise from R&D team engineers or operative level sales teams interacting with customers on a continuous basis. A need in for example finding a more sustainable raw material due to changed environmental regulations or a need in finding augmented reality solutions to help operators in remote guidance, could emerge bottom-up from the operative level. The top-down approach on the other hand comes from higher levels of hierarchy such as firms' strategy roadmaps or executive level discussions about the firm's future. Decision makers can for example decide to focus on measuring company's environmental impact and even launch a venture client cycle before bringing it to the knowledge of operative sales personnel.

Although business ideas are rarely pure top-down or bottom-up either, the simplification can help to understand why it is so beneficial to have a steering committee type of setting around venture clienting from the beginning. As all ideas need managers' or executives' approval before those can move forward, it is important to have a clear guideline how new ideas are processed, or better yet, have tailored processes to systematically discuss about new project topic ideas recurringly. This ensures that all potential ideas reach the decision makers and can partly fix the objections regarding lack of suitable topics. Decision makers should be aware of all potential project topics and business challenges so that they can make an informed decision, which of those should truly be steered towards a venture clienting type of project. Optimally these business challenges can be discussed jointly for example in recurring steering committee meetings so that if many divisions are struggling with a smaller business challenge that would not be invested on a business unit level (cf. e.g., ineffective video communications) the steering group could still decide to invest in it together. The figure 8 illustrates how a steering group in a traditional function- or production-based organization hierarchy could look like.



**Figure 8**: Illustration of business ideas and challenges that stream both bottom-up and top-down to a steering committee who oversee resource allocation.

The figure 8 also illustrates how business unit function heads and the steering group, are exactly the key audience who to persuade first with the venture client approach. In addition, it helps stressing the importance of a steering committee that can work as a joint gatekeeper for accepting opportunities or later help in the piloting phase.

#### 4.2 Foundry firms' value perception on venture clienting

#### 4.2.1 Diversified benefits of venture clienting

Foundry itself defines the benefits of venture clienting to come always down in at least one of the three financial benefits, which are 1. increasing revenue, 2. decreasing costs, or 3. making the firm's balance sheet lighter. These benefits are then typically realized by speeding-up something in the new product development process which then brings for example more revenue in certain time.

Although interviewees' benefit perceptions aligned to Foundry's definition on the high level, there were some remarkable differences on a more detailed level. It appeared that especially interviewees working in more operative tasks had difficulties in quantifying the value into measurable terms. This outcome assessment is discussed more in detail in the chapter 4.3. Other notable differences included that some firms associated venture clienting more into exploitative projects that yield quick, tangible return on investments whereas others considered it as a more explorative tool, which can yield significant return but more rarely and perhaps on a longer time horizon.

Strategically, the interviewees were not so assertive that speeding-up the time-to-market was the key benefit of venture clienting, and they tend to come up with several, partly overlapping, benefit areas. When asked to prioritize the benefits, interviewees typically raised finding disruptive technologies first. The benefit of finding disruptive technologies was followed by the benefit of new information, accelerating the innovation process and organizational learning. The brand benefit was echoed remarkably less than others. Figure 9 illustrates 11 interviewees overall perception on different benefits areas.

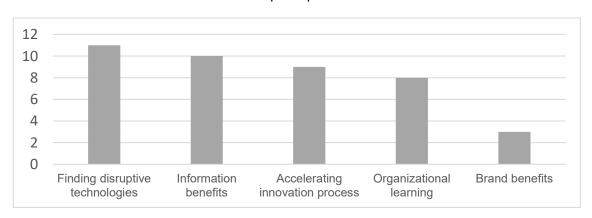


Figure 9: Aggregated benefit areas from 11 Foundry firm interviews

However, two limitations should be immediately raised up regarding the sample size, benefit areas overlapping, and vagueness in some interviewees' answers. First, the illustration should not be read statistically but rather as a visualization which highlights how fragmented the perceived benefit areas are even with such a small sample. Second, even with careful aggregation of the benefit areas, it is difficult to completely avoid overlapping of different benefit areas. For example, accelerating the innovation process can refer to accelerating the process on a single project, or overall speeding up the organizational clock speed with current and upcoming innovations. This in turn could be interpret as organizational learning. On the other hand, the overlapping and vagueness in interviewees answers could also be partly explained by Foundry's marketing material which had listed several benefit areas divided under execution and information benefits. Lastly, some interviewees might have overcomplicated the question of benefits as those were divided into program and project level benefits. These remarks are considered in the following subchapter which go through the five biggest benefit areas one by one.

#### 4.2.2 Generating real business impact

Some interviewees started explaining the venture clienting benefits from the underlying financial benefits like Foundry. Whereas Foundry separated those benefits in increased revenue, cost-efficiency, and lighter balance sheet, one interviewee depicted their value drivers particularly in IT-related projects as follows:

Our benefit areas are increased revenue, increased efficiency, reduced cost, and avoided risk. Those are the benefit areas we use for measuring. (Shackleton)

Shackleton continues that the benefit of risk avoidance can refer to for example safety and emphasizes that the same benefit areas are general and used outside of venture clienting in their company too. Although most of the interviewees did not describe the benefit areas as explicitly, those appeared to be very much the same across companies. Magellan also gave his thought on their organization wide benefit areas.

I see value from four different angles: finding solutions and generating revenue, creating organizational understanding on how certain technologies develop, creating strong individual understanding on how certain technologies work, and fourthly, creating brand value to promote thought leadership and marketing. (Magellan)

Unsurprisingly, different firms still stressed different benefit areas more than others.

I would say all four of those categories are valid (increased revenue, efficiency, reduced cost, and avoided risk), but our main focus in increased revenue and cost effectiveness. [...] We have to show our return on investment for everything, we very rarely do thing because they "feel" like a right thing to do. (Cook)

Cook elaborates that increasing revenue happens typically in two ways, either through generating new products and services, or increasing the profit margins somewhere in the existing offering. On the other hand, from the cost side the return on investment can stem from reducing scrap or labour for example, making the process more effective. A mentality of doing something only because it's cheaper did not arise in any of the interviews, but the common idea was always to do things "smarter" than before.

In general, most interviewees were particularly thrilled on the huge payoff potential that startups' emerging technologies could offer, and how venture clienting helped firms to have an external view on things. Especially champions, who had seen several projects in the past, shared that finding a disruptive solution was the single most important short-term benefit on a project level.

It's the external innovation that is really very important. Because you really cannot do innovation in a box without knowing what's happening outside. [...] Potential to become a game changer business that was the main one (benefit) we saw from the beginning. (Armstrong)

Their (project managers) goals are more focused on finding a solution or a partner based on their responsibilities. (Polo)

Part of the Foundry process is to identify potential technology to solve this problem [...] it is to help ask the right questions to help us to structure the solution, that is the value. (Gagarin)

# 4.2.3 Accelerating the innovation process

Although finding a disruptive new technology appeared to be the single most important benefit, it is equally or perhaps even more important to be able to do it in a rapid manner. Speeding up the innovation process has two major benefits for companies. First, it helps organizations to be first in the market and second, it typically decreases the costs associated in new product-service development.

In manufacturing we're trying to be the first in the market for the fastest solutions for the customers. [...] Out of the box thinking is very valuable and it can bring

many opportunities for our company. [...] From here you can gain things like costefficiency and even time, you can be the first one on the market (Amundsen).

As firms' new product development and innovation processes can generally be divided in certain phases, the venture client model was seen to primary help in the earlier phases of new product development. The first phases covering things such as idea generation and innovation, can further transform into finding startup suitable opportunities or longlisting a bunch of startups for idea gathering which already generates value through improved knowledge in a rapid manner.

The process itself helps keeping with the schedule, which is a good thing. It is sharpening the process and keeps meetings in a certain length. [...] We easily stick to ponder something less important when we should only focus on the core issues, which makes this a good thing (Heyerdahl)

(Process wise the main benefits are) the ecosystem and the number of startups as well as the process and how it's structured in terms of search are the real highlights. (Armstrong)

The interviewees elaborated that after finding the most potential suppliers from the mass, the benefits start to occur in startups' agility and entrepreneurial way of doing things:

When we speak about the project level benefits, speed is definitely a factor. Startups move with a much more rapid phase than large corporations. They don't have all the departments for check and balances and all of the things that need to happen in a big corporation. (Cook)

Cook continues that the entrepreneurial drive can be seen for example in startups way to push the product development process and keep asking what they could do and where they could they go next. Cook's colleague Columbus who has also participated in two venture clienting projects, agrees that one of the biggest benefits of venture clienting is the speed in startups tests and pilot projects.

Without this venturing cycle, maybe we could have solved it ourselves but probably in two to three years from now and not in 3 months. I mean we haven't solved it yet, but at least we have the context, and we will start testing it and evaluating the results from that. So, I would say it saves us at least 75% of the time. (Columbus)

Foundry has worked in several ways to increase companies' organizational clock speed to accelerate their innovation efforts. For example, when Foundry noted that one of its alliance firms appeared to be endlessly asking permissions from different facets and

committees in the projects' pilot phase, and slowing the process down, it took immediate actions. Foundry and the firm gathered on the same table and created a committee with enough authority to permit startup projects to continue their piloting phase without disruptions and running after each stakeholders' acceptance. However, Foundry cannot do these things alone, but the companies must also be invested into accelerating their new product development practices and be flexible with their approach. In the end, speed is one of the most important benefits that venture clienting has to offer.

It's probably more important to find the right one (startup) than to do it really quickly. But also, these things are evolving so fast and there is this window of opportunity to typically engage with the startup before it gets too big and too fixed on its own. (Polo)

### 4.2.4 Information benefits and organizational development

Shortening a single project's lead-time for a little does not make difference on a firm level, but doing it consistently over several projects, can make firms' new product development processes more agile over a long run. In addition, faster projects can enable more topical learning, build more entrepreneurial culture on an employee-level, and build an experimental brand image. Although finding a potentially disrupting technology should be the goal of each venture client project, the interviewees had a mutual understanding that all projects can and should not lead to successful pilots. Organizations also need to be experimental and have volume in their innovation funnels' beginnings to some extent.

If 100% of the venture client cases lead to generating value, there's something wrong. We're not taking enough risk but taking only safe bets. We want to have a lot of ideas and that way pick the best ones. (Shackleton)

Even though information benefits or gaining topical knowledge in emerging technologies were mentioned by many, interviewees tended to rank it much behind finding a disrupting technology for the business challenge at hand. Still particularly champions and people higher in the organization were convinced about the information benefits importance. One, undoubtedly a seasoned champion, and an executive describes the issue like this:

Foundry process itself is evolving and we are generating these landscapes, these market mappings, and all of a the sudden it (Foundry) is a business intelligence tool as well. (Polo)

Concretely this can translate into speaking with selected experts but also sensing the market and finding what the corporations are missing.

You get to discuss with people who understand the situation and get yourself those aha-moments, how something could be solved. (Magellan)

Of course, we get a list of 50 or 70 startups who want to work with us and maybe we'll find a couple ones who we want to work with, but we also see what is happening in the space and how are the business models and so on used. And that is very relevant too. (Polo)

On top of pure topical learning, surrounding yourself to new ways of looking at things was then seen to also promote entrepreneurial culture within a company i.e., encourage people to innovate and become more agile in new product or service development.

Working with startups and scaleups educates our organization to become more agile. In the long run people are more exposed to this kind of working and the mental models are changing a little bit. (Hillary)

In the short-term it (venture clienting) is finding a supplier or a partner you need. In slightly longer it's probably to develop entrepreneurial culture. (Polo)

Finally, interviewees also emphasized the brand benefit associated with venture clienting and working with startups. Two of the four corporations interviewed had received national recognition regarding their startup friendliness, which is also at least partly because of Foundry.

This is also seen to bring sort of brand value in the eyes of everyone, customers, employees, future employees, stakeholders, and other partners. (Magellan)

Every Foundry case, even the startup screening phase, brings in good positive coverage, and the more we can come off with success cases, and talk about it, the better. (Hillary)

It was evident that the brand benefit is much less significant than the other benefits and not enough to convince top management to one way or another as such. According to a former champion Hillary, ultimately the concrete results are the only thing that matters for top management. Lastly, Cousteau adds that in the worst case poorly scoped venture client projects do more harm than good. If the projects for example sound too much like each other, someone can easily interpret that as ineffectiveness.

#### 4.2.5 Costs

Costs, the counterpart of benefits, were discussed much less and the insights can be divided into three groups: general staffing costs to run venture client cycles, pilot project

costs, and a company level venture clienting fee. Although Foundry archives revealed some numbers in Foundry firms' pilot budget guidelines and yearly venture clienting fees, the specific numbers are not revealed here for confidentiality reasons. The focus in costs is rather figuring out how much the venture clienting takes from the companies' project team especially in terms of human resources. Overall, most of the interviewees agreed human resources to be the single biggest costs. Interviewees did not have a shared consensus on how many manhours a venture client cycle takes or how much it should take. Yet, estimations of time use were more similar from problem scoping phase to the end of startup selection phase but started to differ once the pilot phases started. Human resource costs were naturally remarkably bigger in the pilot project phase than during a venture client cycles in every company.

The costs of course include man hours invested, both my (the champion's) and the case owners which isn't that much, but it is still tens of thousands per year. (Magellan)

So, in the selection and screening phase, it's usually communicated that you need only two and a half days, but eventually if you want to do the work well, you will spend triple the time to go through the companies that applied. [...] I think about one- or two-weeks full time at least. [...] then you have a few experts in-and-out so I would say 1.5 FTE's. (Gagarin)

Another case owner from the same company, gives a rather similar estimate although he does not assess the exact time usage of the employees working in the background.

I think we have three to four full-time-equivalent working with this, and then there's probably 5 times the number of people behind who part time support these kinds of phases, which include legal procedures etc. (Columbus).

After moving on to the pilot or proof of concept (PoC) phase, the projects start to require more money, manhours, and other resources to ensure the venture succeeds and solves the company's problem. Interviewees estimations is resource usage varied a lot between companies but also within companies.

So, what we typically do is that we have a certain budget allocated to the different Foundry cycles, but this would only mean the first steps like prefeasibility and making first tries. Then they (pilot projects) would go to co-development programs which then ensure the funding of those initiatives. From the spending perspective I wouldn't consider this as a major money for that goes into this scouting phase (before co-development programs). (Columbus)

We probably spend the time of 4 or 5 people for ten hours a week during a six- or eight-week period so I'll give about a full time equivalent of one to one and a half people for that timeframe of six weeks. (Cook)

The PoCs are typically between 10-150k€ which is quite a lot per year. (Magellan)

Earlier Gagarin also described how difficult it is to find a person to drive a venture client project 100% or at least 50%. Having a handful people to support it, sums up the total costs to around two FTEs over for example a three-month period.

For the pilot phase you need one person driving that 100% or at least 50%. [...] You need one FTE for three months to drive it, and then you may need another FTE divided by two or three people to support it. (Gagarin)

However, the pilot project costs are naturally very project dependent. A pilot in a market ready software solution, such as an augmented reality application for remote experts, can take remarkably less time, and resources than a traditional material innovation which must go through several compatibility tests in multiple facilities. Nevertheless, program should have some guidelines to make steering easier on the executive level.

Lastly, money that goes into facilitating venture clienting aside from the venture client projects themselves, appears heavily company dependent. Although a champion may seemingly be enough to run a venture clienting unit from the firm's side, this can easily impede reaping the major benefits of venture clienting. Business challenges with most venture client potential may not end up into venture clienting cycles, or the effort in their problem definition and scoping phase might be heavily under resourced. As described there can also be other firm liaisons to help spreading venture client initiative for example through a steering committee type of settings or just as an individual advocator e.g., from another project. Unsurprisingly, it also seems to hold true that the more a company puts resources into a project, the more likely it is to succeed. The difficulty comes from finding an optimal spot where projects are not over or under resourced.

To conclude, the venture client cycle's staffing costs appear to be relatively consistent with an average cost of around 1.5 FTEs per venture client cycle (Foundry's scoping and scouting phases). The resource usage in pilot or especially further development and commercialization phases is more project dependent, and the spend likely correlates with project's success rate. The cost rate also likely correlates with firms' overall venture client maturity which could be measured for example in the model's level of integration to the company.

## 4.3 Assessing venture clienting outcomes

## 4.3.1 Foundry's key performance indicator scorecard

The interview questions referring the venture client model metrics and KPIs appeared to be the most difficult ones for interviewees. Some of the interviewees claimed that they were only looking at process indicators such as number of projects launched, startups screened, and the pilot projects began. On one hand, it can be that the interviewees lacked or were not willing to reveal their more precise financial measures that are important for the top management. On the other hand, it can be that people simply did not have this information which de facto can be difficult to gather and analyse in such an early phase of a new product development for example. One interviewee also explained, how the executive level is sometimes in fact more interested to listen the qualitative feedback than mere numbers. Therefore, participating to a workshop session that addressed Foundry's key performance indicators (KPIs) around one firm's venture clienting initiative gave lots of insights for project related KPIs. The KPIs are summarized in the table 7.

**Table 7**: Project related KPIs discussed in the second Foundry workshop

Finalia a calcalata	Exposure: firm exposure to venture client approach
Finding valuable business needs	Action: Number of project scoping workshops organized
busiliess lieeus	Quality: Number of venture client projects launched
Finding world-class	Attractiveness: Number of venture client projects requests
startup solutions	Quality: Number of startups entering a pilot project
	<b>Experience</b> : Case owner's, champion's, and startup's net promoter score (NPS) after the startup's selection phase
Ensuring smooth	<b>Execution</b> : Duration from champion's first project team contact to project launch in days
and scalable project execution	<b>Execution</b> : Duration from startup selection to pilot project agreement in days
	<b>Scalability</b> : Number of pilot project transfers into long-term engagements

Interestingly, the KPIs emphasize a lot of project related process indicators such as how many teams or people are exposed to venture clienting or how many projects continue from pilot and PoC (proofs of concept) phase to long-term engagement. The KPIS appear to be rather distant from traditional cost and time metrics that one would assume to be executives' primary interest. On the other hand, it is good to keep in mind that KPIs are not financial or time related metrics, but measurements to track progress towards specific goals. In addition, the table 7 reflects only one of the Foundry companies' insights and should not be necessarily generalized for all Foundry companies. Second, Foundry has also its own tracking system for following projects pilot and scaleup phase.

However, especially the forementioned project tracking system has lacked champions input and failed to provide a holistic picture of the current overall situation.

## 4.3.2 Interview insights on outcome assessment

Many interviewees claimed that they did not track projects carefully and justified the lack of metrics and KPIs around venture client model with the program's novelty. The typical measurements interviewees could come up with circulated around time and money savings. Some interviewees had for example tried to measure how much venture clienting shortens their innovation projects, but very few had been able to quantify their success stories in financial terms for two reasons. First, interviewees claimed that even the company's very first projects had not yet reached the scale-up phase. Second, many interviewees argued also that venture clienting is used in such an early stage of new productservice development process or that it solves only a fraction of a bigger business need in the background, making the measuring simply too vague. On the other hand, if it takes two to three years to reach the market after beginning of a pilot project, it can indeed be very difficult to estimate whether the project eventually succeed because of an excellent startup selection, great program facilitation or company's effort somewhere later in the new product development process for example. Some projects may have also worked as a steppingstone for more important development projects or continued elsewhere with startups or established suppliers on a slightly changed project scope.

I don't see any measures about the revenue because I think that will be a very very small amount, but I have the ambition to make those type of measures. [...] If it (venture clienting) starts to fly, it makes more sense to see it in terms of revenues or things like that. (Gagarin)

There's been very few success stories, although we started already in 2018. We're just now starting to see the first results. [...] I'm not sure if it's a bad thing or that we would be doing bad because we're doing this for the experiments. On the other hand, if you run a hundred cycles and nothing comes out, then something's wrong. (Magellan)

In a third company, where the success rate of pilot projects was relatively high, many of the projects were on hold for the projects' scaleup phases and transitions to co-development programs. Another company interviewee from the same company agreed that measuring results is yet too early. In several cases, the interviewees felt that even simply measuring a new technology's performance against simple, technical metrics could be difficult because the innovations can be so radical by nature.

You can have measures once it's in the production. So, in this case, I think the only thing we can measure right now is what we've tested right now (in the pilots) and which of the startups have moved to advanced stages. (Armstrong)

If it's a new idea, how do you judge really how much is it worth? (Columbus)

In general, interviewees had a consensus that financial measuring was possible only once the projects were moved further down the production lines or reached the markets. Based on empirical insights, the projects would benefit from leading indicators, KPIs or financial reasonings which would also justify why to engage in projects in the first place. Questioning these metrics resulted many interviewees claim that projects are very case specific and simply difficult to measure. Luckily, two interviewees could come up with little more concrete project specific KPIs.

The KPIs are going to be classic manufacturing KPIs: scrap and waste, labour costs, material costs, overhead costs in terms of engineering and human resources. I think we have covered projects that are close to being able to demonstrate benefit, but we don't have anything that has successfully affected those KPIs yet. (Cook)

The actual investment value comes in the implementation part through PCA which stands for post competition audit. Once the project (scaling) is finished we can look against hard numbers whether there's value in the bottom line. (Shackleton)

The interviewees in different companies had also notably different expectations for the success rates of venture client projects. Some were pursuing venture clienting as a more of an explorative tool and some were chasing rather quick wins and trying to find new technologies that could be implemented immediately.

I don't know what would be good (success rate). If you launch 100 projects and get 5 success stories, would that then be super good. I don't know. It's definitely not 100% and of course not 0%. But it's definitely closer to 0% than 100%. (Magellan)

When it comes to measuring and showing results, it's enough if we can show that we have utilized startups or their technologies from venture clienting projects. It's already a lot if we can show that these are useful and that there's more than just a PoC. [...] Whether we found something faster because of this (venture clienting) or if we used our resources better than without this would be difficult to measure. (Hillary)

In order for us to engage in a process there has to be a financial payback period. But I think the financial payback is understood in the beginning because here's a problem we need to solve. One of the things we avoid, at least in our company is embracing the technology just for the sake of technology. We start with a problem we need to solve and then through venture clienting we discover here's a technology that can solve our problem. [...] Venture clienting helps us to find the most efficient method. (Cook)

Even though financial metrics are very difficult to put in place in the beginning of venture projects, there should be some estimates or targets for engagements. However, pushing project teams to come up with financial targets might decrease their participation rates, which complicates finding well prepared and scoped projects. Thus, financial metrics are sometimes replaced with technical metrics or criteria for success which can be unclear or vague too. Perhaps especially for the Foundry team who is typically working with a completely new topic. In addition, the project teams occasionally misuse their goal setting with radical innovations and leave the project description or definitions intentionally openended. This appears as they would like to have a glance of startups' offerings in certain fields without truly committing to startup engagements. Fortunately for Foundry, there are also more incremental or exploitative oriented projects, in which the project teams might already have a good understanding of the solutions' technical requirements, or even better, how succeeding in those requirements would affect in financial terms. One interviewee for example shared that in his first venture client cycle, they looked for a substitute in 3D-printing for tooling. Here the benchmark was relatively easy since they knew the existing performance levels such as printing time and process costs. Although overall most companies appeared to stumble with accurate measuring, two interviews had some good insights on the topic.

When we start doing the PoC we have some ideas and requirements what we want to come out of it. Typically, we also define the criteria for success. (Hillary)

There's always estimates on the impact on KPIs. [...] If it pays back in 18 months, it's generally "yeah let's go ahead and go as fast as we can", if it goes more than 18 months, it's a little bit slower decision. We may decide to do it, or we may not. [...] Anything that has a longer than 3-year payback that we do, is highly unlikely that we do it. (Cook)

Cook's project approach is ideal for Foundry as it makes accurate measuring in project success fast, which can give either credibility or learnings to future venture client projects more rapidly. Hillary's ideas and requirements look good on the surface as well, even

though those still miss the time element. Asking Hillary how the ideas and requirements are measured in practice, he continued that project teams are typically measuring technological fit, ability to scale the startup offering and whether the company's internal processes comply with the startup's solution. However, these again are very qualitative metrics and might remain too ambiguous in the scoping phase. Some other interviewees complemented the discussion by introducing technological readiness levels (TRLs) which are typically used to measure new product development for example in traditional R&D departments.

TRL is something that is easy for people to understand where we're going. Those indicate when we are going to reach the market and how much more money do we need to invest. (Cousteau)

We have a little similar (TRL-system) and we're currently in the first stage (with the startup project). (Heyerdahl)

The TRLs are sometimes linked to the new product development processes, but not always. The idea is always that the TRL measuring would help new product development processes to keep on track how well the technology works, which business requirements does it pass, or how close is it to be moved to production phase testing or the markets. However, the status of the past venture client projects which did not move straight to pilot projects, and from there to scaling and markets were not always clear for champions or employees working in the business units.

I am not sure how it is nowadays, but we used to have a technology management organization, where we had designated people tracking emerging technologies, where we're going, and how we could utilize those. Back then when a PoC or a technology from venture clienting related to some technology, a certain person oversaw the information: "this is what we did, and this is how it develops." (Hillary)

We are trying to connect this to different ways to gather insights and I am part of our firm's innovation office, and my colleagues are working with scenarios and trend analysis and stuff so the learnings and the landscapes and so on will go to that. [...] To some extent we can maybe use KITE platform and to some extent we probably need to have some internal tracking as well. (Polo)

We should be measuring (TRL's) but we're not. [...] We might discover that the technology is interesting but it's not mature. And because it's not mature we're not going to invest in it. But there's some benefit for the organization to understand that this technology exists and maybe in three to five years it will be mature

enough to utilize and we should stay educated and aware of the technology. (Cook)

Interviewed companies did not seem to attach information benefits to their common knowledge basis apart from keeping somewhat track on who has which information. On a project level it seemed to only be important to measure the project's speed and quality, as well as track process indicators such as how many projects were started, or what their conversion rates to further development programs were.

# 5. DISCUSSION

## 5.1 Improving effectiveness of venture clienting

While the literature review suggested tackling the effectiveness of venture clienting in four categories, the empiric findings align and deepen this understanding in a Foundry specific context. Before diving into the practical recommendation, this chapter summarizes the study's key findings from the original three research questions point of view in venture client project sourcing, value perceptions, and outcome assessment. Both literature review and empiric insights had most insights for the research question 1 and the questions overlapped more than initially thought in general. The study strongly supports the assumption that some Foundry firms venture clienting setup works significantly more effectively than others.

Regarding the first research question, empiric findings strengthen the literature review's insight that the number of launched venture client projects is heavily affected by the executive level interest, which in turn yields from their perceived results. Whereas in in the past Foundry has given firms a plenty of organizational freedom to coordinate their venture clienting approach, it appears that Foundry should take a more active role to coordinate the steering processes. Insights from the literature and the most effectively running venture client units suggest for example adding recurring firm-specific steering meetings and increasing executive support in project scoping for all alliance companies.

Regarding the second research question on venture client model's value perception at different organizational roles, there does not appear to be a clear perception differences for example between project workers, project managers or project executives. The value perception is better explained by employees' venture client experiences. In general, the more familiar people are with the model, the better they understand its benefits and costs. Executives typically have some head start in understanding the model's value proposition thoroughly, due to a better overall understanding of their business.

Finally, regarding the third research question on assessing venture client outcomes, Foundry appears to have some good metrics in place but those should be pushed to all Foundry firms and their use should be monitored more carefully. Foundry should thus take an active grip on the individual project teams and then ease their reporting for more frequent business calculations or estimates, and project updates. The assessing should also always come down to financial benefits.

## 5.1.1 Standardizing executive level steering

Improving the effectiveness of venture clienting requires more systematic management from the Foundry firms, which in turn can be achieved by standardizing best practices in program and project steering. Both literature and empiric findings indicate that the more managerial commitment the program gets, the better the results. Literature refers to this managerial commitment through so-called protectors or champions (Freeman & Engel 2007), which may work the best when applied separately on strategic and operational levels (Weiblen & Chesbrough 2015). Empiric findings on the other hand discuss more about integrative mechanisms and steering committees. Obtaining managerial commitment for the program does not come for free, but as one of the interviewees put it, executives start only investing in it once they see the results and start believing in the program's potential. Luckily, some firms, both inside and outside Foundry alliance, have already pioneered their investments in venture clienting or a similar context. These proven techniques and methods can then be applied to more sceptical Foundry firms. The first three practices discussed below revolve around company level target setting, recurring steering meetings, and executive support in raising program awareness.

To reach strategic venture clienting goals, Foundry firms should more accurately and transparently set objectives on a yearly number on venture client projects launched, number of pilots, and number of pilot transfers into further development programs or commercialisations (the scaleup phase). This is something that Siemens TTB did with their startup program (Weiblen & Chesbrough 2015), and which later allowed them to start using even more sophisticated project metrics based on revenue increases and improvements in profitability. Even though the target numbers feel difficult to estimate, those are also used to steer projects' scope to the right direction. For example, firms that suffer low project success rates can then awaken to steer projects into a more exploitative direction whereas firms that feel confident with their current success rate can adjust their projects' scope to more explorative. However, it is good to bear mind that venture clienting is primarily a tool for exploitative venturing (Kurpjuweit & Wagner 2020), and not the least because that typically yields more resources from the executives allowing to develop the CV mode into a more exploitative direction in the future if needed. On the other hand, the earlier the executives get their grip to scoping the projects, the higher the chances that those eventually reach their commercialization phase too. Typically, only the executives can do accurate enough business calculations, whether for example a new disruption in Al space is something that could work as a basis for an attractive venture client project.

As one executive does not likely have enough expertise to steer all divisions of a firm, it also makes sense to have several function or product line heads thinking together of new project launches and whether existing projects should be continued or terminated. That is something what Siemens TTB did with their nine divisions (Weiblen & Chesbrough 2015). One of the Foundry firms has also implemented a formal steering committee in their venture clienting approach. There each of the steering committee members as well as a Foundry champion(s) gather around to give each business units' updates on the project pipelines, including ongoing projects and future projects. These gatherings can work as decision making points to decide which projects to continue and which to terminate. In addition, the meeting can be used to solve for example budget or contract related bottlenecks, which also leads to organizational learning, on how to speed up innovation processes even more. It is noteworthy that this type of every two-month gatherings for example do not necessarily have to focus on venture clienting solely, but those can also take advantage of companies existing steering committee structures. Perhaps some Foundry companies could for example extend their monthly business unit head / vice president / partner, etc. meetings to include the topic of venture clienting topic as well.

Building or adjusting a steering committee around firms' venture clienting can also clarify traditional Foundry champions job duties and especially help them to find new managers for future venture client projects. In some of the Foundry firms' champions argued that they are still sometimes struggling to find project topics and managers, and hearing their objections regarding for example time, money, and resourcing. Although, to some extent, it is good to have bottom-up type of venture client endorsement to also convince the decision makers and nurture their ideas, the project sourcing appears to be still the most effective top-down. That is why firms should first target educating the relevant executives in venture clienting before moving their awareness sessions to touch the managerial level too. Bottom-up interest in venture clienting and employees project topic ideas will evolve naturally as people start understanding the program's value. On the other hand, when executives introduce Foundry champion to their business unit (including managers and their project teams), the presentations on venture clienting are far more likely to get audience's acceptance. The sessions are not only perceived more convincing, but the champions can later also utilize the executive's authority for gathering bottom-up project topics if the program becomes established. Sometimes this is as simple as attaching him or her as an email cc (carbon copy) if someone is not responding to their email requests on new venture clienting topics.

## 5.1.2 Standardizing project sourcing practices

In addition to better executive level steering, program effectiveness can also be improved on an operative level by having more and better scoped project options and executing those more effectively. More specifically, improvements can happen through even better awareness session structure and standardized awareness session content which include active tearing down of potential bottlenecks such as project managers' fear of failure, resourcing, or deadline related issues. In addition, it might make sense for Foundry firms, to later consider incentivizing venture clienting to ensure all projects are taken seriously from the finish to the ends.

Even though literature and most of the interviewees considered best practices in raising venture client awareness somewhat superficially, one expert interview revealed a good practice to plan awareness sessions around three objectives. The first objective is to ensure people understand why startups are strategically relevant, the second to have everyone understand what a venture client unit does, and the third, to reveal and adjust people's business problems to suit venture clienting. Even though during my employment at Foundry, I sensed people feeling that champions' awareness sessions were on point, I would still recommend Foundry to confirm that all champions' presentation techniques and materials are certainly up to date.

As champions' project sourcing has so far been comparable to internal selling, it is also important to make sure everyone sell the same offering, including preliminary searches, latest reference examples, and an opportunity to shorten projects, to convince potential project managers. In general, many interviewees reflected how preliminary searches could already be a standardized part of the project once people show their initial interest for example in the awareness raising sessions. On the other hand, latest success stories in venture clienting should be more systematically distributed across Foundry firms, in which Foundry could perhaps take a more active role itself too. Lastly, in the end-half of my employment at Foundry there was carried out a shortened venture client cycle, which would also echo some potential project managers need for speeding up projects to meet their own, not venture clienting related, project deadlines.

Finally, incentivizing venture clienting, similar to corporate venture capital (Dushnitsky 2011), could also result in more passionate driving of venture clienting projects from their start to finish. Whereas the idea of incentives was not raised up in any of the interviews, it was point out by one of the Foundry team members in the questions and answers part of the master's thesis results' validation. Even if most of the Foundry firms venture client maturity would not yet be on the level of incentivizing projects based on financial impact,

it is something to be consider especially for project managers but also to whole venture client units in the future. However, although incentives would likely strengthen Kohler's (2016) finding that startup suppliers can benefit of focusing on passionate people as much as finding a suitable project topic, it can be still too early to start estimating the incentives drawbacks holistically. Whereas it is unlikely that employees would jump to a private accelerator in hope of better commissions, like they did in the CVC side (Dushnitsky 2011), it is possible that the incentives would bring major conflicts in case the traditional innovations processes would not be incentivized in parallel.

## 5.1.3 Standardizing projects' impact tracking

As important as it is to set accurate and transparent goals on a firm level, it is equally important to set and follow clear metrics for each phase of a project. The interviews and my own experience at Foundry indicate that the fear of project deficiency might have lessen Foundry teams' willingness to push people to give those parameters in the project scoping phase. Therefore, even though Foundry already has a dedicated canvas for scoping a project, this canvas is sometimes carelessly filled under the guise of leaving project scope intentionally open or to not limit outside of the box thinking. This is turn might steer the projects to a more explorative path than originally intended, which hinders the projects likelihood of success. In addition, occasionally lack of planning has resulted to slowly moving pilot projects with insufficient steering, which should be tackled with clearer pilot project guidelines and their standardized check-ins.

As most of the Foundry firms should focus on improving their success rates to receive more executive support and resourcing (instead of striving for single substantial wins), the Foundry team should more actively starts pushing projects to exploitative direction. Investing into the project scoping phase, helps projects succeed as described earlier by for example weeding out topics that would not ever reach the scaleup phase. Pushing project teams will also educate them to think more strategically, and acid test, whether their business challenge is worth solving the first place. In this phase, Foundry team can also act as a consulting like intermediary. Although only one of the interviewees stressed the importance of projects payback time, a heuristic of earning the money back in for example 18 months could be a baseline for venture client projects across Foundry firms.

Adding the guiding timelines, such as a three-month period for pilot projects, can ensure that projects move fast enough in the firm's pipeline. In addition, those would enable champions natural intervene points in pilot and scaleup phases, which have sometimes started lagging or abruptly lost firms' interest. To combat this, firms can and likely should

standardize their pilot project's length to maximum of for example 3 months, like other startup supplier programs have done too (Weiblen & Chesbrough 2015). Checking the guideline schedule and pushing a fast pilot project start after the venture client cycle, perhaps should be emphasized more as a one of the key tasks of a champion while working on an ongoing venture client cycle. Projects have so far had only a standardized kick-off meeting in the beginning of a pilot project that has maybe resulted in proverbially dropping the ball right after the venture client cycle. Adding a systematic halfway check at least in the middle of a pilot project thus appears as a necessity. Another milestone meeting could take place in the closing phase of a pilot project, which could also include the case owner or an executive from the steering committee to indicate project's strategic importance and boost team's motivation. Eventually, the standardized project check-ins in the pilot (and perhaps in the scaleup phase), would also help Foundry to keep track on firms ongoing pilot and scaleup projects, which have lacked up-to-date information on projects' status, lead times and budget, and financial benefits.

## 5.2 Recommendation for next steps

Table 8 below summarizes the recommendations for Foundry in three groups which are classified as executive level steering, project sourcing practices and standardizing project's impact tracking. Table 8 also suggests, how the implementation can be rolled-out. However, the first step for Foundry is to consider these recommendations internally and discuss whether the action plan requires any adjustments. In general, most of the action points should be implemented together with Foundry alliance's joint steering group, but there are also actions that can be executed on a more operative level.

In addition to the recommendation for practically immediate steps or so-called quick wins, many of the implementations can also be taken further in the future. Firms venture client targets can be increased, new executives can be added to firms steering committee structures, and more executive time can be allocated to venture client project's scoping phase, if those yield the wanted results. Similarly, the awareness session structures can be honed with increased resourcing, and pilot projects can be allocated more money. However, recommending these implications already, would likely appear for executives or in the worst case even result to suboptimization of venture clienting over firms' overall innovation practices. The gentle push towards allocating more resources on a project level should instead come from projects' genuine need, and business calculations that something is truly worth investing the extra time and money to result in a shorter return on investment for example. The recommendation is summarized in the table 8.

Recommendation	Short description of execution	Main responsible(s)	Timeline
Executive level steering			
<b>Company level target setting:</b> Set company specific accurate and transparent objectives on yearly number of projects, transfer rates to pilot and scaleup phase, as well as technology search trends.	Arrange executive level discussions in each firm and map how many projects can be budgeted an which technology fields to prioritize.	Foundry's steering committee	Next 2 months
<b>Executive level steering meetings:</b> Establish or use existing steering committee structures to monitor firm's new venture client project opportunities and the status of ongoing ones.	Establish a steering committee of executives who are interested in the program. Consider applying e.g., RACI-model (responsible, accountable, consulted, informed).	Firm's strategic and operative champions	Next 6 months
<b>Executive support in program awareness:</b> Introduce champions and their awareness sessions top-down to increase program acceptance.	Strengthen top-down project sourcing and increase executives support to champions	Firms' strategic champions	Next 6 months
Project sourcing practices			
Systematize awareness session structure: 1. Create understanding in startups importance. 2. Explain how venture clienting works. 3. Start adjusting people's business challenges for venture clienting.	Conduct a workshop with champions to go through their marketing material, and awareness session structures.	Foundry team and operative champions	Next 2 months
<b>Standardize awareness sessions content:</b> Ensure that champions offer actively preliminary searches, present latest reference projects, and introduce the opportunity for shortened projects.	Establish a regularly updated success story bank including (firm specific) business case calculations.	Foundry team	Next 2 months
<b>Consider incentivizing projects:</b> Discuss whether some Foundry firm structure allows incentivizing PMs to test whether it improves success rates.	Discuss if some Foundry firm would like to test an incentivized model e.g., for a one calendar year.	Foundry's steering committee	To be discussed
Systematizing project's impact tracking			
Push benefit estimates in the project's scoping phase: Force project teams to give quantitative or even financial estimates based on their business challenge early on.	Prepare a list of typical business case metrics for example in new product sales or cost-savings per user to ease ROI calculations.	Foundry team, operative champions	Immediately
<b>Shorten and standardize pilot phase timeline:</b> Actively steer project scopes to a direction that the success is easy to measure already after e.g., 3 month pilot projects. Stress the importance of starting a pilot project immediately after startup selection.	Guide project teams and startups to prepare business calculations and project timelines already in the final startup selection phase.	Foundry team, project teams	Immediately
Standardize pilot and scaleup phase check-ins: Schedule project update meetings in the pilot and scaleup phase to improve steering and measuring.	Include and schedule project check-ins in the venture client process model.	Foundry team, operative champions	Immediately

Strategic champion = Firm's representative(s) in Foundry's steering committee
Operative champion = Foundry firms traditional champions

Table 8: Recommendations for Foundry to boost venture client model effectiveness

In addition, some interviewees directly emphasized how venture clienting could be used for example as a business intelligence tool or how it could be combined to companies' existing knowledge management databases. However, as this study did not address those ideas further but left those for other development projects, they are not included in the actionable recommendation. Similar remarks are also addressed in the conclusion's subchapter considering future research.

# 6. CONCLUSION

## 6.1 Theoretical contribution

From a theoretical perspective, this study contributes to the emerging literature of startup supplier programs, such as venture clienting, as well as strengthens the foundation of outside-in CV typologies and their place in corporate venturing literature. Although one empiric case research is not going to change the fragmented landscape of CV modes among scholars, it can still provide noteworthy insights for researchers who explore similar type of non-equity-based CV modes in the future.

First, the centre of the study, effective use of venture clienting, can help scholars to better understand how a one form of startup supplier programs works, what are its difficulties especially in the program's launch phase, how its value is perceived on a strategic level, and how its outcomes can be measured. So far literature has studies little how startup supplier programs or their closest relative, CA programs, should be steered in practice. Although modes program content is described to some extent (e.g., Kurpjuweit & Wagner 2020) specifically through the popularized stage-gate models (Cooper & Kleinschmidt 1991), the concrete steering mechanisms were left mostly untouched. Programs' value propositions are on the other hand addressed significantly more, but few studies have been able to quantify that value's realisation. Although this study did not focus quantifying the models provided value either, it can still give guidelines, how to study it financially in the future (see future research below).

Second, the study also contributes to the outside-in CV mode literature more generally, by positioning the emerging startup supplier programs more firmly into their academic contexts. Whereas the modern CV landscape is still fragmented (Guttmann 2019) and it tries to find an overarching CV typology to cover all different CV modes at once, this study suggests tackling smaller pieces first, such as the rapidly evolving outside-in CV mode landscape. So far only few CV studies have directly addressed the direction of innovation flow dimension, and the ones that have, typically lack adequate classifications inside it. Some scholars have for example classified all different CV engagement modes such as investing, co-developing, and supplying under CA programs (Kohler 2016), which hinders their research, and applicability to practitioners needs. The more convincingly the studies in startup programs succeed to justify the CV modes importance in the academic discussion, the more rooted the typologies become, and the more those help researchers to understand different CV programs development holistically.

## 6.2 Managerial implications

From practitioners' perspective the study contributes mainly to Foundry's venture client model, but the findings can also benefit similar type of startup programs, which are based on a non-equity-based model. The implications are derived both from the prior startup program research and their case examples, as well as from the Foundry alliance firms.

The effectiveness of Foundry's venture client model can be improved through three key areas, that are standardizing alliance firms' program steering mechanisms, standardizing their project sourcing practices, and improving their outcome assessment. The program steering methods introduces first a well-performing company level target setting, second a steering committee structuring, and third, methods to improve program's organizational awareness. The standardized project sourcing practices on the other hand consider the improved awareness sessions structure, more systematized venture client marketing material, and an option for incentivizing the projects. Lastly, impact tracking proposes to invest more in the projects' initial scoping phase as well as suggests adding recurring check-ins for projects' pilot and scaleup phases to shorten and standardize firms' pilot project timelines. The study also provides an initial timeline and approach for executing the proposed improvements together with Foundry companies.

The same program steering, awareness raising and outcome assessing mechanisms can likely benefit other startup or alike CA programs to certain extent as well. Whether the programs' have been running for years, or the executives are still in the consideration phase, the study can help executives understanding how the programs work on the high level elsewhere, and especially to which type of business challenges the programs should be used. However, the study does not argue that the venture client model or startup programs in general would be more suitable corporate venture tools than other models in every situation. Practitioners should rather learn to identify the most suitable venturing modes for their strategic needs, which might even result some CV modes to complement each other's.

# 6.3 Research validity and future research

Although the study succeeds to provide practical implications for more effective venture clienting, there are still limitations and acknowledgments in term of study's credibility and transferability. In addition, the research provokes many future research topics that should be addressed by scholars, the Foundry alliance, and other practitioners.

First, study's credibility is slightly decreased because it could only cover a handful of high-level executive insights. On one hand, many executives were busy carrying their everyday work, but on the other hand Foundry was also somewhat protective towards interviewing too many of their networks' high-level executives. Master's thesis was thus steered into a more operative scope, although it could not dismiss a strategic perspective completely. Even though the key insights were derived from all organizational levels, executive interviews tended to still be more insightful in a big picture. Lastly, some for example financial data was too confidential to be distributed even with non-disclosure agreements, which could also decrease study's credibility to some extent.

Second, because the study mainly focuses on large Nordic companies, its transferability to other type of corporations or even more so to small and medium sized enterprises might be low. Western CV studies and reports typically focus heavily on western CV programs and their startups which can hinder their learnings applicability for example in Asia. The same issue was reported for example in Eckblad's et al. (2019) recent report on global corporate venturing which has focused mainly on Europe, North America, and Israel. On the other hand, big CV programs are typically the most applicable for large corporations which need startups agility and rapidness to for example speed-up their new product development so the study's applicability might be reduced for small firms too. Also, the fact that the study focused on an alliance type of corporate venturing, might hinder the study's applicability in individual organisations. Although there is no direct rationale, why similar type of approach with an external intermediary would not work in a stand-alone corporation, more research is needed in that regard.

Finally, the study prompts important future research areas for both Foundry in the model's outcome assessment and scholars in studying different startup program types. Whereas this study identified practices for effective venture clienting, Foundry should next implement those to its alliance network and start to objectively quantify financial result of venture clienting. The financial estimates should be considered already in each projects' scoping phase, whether it is related to a commercial potential of a new product, or cost savings after a new technology reduces experts' needs for travel. This financial information must be tracked more accurately in each project phase and communicated back to Foundry to improve learning. It would also be plausible to execute a longitudinal case study of the topic for example through a master's thesis work. Secondly, from scholars' perspective, it would be especially important to research how different startup programs, such as venture clienting, themselves differ from one another or alike CA programs. The research could not only reveal more best practices in effective startup supplying but also reveal how different type of solutions or dimensions can strategically benefit different type of business needs. The research could either examine only certain

dimension's benefits and drawbacks, such as using an alliance-based intermediary versus a firm-specific program, or try to give a holistic outlook on how for example Gutmann's (2019) and other scholars CV dimensions favour different type of strategies in corporate venturing.

# **REFERENCES**

- Battistini, B., Hacklin F. & Baschera, P. (2013) The state of corporate venturing: Insights from a global study. Research technology management. 56 (1), 31–39.
- Biniari, M., Simmons, S., Monsen, E. & Moreno P. (2015) The configuration of corporate venturing logics: An integrated resource dependence and institutional perspective. Small business economics. 45 (2), 351–367.
- Bonzom, A. & Netssine, S. (2016) How do the world's biggest companies deal with the startup revolution? Insead & 500 Startups.
- Combient Foundry. (2023) Venture client approach. 3.6.2023. Available: https://combientfoundry.com/our-approach.
- Cooper, R. & Kleinschmidt, E. (1991) New product processes at leading industrial firms. Industrial marketing management. 20 (2), 137–147.
- Dushnitsky, G. (2011) Riding the next wave of corporate venture capital. Business strategy review. 22 (3), 44–49.
- Dushnitsky, G. & Lenox, M. J. (2006) When does corporate venture capital investment create firm value? Journal of business venturing. 21 (6), 753–772.
- Eckblad, J., Gutmann, T., & Lindener, C. (2019). Report on global corporate venturing research data. Available: https://www.corporateventuringresearch.org/.
- Freeman, J. & Engel, J. S. (2007) Models of innovation: Startups and mature corporations. California management review. 50 (1), 94–119.
- Ganti, A. (2022). Angel investor definition and how it works. Investopedia. 3.1. 2023. Available: https://www.investopedia.com/terms/a/angelinvestor.asp.
- Gimmy, G., Kanbach, D., Stubner, S., Konig, A. & Enders, A. (2017) What BMW's corporate VC offers that regular investors can't. Harvard Business Review Digital Articles. 7.27.2017 (1), 2-6.
- Grant, M. James, M. & Logan, M. (2022) What a startup is and what's involved in getting one off the ground. Investopedia. 26.1.2023. Available: https://www.investopedia.com/terms/s/startup.asp.
- Gutmann, T. (2019) Harmonizing corporate venturing modes: an integrative review and research agenda. Management review quarterly. 69 (2), 121–157.
- Hayes, A. (2022) Venture capital: What is VC and how does it work? Investopedia. 4.2.2023. Available: https://www.investopedia.com/terms/v/venturecapital.asp.
- Henz, T., Sibanda, T., Wang, M. & Brown, S. (2021) Collaborations between corporates and start-ups. 26.2.2023. Available: https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/collaborations-between-corporates-and-start-ups.

- Hill S. & Birkinshaw J. (2008) Strategy–organization configurations in corporate venture units: impact on performance and survival. Journal of business venturing 23(4), 423–444.
- Hofmeister, J., Herve, O. & Loeffelbein, K. (2020) The next big thing to boost your innovation The venture client model. Capgemini. 4.10.2022. Available: https://www.capgemini.com/insights/expert-perspectives/the-next-big-thing-to-boost-your-innovation-the-venture-client-model/.
- Kohler, T (2016) Corporate accelerators: building bridges between corporations and startups. Business horizons. 59(3), 347–357.
- Kurpjuweit, S. & Wagner, S. (2020) Startup supplier programs: A new model for managing corporate-startup partnerships. California management review. 62 (3), 64–85.
- McKinsey & Company. (2009) Enduring ideas: The three horizons of growth. McKinsey quarterly. Available: https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/enduring-ideas-the-three-horizons-of-growth.
- Miles, M. & Covin, J. (2002) Exploring the practice of corporate venturing: some common forms and their organizational implications. Entrepreneurship theory and practice. 26(3), 21–40.
- Narayanan, V., Yang, Y. & Zahra, S. (2009) Corporate venturing and value creation: a review and proposed framework. Research Policy 38(1), 58–76.
- Pauwels C., Clarysse B., Wright, M. & Van Hove, J. (2016) Understanding a new generation incubation model: The accelerator. Technovation 50/51(2016), 13–24.
- Prashantham, S. (2019) The two ways for startups and corporations to partner. Harvard Business Review Digital Articles. 30.1.2019 (1), 2-4.
- Prats, J. & Siota, J. (2019) How corporations can better work with startups. Harvard business review.
- Reimsbach, D. & Hauschild, B. (2012) Corporate venturing: an extended typology. Journal of management control. 23 (1), 71–80.
- Sanders, D., Gomez, J., Goldstein, A., Dumler, C., Saleh, N. (2020) Multi-channel corporate venturing: A build, partner, buy approach for corporate leaders in the new decade. Deloitte Digital.
- Saunders, M., Lewis, P. & Thornhill, A. (2019) Research Methods for business students. Eighth edition. Harlow, England: Pearson education.
- Thompson, N. Bonnet, D. & Jaballah, S. (2020) Lifting the lid on corporate innovation in the digital age. Capgemini Invent & MIT.
- Tour, A., Soussan, P., Harlé, N., Chevalier, R. & Duporter, X. (2017) From tech to deep tech: Fostering collaboration between corporates and startups. Hello Tomorrow & The Boston Consulting Group.
- Voss, C. Tsikriktsis, N. & Frohlich, M. (2002) Case research in operations management. International journal of operations & production management. 22 (2), 195–219.

- Weiblen, T. & Chesbrough, H. (2015) Engaging with startups to enhance corporate innovation. California management review. 57 (2), 66–90.
- Yin, R. (2018) Case study research and applications: design and methods. Sixth edition. Los Angeles: SAGE.
- 27pilots. (2023) Boost your competitiveness. 26.12.2022. Available: https://www.27pilots.com/.

## **APPENDIX**

### Appendix A. Interview guides in English

### Introduction

- Structure of the interview and asking permission to record the interview.
- Introduction to the master's thesis topic.
- Background: previous innovation / startup related work experience.

#### 1. Diffusion of startup collaboration

- How is venture clienting included in the corporation's strategic level innovation management? (What are %-shares e.g., in internal, external, and open innovation)
  - o Do you have other similar types of startup collaboration programs?
- What kind of technological challenges are best to outsource for venture clienting?
   Where do suitable challenges stem from? (Strategy, customers, competitors)
  - o What kind of scope would work best for the venture client opportunities?
  - o Do case teams focus more on the need or the end solution in the beginning?
  - What kind of role should the internal project team have when using an external venture clienting process? (E.g., from project setup to beginning of the pilot/PoC)

## How is venture clienting spread within the organization?

- How are the organizational innovation challenges and opportunities sought as well as how often? (Generic queries, booking meetings, etc.)
- o Could this be improved? How?
- How is information about venture clienting spread compared to other types of startup/scaleup collaboration programs?
- How do you find passionate people to drive venture clienting type of innovations within the organization?

### 2. Value perception (benefits and costs)

On a high level, what is important to your organization in terms of innovations and new technologies?

### • What are the benefits of venture clienting on the high level?

- Are those for example analysing the arising field of technologies, going through the startups in a rapid manner (legwork), finding top-quality solutions or building brand image for the organization and its clients?
- What type of business benefits are you mainly pursuing with the venture client model? (E.g. increased revenue, growth, cost effectiveness, quality, risk avoidance) How are those prioritized?
- What is the rationale to use (external) venture clienting instead of finding the startups yourself or sticking to corporation's existing partners / suppliers?
- How does venture clienting differ from developing technologies internally, with established suppliers or with other types of partners?
- How has this been realized in the previous venture client projects?

#### What are the benefits of venture clienting on a project level?

- o How have previous case teams perceived the value of venture clienting?
- Does perception of benefits change throughout venture client program? How?

### What are the costs of venture clienting on organizational and project level?

- What are the main costs for a case team to use a venture client process? How are these costs distributed in your organization?
- o How much money (budget) and time (FTEs) do project teams need to invest?
- Do you think that's a good amount to support external venture clienting, too little or too much? How do you decide what's a good amount?
- o How do you decide who to involve in your meetings around the case team?
- What else does it take? (Mindset shift / ability to switch from one task to another (cf. speaking another language), decision making capacity, social capacity, etc.)
- What are the other reasons why line managers do not try venture clienting?
- o Is venture clienting perceived as an additional task on top of job duties?
- O What matters would the previous case teams like to develop in the model?

#### 3. Value measuring

### How is the business value of venture clienting measured and what are the KPIs?

- o How is top level management measuring the value in venture clienting?
- How are execution benefits measured? (E.g., number of successful pilots, financial savings, time-to-market, customer satisfaction, increase in revenue)
- How are information benefits measured? (Learning, having a channel to speak with external domain experts, screening hundreds of startup technologies quickly, branding)
- How is the rapidness of finding new technologies measured against finding a new partner by yourself or using your existing partnerships?
- o How is the quality of finding the best solution providers measured?
- o How is the technological readiness measured in the projects?
- How is the business value measured in general regarding new technology and early phases of the innovation process?
- Can you use lacking indicators to measure the collaboration success as a whole?
   (e.g., the ratio of how spending to a startup collaboration is converted into new-product sales or the ratio of gross margin to new-product sales.)
- Can you use any kind of leading indicators to estimate the collaboration's success? (e.g., sales or profitability improvements in worst, most likely, and best-case scenarios as well as the probability of each scenario.)

### • How are the learning and information benefits measured?

- o How this could be measured?
- O How are the brand benefits measured?
- Do you use databases for tracking how the technologies develop? How is venture clienting integrated to it?

### · What should be measured?

- How have the previous case teams measured project success? (solution's technological success, time-to-value, etc.)
- o Do the case teams KPIs or goals change along the venture client program?

#### Additional material and earlier documents

- Do you have any supportive material such as documents or workshop notes related to startup collaboration so far?
- Would you have a previous case owner in mind that I could interview too?

### Appendix B. Interview guides in Finnish

#### Johdanto

- Haastattelurakenne sekä luvan kysyminen nauhoittamiseen.
- Johdattelu diplomityön aiheeseen.
- Tausta: aiempi innovaatio / startup keskeinen työkokemus.

#### 1. Startup-yhteistyön leviäminen

- Miten venture client malli on sisällytetty yrityksen strategisen tason innovaatiojohtamisessa? (Mitkä ovat %-osuudet esim., sisäisessä, ulkoisessa sekä avoimessa innovoinnissa)
  - Onko teillä muita vastaavanlaisia startup-yhteistyö ohjelmia?
- Minkälaiset teknologiset haasteet on parasta ulkoistaa venture client -ohjelmaan?
   Mistä sopivat haasteet kumpuavat? (Strategia, asiakkaat, kilpailijat)
  - Millä tavalla määritellyt haasteet sopivat parhaiten venture client ohjelmaan?
  - Keskittyvätkö projektitiimit alussa enemmän tarpeeseen vai loppuratkaisuun?
  - Minkälainen rooli sisäisellä projektitiimillä pitäisi olla hyödyntäessään venture client -ohjelmaa? (esim., projektimäärityksestä pilotin/PoC:n aloittamiseen)

### • Miten venture client ohjelmaa levitetään organisaatiossa?

- Miten organisatorisia innovaatiohaasteita ja mahdollisuuksia etsitään ja kuinka usein? (geneeriset kyselyt, tapaamisten sopiminen, etc.)
- o Voisiko tätä kehittää? Miten?
- Miten informaatiota venture client -ohjelmasta levitetään muihin startup / scaleup -ohjelmiin verrattuna?
- Kuinka löydätte intohimoisia ihmisiä johtamaan venture client -ohjelman tyyppisiä innovaatioita organisaatioissa?

### 2. Arvon kokeminen (hyödyt ja kustannukset)

Ylätasolla, mikä on organisaatiossanne tärkeää innovaatioiden ja uusien teknologioiden suhteen?

## • Mitkä ovat venture client -ohjelman hyödyt ylätasolla?

- Ovatko ne esimerkiksi nousevien teknologioiden analysointi, startuppien läpikäyminen nopeasti (tiedon kerääminen), parhaiden ratkaisuiden löytäminen tai brändikuvan rakentaminen organisaatolle ja sen asiakkaille?
- Minkälaisia liiketoimintahyötyjä venture client -ohjelmalla pääasiallisesti haetaan? (esim. liikevaihdon kasvu, yrityksen kasvu, kustannustehokkuus, laatu, riskin välttäminen) Miten näitä priorisoidaan?
- Mistä syystä venture client -ohjelmaa käytetään sen sijaan, että startupit etsittäisiin itse tai pysyttäisiin yhteistyössä yrityksen vakiintuneiden partnereiden ja toimittajien kanssa?
- Miten venture client -ohjelma eroaa teknologioiden kehittämisestä sisäisesti, vakiintuneiden toimijoiden kanssa tai muiden partnereiden kanssa?
- Miten tämä on realisoitunut aiemmissa projekteissa?

### • Mitkä ovat venture client -ohjelman hyödyt projektitasolla?

- Miten aiemmat projektitiimit ovat kokeneet venture client -ohjelman arvon?
- o Muuttuuko kuva hyödyistä venture client -ohjelman aikana? Miten?

#### Mitä kustannuksia venture client -ohjelmasta syntyy yritys- ja projektitasolla?

- Mitkä ovat pääasialliset kustannukset projektitiimeille venture client -ohjelmassa? Miten nämä kustannukset jaetaan organisaatossa?
- Kuinka paljon rahaa (budjetti) ja aikaa (henkilötyötunteja) projektitiimien tulee investoida?
- Onko se järkevä määrä venture client -ohjelman tukemiseen, liian vähän tai liikaa? Miten määritätte mikä olisi hyvä määrä?
- Miten päätätte, keitä projektitiimistä tapaamisiin kulloinkin osallistuu?
- Mitä muuta vaaditaan? (mielenlaadun muutosta / kykyä vaihtaa tehtävästä toiseen (vrt. toisen kielen puhuminen), päätöksentekokapasiteettia, sosiaalista kapasiteettia, ym.)
- o Mistä muista syistä projektipäälliköt eivät kokeile venture client -ohjelmaa?
- Koetaanko venture client -ohjelma ylimääräiseksi normaalin työn ohella?
- o Mitä aiemmat projektitiimit haluaisivat kehittää ohjelmassa?

#### 3. Arvon mittaaminen

- Miten venture client -ohjelman arvonluontia mitataan ja mitkä ovat KPI:t?
- Miten johto mittaa venture client -ohjelman arvon luontia?
  - Miten toimeenpantavia hyötyjä mitataan? (esim. onnistuneiden pilottiprojektien määrä, taloudelliset säästöt, markkinoiden saavuttamiseen kuluva aika, asiakastyytyväisyys, liikevaihdon kasvu)
  - Miten informaatiohyötyjä mitataan? (oppiminen, mahdollisuus puhua ulkoisten asiantuntijoiden kanssa, satojen startuppien läpikäynti, brändäys)
  - Miten uusien teknologioiden löytämiseen kuluvaa aikaa mitataan verrattuna partnerien etsimiseen itse tai että hyödynnettäisiin vain olemassa olevia partnereita?
  - Miten parhaan teknologian löytämistä voidaan mitata?
  - Miten teknologista valmiustasoa (TRL) mitataan projekteissa?
- Miten liiketoiminta-arvoa yleensä mitataan uusien teknologioiden osalta sekä aikaisessa vaiheessa innovointiprosesseja?
  - Voidaanko laahaavia mittareita käyttää projektien onnistumisen mittaamisessa?
     (esim., miten startup yhteistyön kustannukset muuttuvat uusien tuotteiden myynniksi tai miten se heijastuisi uusien tuotteiden myyntikatteessa?)
  - Voidaanko ennustavia mittareita käyttää projektin onnistumisen mittaamisessa?
     (esim., ennusteet myynnin tai kannattavuuden paranemiselle huonoimmassa, todennäköisessä ja parhaassa tapauksessa, ja kunkin skenaarion todennäköisyys)

### Miten oppimis- ja informaatiohyötyjä mitataan?

- Miten tätä voisi mitata?
- o Miten brändihyötyjä mitataan?
- Käytättekö tietokantoja uusien teknologioiden kehityksen seuraamiseen?

#### • Mitä pitäisi mitata?

- Miten aiemmat projektitiimit ovat mitanneet onnistumista? (ratkaisuiden teknologista onnistumista, markkinoiden saavuttamiseen kuluvaa aikaa, jne.)
- Muuttuvatko projektitiimien KPI:t ja tavoitteet venture client -ohjelmien aikana?

## Lisämateriaali ja mahdollinen aiempi dokumentointi

- Onko teillä muuta materiaalia tähänastisesta startupyhteistyöstä kuten dokumentteja tai workshop-muistiinpanoja?
- Tuleeko mieleenne, jotakuta projektipäällikköä, jota voisin myös haastatella?