Venture Studio: A Framework for Digital Sustainability Entrepreneurship

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JUHANA KUPARINEN: Venture Studio: A Framework for Digital Sustainability Entrepreneurship

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Climate change and energy, and materials dependency problems in Europe and around the world put a lot of pressure on our societies to develop new innovative and sustainable solutions for a wide array of industries. Venture studios present an interesting tool for sustainable innovation: a single company produces a multitude of startups in a parallel innovation process. However, venture studios are also a relatively new model of business and innovation. What a venture studio actually is and how it could concretely produce new innovative startups in the field of digital sustainability remains a rather tricky question.

This thesis examines venture studios and how they could be utilized with digital sustainability in mind. This thesis produces a definition of venture studios, a typology for different types of venture studios, and examines them through different models of funding. After this, the thesis ties these theories with digital sustainability. More specifically, what kinds of everyday routines and qualities the studio should cultivate to excel in digital sustainability?

We produce five different venture studio types: founder's sandbox, entrepreneurial community, company as a product, copy-cat, and strategic partner studio types. As we examine these types in the context of digital sustainability, we come up with the optimizer vs. creator model as a basis to choose a venture studio type. We also produce a set of routines that can be used as a high-level framework for running a digital sustainability venture studio. Finally, interviews with industry experts both validate and challenge our ideas: Typing venture studios based on go-to-market strategy is found to be an interesting new angle for future research, as the typology in this thesis might not capture the whole business model of different studio types well.

Keywords: venture studio, startup studio, venture builder, company builder, sustainability, digital entrepreneurship, digital startup

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Glossary

digital artifact Digital artifacts are digital extensions to physical products or services.

digital startup Is a firm, or an organisation within an established firm, in its early stages of development and growth in which digital technologies enable at least one component of a business model in a way that is not just functional but vital to the firm.

EIR Venture studio employees who create the portfolio companies are often called Entrepreneurs In Residence..

LP Limited Partner (LP) is an investor, who has limited voting power and participation in a businesse's day-to-day activities..

seed paper Seed paper is a research article, that can be used to easily find additional research on the subject, with the help of tools that map citations to and from the paper.

sustainability Improving the social and environmental performance of the present generation without compromising the ability of future generations to meet their social and environmental needs.

triple bottom line Provides a framework for measuring the performance of the business and the success of the organization using three lines: economic, social, and environmental.

venture studio Is a business that internally co-founds and develops startups with resources like people, expertise, capital and networks. They develop repeatable processes for startup creation and are deeply involved with their startups well past the initial stages of their life cycle, providing ongoing support and guidance. They typically take a profitable share of the startups for themselves.

1 Introduction

1.1 Research Objectives and Motivations

The world is going through a transformation towards more sustainable societies. The United Nations **Sustainability Development Goals**, worries about energy dependency, and the **European Green New Deal** are good examples of the drive to transform our societies [1]–[3]. Moving from old technologies and infrastructure to new more sustainable solutions requires a lot of innovation and new digital systems to integrate these innovations into our information societies.

Startups are a typical way to innovate in our modern economies [4]. Although one can found a startup completely alone, these firms are often cultivated in incubators and accelerators, that provide mentorship, networking, and other kinds of benefits to new ventures. Venture studios have gone through a recent surge in popularity and offer an alternative environment to build startups. However, the evidence for whether venture studios are actually a good solution or what a venture studio even is, is still limited in research. [5]

On these premises, this thesis aims to define the term ”venture studio”, identify common venture studio structures, and finally examine how they would work with innovative digital sustainability in mind.

1.2 Research Questions

Considering the scope of this thesis, the following research questions were chosen:

RQ1: What is a venture studio?

Since the term venture studio is very loosely defined, this question aims to give a sound academic definition for the term, at least in the context of this thesis.

RQ2: What are the characteristics of successful venture studios?

Answering this question is important in regard to RQ4, since any sound framework has to be based on effective practices to accomplish the desired goals.

RQ3: What are the common characteristics of successful digital startups solving problems in sustainability?

We need to define what a digital startup actually is and also look at common characteristics shared by digital startups operating in the field of sustainability: what kinds of networks do these utilize, who invests in these startups et cetera. Answering this question creates a good foundation for the theories of RQ4.

RQ4: How should a venture studio, focusing on digital solutions for sustainability, conduct its operations and decision-making?

This is the main point of this thesis: a framework for venture studios focused on the creation of digital sustainability startups. The framework will outline the daily routines and

characteristics for a venture studio wanting to innovate in digital sustainability.

1.3 Research Methods and Sources

To gain an understanding on the four research questions of this thesis, the following research methodologies are used.

Literature review will be conducted at first, to gain an understanding of the current knowledge and qualitative/quantitative data regarding venture studios and digital businesses focused on sustainability. Literature reviews will be especially important in defining what a venture studio is and what determines venture studio success (RQ1 and RQ2). The literature review also gives a solid foundation on the current knowledge regarding digital startups and innovation in sustainability (RQ3). Sections concerning the literature review are 2 and 3. The literature review is an integrative review, as defined by Snyder H. [6] The reason for this approach is that we are trying to create preliminary theories, models, and frameworks for the emerging topic of venture studios (RQ4). This also means that the scope of the review will be limited to only answering the research questions.

Interviews with a selected set of industry experts in venture studios, digital, and sustainable business will be conducted. Interviews will be especially useful to get access to more personal and deeper opinions of various experts. This will be especially useful with RQ3 and RQ4.

Case studies will be used to compare the business models and operational structures of various venture studios and companies focusing on digital sustainability. Case studies will be especially useful in forming the hypothesis about the operational framework for

the digital sustainability venture studios of this thesis (RQ3 and RQ4).

1.4 Structure of the Thesis

The thesis is divided into self-contained chapters, with their own methodologies, results, and discussions. The first chapter of substance, 2 Venture Studios, defines ”venture studio” as a term, develops a typology for different venture studio archetypes, and finally combines them with funding structures that would likely fit each type. Chapter 3 Digital Sustainability Startups and Venture Studios examines digital sustainability, and how it could fit together with venture studios. Chapter 4 Interviews tests my theories against the opinions of a few experts, who have experience from different angles of the topic. Finally, we conclude the thesis in chapter 5 Conclusions.

2 Venture Studios

2.1 Methodology

2.1.1 Literature Review

The first half of this chapter is based on a limited ”standalone” literature review done as part of the writing of this thesis. Since venture studios can be considered a relatively new field of research, other extensive literature reviews have not yet been done. Instead of mainly basing our information on outside sources, we have to dig deeper.

Academic sources were mostly searched from the Web of Science and the Google Scholar databases, using keywords like ”venture studio”, ”venture builder”, ”startup studio”, ”company builder”, etc. Found academic sources were additionally put into litmaps[1] to be used as seed papers, which provided us additional interesting sources, we would not have found otherwise.

Since some of the findings of this chapter also contributed to a joint research project on venture studios called Big Venture Studio Research 2024[2] led by Pog M. and Malyy M. [7] During the project, articles, books and other sources were also searched from a shared

[1] https://www.litmaps.com/

[2] https://www.linkedin.com/posts/maxpog_big-call-to-venture-studios-our-teams-full-time-activity-7158769463218130944-LkXQ/

Zotero database provided for the researchers. These were used as sources in this thesis as well. Additionally, a research Slack channel was joined, where other contributors sometimes shared their own new research on the subject. We then added interesting papers that were shared as sources for this thesis.

Quality of the academic articles was measured with the number of citations associated with them which, at least according to Massaro et al. and Bandara et al., can be used as a proxy for said quality. As Zaheer et al. and Bandara et al. point out, older articles also have more time to accumulate citations, so citations by year are also taken into account. Still, the number of articles is not as huge as with many other subjects, and many relatively less-cited articles were also accepted as sources. [8], [9]

Due to limited existing research on the subject, many non-academic sources were also used. These were largely collected from social media networks relevant to venture studios and from publicly available recorded interviews with visible figures in the field.

Method for literature review

As the academic research on venture studios is very sparse and scattered, the following search term yielded only 19 results from the Web of Science database:

```
"venture studio"* OR "startup studio"* OR "venture builder"*
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Among the results was the article from Patel et al. [5] and Romme et al. [10]. As it is evident, the number of results is very tiny, and we had to rely on many other sources detailed earlier.

2.1.2 Ideal-type analysis

Rather than focusing on actual cases using case studies, the venture studio cases in this thesis will be inspected through ideal-type analysis [11]. The reason for this is simple: the business models and exact working mechanisms of specific venture studios are often not publicly available. This makes it hard to assign exact qualities to specific venture studios, especially when using second-hand sources.

According to Stapley et al., a typology is formed by ”grouping cases or participants into types on the basis of their common features” [11]. Thus, a typology allows us to fetch information from various sources and use this information to build a few ”archetypal” cases of different venture studios. This enables the exploration of different venture studio models very concretely, even without complete information on singular cases or models from specific venture studios.

Method for Ideal-type analysis

The process for ideal type analysis was as follows: first, we familiarized ourselves with various descriptions of venture studios from various sources. Mainly, these included third-party interviews, blogs, and venture studio websites. After going through the gathered material, we summarized each real-world venture studio case. Next, we formed the ideal types by finding commonalities and differences between different venture studio descriptions. Finally, we linked a real-world optimal case to each ideal type, illustrating the specific type’s characteristics.

2.2 Background

Although the academic research on the history of venture studios is rather lacking [5], the first examples of venture studios can most likely be found from the 90s: Idealab[3], often considered to be the first venture studio at least in the US, was founded in 1996 by Bill Gross. After the success of Idealab, waves of new venture studios were founded in the 2000s and 2010s. Venture studios are indeed a rather new phenomenon among business models, gaining more popularity each year [5], [12], [13].

2.3 What is a Venture Studio?

Venture studio as a term is not very well defined, at least not academically speaking. Venture studios are also sometimes called startup studios, venture builders, company builders, and startup foundries, depending on the context. Some people see all of these as the same thing, some people think that the terms mean completely different things [4]. In this thesis, we will consider all of these to be under the umbrella of a venture studio.

2.3.1 Characteristics of a Venture Studio

Based on literature and appearances of the term in various other sources, we can assign some common shared qualities to most definitions of a venture studio:

1. They are businesses that focus on internally developing and validating startup ideas.
2. Studios co-found these companies, having a certain profitable share of the new startups for themselves.

[3] https://www.idealab.com/

[4] https://www.linkedin.com/pulse/what-difference-between-startup-studios-venture-dianna-lesage/

3. Venture studio startups are started by people who work under the venture studio.

4. Studios are deeply involved with their startups well past the initial stages of the startup's life cycle, possibly as long as the startup and the resulting business exist or exits.

5. Studios create repetable and sustainable processes for creating their startups, often according to lean, agile, and design thinking principles.

6. Studios often fund their own startups, especially at the early stages of the startup's life cycle.

7. Studios build professional networks, relevant expertise, and other resources that are shared with each new venture the venture studio produces.

Let's break these down a little bit more to truly understand what each of these means.

Firstly, venture studios are businesses that internally develop and validate startup ideas. This means that the venture studio as a business focuses most of its internal resources, like people, capital, and expertise, on developing startups within the company. [5], [14], [15]

Secondly, the venture studio co-founds these startups, taking a profitable share for itself. This means that the venture studio often receives a considerable amount of the new startup stock for themselves (at least over 10%, but even up to 100% depending on the venture studio and their working model). In return, the venture studio acts as a co-founder of the business and is much more involved in the day-to-day activities of the new venture than the somewhat similar business accelerators or incubators. [5], [13]–[16]

Thirdly, venture studio startups are created by people who work under the venture studio. In many contexts, the ”employees” of the venture studio are referred to as Entrepreneurs In Residence (EIRs) [13], [17]. Unlike similar accelerators or incubators, venture studios

do not seek to invest in businesses created outside the venture studio by default (though surprisingly many organizations calling themselves venture studios also seem to do so [14]). Rather, the venture studio focuses on creating these businesses internally. Each new venture has been the idea of one of the EIRs at first, who along with the venture studio would have become one of the co-founders of the new business.

In the fourth characteristic of a venture studio, we mention them being deeply involved with their startups well past the initial stages of the startup's life cycle. Again, we can see a big difference between venture studios and similar incubators and accelerators here. As a co-founder, the venture studio will most likely plan on being part of the new startups as long as the other co-founders. This can mean being on board as long as the business exists. The startup also might have an exit plan, in which case the venture studio will exit the business along with the other co-founders when the time of the planned exit comes [14], [15]. As mentioned earlier, being deeply involved means that the venture studio will, as a co-founder, participate in the day-to-day activities of the business as much as the other co-founders with similar ownership of the business.

The fifth characteristic is concerned with venture studios having repeatable and business-wise sustainable predefined processes for startup creation. As the venture studio gains more and more experience with business creation, it also develops processes and systems, which make creating each new venture a lot easier with repeatable and proven steps. These processes are very similar to lean startup or agile kinds of processes with iterative approaches, where the business is developed step by step based on stakeholder feedback. Processes for quickly recognizing and killing off unsuccessful new ventures are also in place to ensure that the venture studio remains profitable and does not waste its resources. These practices are often articulated in so-called ”playbooks” that work as a guide for the venture studio employees and other stakeholders. [13]–[15].

At the sixth point, we mention that the venture studios often fund their startups, especially

at the earlier stages. The venture studios do also sometimes seek outside investment, but a venture studio with its own investors or a big bank account will most likely also be the first monetary investor of its own startups. [14], [15]

Lastly, the venture studio builds professional networks, relevant expertise, and other resources that are shared with each new venture. One of the big benefits of the venture studio model is that the business can create the perfect environment for the cultivation of new startups within its bounds. Much like any business in other kinds of industries, the venture studio gathers collective experience, skilled personnel, capital, networks, and other useful resources over time, which can be shared within the venture studio. The difference from a more traditional business is that these resources are focused on startup creation. [14], [15]

2.3.2 The Definition

Based on the previous discussion and the definitions in various literature on venture studios, a venture studio is defined as follows in the context of this thesis:

Venture studio is a business that internally co-founds and develops startups with resources like people, expertise, capital, and networks. They develop repeatable processes for startup creation and are deeply involved with their startups well past the initial stages of their life cycle, providing ongoing support and guidance. They typically take a profitable share of the startups for themselves.

2.4 Venture Studio Structures

This chapter goes through the possible venture studio structures from the point of view of investors and owners of the venture studio.

There is quite a few ways to structure a venture studio. Venture studio structures are not tied to specific types of venture studios, and all kinds of structures can exist in all kinds of venture studio contexts. The main challenges that any venture studio structure has to solve lie within funding of the new startups and the ability to quickly roll out new ventures while keeping the structure from getting too complex. Investor and founder alignment is also very important. [18], [19]

1. All of the venture studio structures include the business entity that acts as the venture studio, be it a private holding company, a fund, or anything else.
2. A venture studio structure can include a separate fund that invests in the venture studio startups. Funds can simplify the process of raising capital.
3. A venture studio structure can also include a syndicate of investors, which can also be an alternate or additional way to raise capital.

2.4.1 Structures and Their Combinations

John Carbrey at FutureSight[5] has written a whitepaper on the subject of various venture studio structures. As academic research and sources on venture studio structures are non-existent, a whitepaper is the next best thing we can use to inspect the topic: [18], [19]

[5]https://futuresight.ventures/

Single fund model — fund as the venture studio

The first model detailed by Carbrey is a fund acting as a venture studio. All startup equity sits within the fund, including founder- and purchased equity. The main advantage is the simplicity of the model, but Carbrey details a lot of potential disadvantages that should be considered:

1. High fee-load[6] is necessary to cover incubation costs with smaller funds.
2. High carry[7] has to be used to incentivize operational efforts on incubation.
3. Fund has to participate in or lead funding rounds, or risk giving mixed signals to other investors.
4. High fund commitment can bias decisions in terms of continuing or killing off a company.

Single fund model foundry — foundry with bill-back

Next on the list is a so-called foundry model. It's a bit more complex than the previous single fund model, with three different actors to consider, on top of the new startups.

The new startups are funded by the venture studio fund which along with the venture studio founders[8] and any EIR sit at the cap table[9]. The fund receives preferred shares[10], while the

[6]Fee is an expense, charged by the managers of a fund annually.

[7]Carry is a performance fee that is paid to General Partners (GP) as a percentage of the profits generated by a fund. Basically, carry is a reward for GPs when they generate positive returns for the fund.

[8]Note that venture studio founders are not the EIR, but rather the creators of the whole venture studio. The venture studio founders get direct equity in this model because the venture studio itself does not receive equity.

[9]Cap table is a document that outlines the company's equity ownership. Owners often consist of founders, investors, and employees.

[10]Preferred stock is a class of shares that gives the holder a higher claim to dividends or asset distribution than common shareholders.

venture studio founders receive common shares[11]. In addition, there is a separate operating venture studio, which does not receive shares. It will help with the new startup operations and has a bill-back relationship with them. In practice, this means that the venture studio will bill the startups on any operational costs they incur for the venture studio (often every month). This ensures that the venture studio breaks even.

The benefits of this model are:

1. Only a single entity receiving shares on the venture studio side.
2. Startups pay for management and overhead costs.
3. Limited partners (management and fund staff, for example) can receive direct equity allocation via a Limited Partner Advisory Committee (LPAC) agreement.
4. LPs[12] equity does not suffer from funds carry provisions.

The potential downsides are:

1. Venture studio management might be incentivized to create more companies than necessary, to increase their overhead/fee load.
2. Venture studio management might want to focus on single winning companies, due to management allocation on the startups.
3. If fees are not successfully collected from all startups, the operational cash flow of the foundry might be affected.

[11]Common shares, also known as common stock, represent ownership in a company and give shareholders the right to vote on company matters and receive dividends.

[12]Limited Partner (LP) is an investor, who has limited voting power and participation in a business's day-to-day activities.

4. Fund has to participate in or lead funding rounds, or risk giving mixed signals to other investors.

5. Outside investors might be troubled by the practice of billing companies, as it's not typical in VC.

Dual entity model — fund and venture studio pairing

This is also a more complex structure. On top of the EIRs, the shares of the new startups are split between the venture studio (founder shares) and a fund (preferred shares).

The venture studio most likely charges a 2-2.5% management fee and carry. Since the venture studio expenses at the beginning can't most likely be covered with the fee and the carry, the fund's first investment is going to be in the venture studio itself. This gives the fund access to some of the common shares that go into the venture studio. This investment can be equity, but also a debt instrument.

The potential benefits of this model:

1. Syndication of future pro-rata rights: the venture studio can offer the fund to always hold a certain percentage of equity in each new startup.

2. Low cost in failed incubated companies and concepts.

3. Better alignment between venture studio management and LPs.

4. Clear role division between operations (venture studio) and funding (fund).

The potential downsides:

1. Complexity of the model.

2. Requires significant expertise and capital.

Single venture studio model — venture studio without fund

This is a very simple model, where the venture studio itself funds the new startups on top of the operational help. The venture studio can receive common or preferred equity in the new startups.

Potential benefits:

1. Very simple structure.
2. Agile compared to other models.
3. Venture Studio can determine the necessary capital and staffing allocation for each startup.

Potential drawbacks:

1. Can't realize the full value from ROFR[13] and pro-rata without the associated fund.
2. Difficult to get LPs to lead funding rounds or co-invest.
3. Overall, much harder to raise funds for startups without the fund and with the two previous disadvantages.
4. Non-biased outlook and spending discipline required to avoid giving up on companies too early or spending too much on a single company.

[13]ROFR (Right of First Refusal) is an agreement, where investors can buy shares before they are offered to external parties.

Single Venture Studio Model + Syndicate — Venture Studio with Extended Syndicate

This model tries to cover the drawbacks of the single venture studio model by introducing a syndicate of LPs and angel investors. When the venture studio startups need additional capital, single/special-purpose vehicles[14] (SPVs) can be created to enable the LPs and angels to invest in the startups.

Potential benefits:

1. All the benefits of a single venture studio model.
2. Captures value from ROFR and pro-rata much better than the single venture studio model.
3. Can utilize syndicate platforms[15] to simplify follow-on funding.

Potential downsides:

1. Difficulty of getting an effective syndicate up and running.
2. Syndicate investors are only committed to singular deals, which can lead to some startups being unable to get additional funding.
3. Alignment between investors and the venture studio might be an issue, since the syndicate is not ”owned” by the venture studio.

[14]Special-purpose vehicle is a subsidiary created by a parent company. They isolate financial risk by having their own balance sheets and allow investors to consolidate a pool of investments into a startup.

[15]A syndicate platform can be a digital platform that gathers together investors who want to invest in various ventures. In essence, the platform eliminates the need to create a syndicate from the ground up.

Dual entity + syndicate model - fund and venture studio pairing with a syndicate

Combines the venture studio/fund dual-entity with a syndicate. While this is a very complex structure, the funding options for the startups are much more diverse once the structure gets up and running.

Potential benefits:

1. Benefits of the syndicate and dual-entity model.
2. Even better at capturing value from ROFR and pro-rata rights.
3. The sources of funding are diversified.

The only potential downside of the model is a very complex structure that is hard to get up and running.

2.5 Dimensions of Support in Venture Studios and Their Characteristics

Mittermeier et al. tried to define a venture studio model taxonomy in their conference paper *Entrepreneurial Support Systems in the Digital Era: A Taxonomy of Digital Company Builders* [20]. Because Mittermeier et al. include in their analysis business models that are not considered to be venture studios in this thesis, this chapter builds upon the taxonomy by taking out irrelevant information and adding new relevant characteristics into the dimensions of support. This chapter lays the groundwork for categorization in the typology later in this thesis (2.6), and thus helps to answer RQ2: *What are the characteristics of successful venture studios?*

	Support Dimension	Characteristics				
WHO	Type of Entrepreneur	Visionary	Mature	Non-entrepreneur		
HOW	Degree of Supporting Services	Essential	Extended	Full		
	Governance Structure	Market-like	Hybrid	Hierarchy-like		
	Degree of Standardization	Low	Medium	High		
	Main Type of Routine	Partnering	Accelerating	Innovating		
	Main Advantage for the Entrepreneur	Entrepreneurial Know-how	Entrepreneurial Ecosystem	Democratization of Entrepreneurship	Innovation Outsourcing	Leverage Partner Assets
WHAT	Level of Innovation	Adjacent		Transformational		
	Driver of Innovation	Opportunities	Market	Tech/Topic		
	Source of Ideas	EIR	Venture Studio	Partner		
	Fate of the Ventures	VC Case	Acquisition	Continued Ownership		

Figure 2.1: Characteristics of venture studios, based on the taxonomy by Mittermeier et al.

2.5.1 Who is Supported

The dimension of who is supported is about the EIRs. The support can focus on:

Visionary founders, who are EIRs with their own ideas they want to implement within the venture studio.

Mature founders, who are either experienced entrepreneurs avoiding the uncertainties of solo entrepreneurship or founders that have skills in scaling already validated business ideas.

Non-entrepreneurs, which are founders with no previous entrepreneurial experience or their own ideas. They are most likely seeking entrepreneurial experience without risk or they have skills for a subset of entrepreneurial tasks.

2.5.2 How are they Supported

A venture studio can provide a few processes and structures to support the innovation process:

Degree of supporting service refers to the availability of free services given to the EIRs and their startups inside the venture studio. *Essential services* refer to shared services, like office spaces or consultation regarding taxes, finance, and accounting. *Extended services* build on the essentials by providing additional mentoring, funding, sales, marketing, and customer services. *Full service* includes a ”whole venture building team consisting of venture architects, UI/UX designers, product managers, and sometimes engineers” [20] on top of the extended and essential services.

Governance structure tells us where the decision-making power regarding the startups resides within the venture studio. In a *market-like* structure, the EIRs have the most power over the startups they create. They also carry most of the responsibility if the business does not succeed. On the opposite side of the spectrum is the *hierarchy-like* governance structure, where the EIRs work under the authority of the venture studio, and don’t necessarily bear as much responsibility as a result. *Hybrid-like* structures exist within a middle ground between the two.

Degree of standardization refers to the number of set processes and numeric figures the startups have to follow inside the venture studio. The degree from low to high is pretty self-explanatory.

Main type of routine refers to the day-to-day routine that helps the specific EIR type within the venture studio to succeed. *Partnering* routine tries to cultivate and provide

the EIRs a good network and an ecosystem of various actors, that can help their ideas to succeed. *Accelerating* routine tries to shorten the cycles of startup creation, so that as many startups as possible can be successfully produced within a certain time span. *Innovating* routine tries to create the perfect environment for innovation within the venture studio.

Main advantage for the entrepreneur is the main competitive advantage, the venture studio brings to the table in whatever goal the EIRs are trying to reach. The value in *entrepreneurial know-how* comes from the cooperation of a lot of different experienced entrepreneurs. *Entrepreneurial ecosystem* provides the entrepreneur with the necessary networks and resources to facilitate startup growth. *Leveraging partner assets* means that innovation is driven by resources provided by partners. *Idea outsourcing* is idea generation, where ideas are taken outside the venture studio, and the venture studio or the entrepreneurs do not have to invest in their own idea generation processes. *Democratization of entrepreneurship* enables everyday people to become startup entrepreneurs.

2.5.3 What is Supported

The venture studio model is designed to facilitate the development and operation of various critical areas in startups:

Level of innovation tells us what kinds of innovation could benefit from the venture studio type the most. *Transformational*-level refers to completely new innovations that have a high chance to either disrupt or even create new markets if truly successful. *Adjacent*-level tries to mainly improve already existing modes of business.

Driver of innovation tells where the various startup opportunities come to whoever will be generating the ideas. In the *opportunities* domain, the ideas stem from the opportunities given by the available resources at the venture studio's disposal. In the *market* domain, innovations are dictated mainly by the demands and gaps in the current market. In the *tech/topic* domain, innovation stems from expertise within a certain niche of technology or topic of interest, like sustainability.

Source of ideas simply refers to the origin of the ideas that the venture studio startups execute. It can be the EIRs, the venture studio itself, or its various partners.

Fate of the ventures is the final goal the venture studio has set for each of its startups. *VC case* refers to venture capital events, where the venture studio can exit the business as other investors fund the developing startup. *Acquisition* happens when the startup is simply sold as a whole to a willing customer. *Continued ownership* happens when the venture studio wants to retain a certain stake in the new startup as long as it exists.

2.6 A Typology for Venture Studio Models

In this section, we will form the ideal types following the process defined by Stapley et al. An ideal type consists of a short description of the main characteristics of the type, a table based on Mittermeier's research [20] filled with characteristics of the type, and finally an exemplary real-world case that likely illustrates the qualities of its associated type the most. The data that was used to form the ideal types can be found from Appendix C.

This section presents the following types: founder's sandbox, entrepreneurial community, company as a product, copy-cat, and strategic partner types.

2.6.1 The Founder's Sandbox Studio

The founder's sandbox studio tries to create the perfect environment for visionary founders to execute their ideas. In certain ways, these kinds of venture studios are very close to traditional incubators and accelerators, where the venture studio exists to support the needs and wants of its entrepreneurs. Processes and standardization are lax, the EIRs get a lot of equity in their startups, but also have more responsibility over their companies and their success. [20]

Support Dimension	**Characteristic**
Type of Entrepreneur	Visionary
Degree of Supporting Services	Essential
Governance Structure	Market-like
Degree of Standardization	Low
Main Type of Routine	Partnering
Main Advantage for the Entrepreneur	Entrepreneurial ecosystem
Level of Innovation	Transformational
Driver of Innovation	Tech/Topic
Source of Ideas	EIR
Fate of the Ventures	VC case

Table 2.1: Founder's sandbox studio dimensions

These kinds of venture studios are close to Mittermeir's founder-centric studios [20]. They target visionary founders, who bring their own ideas into the venture studio. The venture studio helps the founders to form teams and provides them with basic services and as much freedom as possible to implement their ideas. Governance is market-like, and the founders have to show they can be successful or risk not receiving any investments from the venture studio. The venture studio routine is partnering, as the goal is to provide the founders with all the necessary help to succeed with their own ideas. Because the

venture studio involvement is lower than in other types, the venture studio also takes a smaller equity stake from the startups: most likely about 10%. These venture studios are most likely tech/topic-driven in innovation, as this allows specialization in helping certain kinds of startups. The level of innovation is most likely transformational, as the freedom of the EIR in this type would allow them to experiment even with very atypical ideas.

Exemplary case: Carbon13

The UK-based Carbon13 is a very founder-centric venture studio focused on climate tech. It works by regularly recruiting cohorts of founders (about 80 potential founders, totaling in every cohort), who together brainstorm ideas and form teams and startups around their ideas. The startup formation is divided into three phases: the teaming-up period lasting 10 weeks, and the validation and acceleration periods, both lasting three months. Carbon13 invests around 150 thousand euros in each launched startup and takes about 10% equity in return. Carbon13 also has a fund to support its operations.

Potential problems with the type

The largest potential drawback with this type, compared to other venture studio types, is a much lower synergy between the different venture studio startups. Individual freedom can come at the cost of collective success. The venture studio also has a very limited influence on the startups, if its equity stake remains at the 10% mark. Finally, as this type is very similar to the traditional concept of an accelerator, there could be a problem of identity and differentiation between the two.

2.6.2 The Entrepreneurial Community Studio

The entrepreneurial community studio is focused on bringing experienced serial entrepreneurs together. Within this type of venture studio, entrepreneurs can support each other and also accumulate collective experience, resources, and know-how on startup creation. A portfolio of successful startups funds the venture studio operations. [20]

Support Dimension	**Characteristic**
Type of Entrepreneur	Mature
Degree of Supporting Services	Any
Governance Structure	Hybrid
Degree of Standardization	Medium
Main Type of Routine	Accelerating
Main Advantage for the Entrepreneur	Entrepreneurial know-how
Level of Innovation	Transformational
Driver of Innovation	Opportunities; Market; Tech/Topic
Source of Ideas	EIR; Venture studio
Fate of the Ventures	VC case; Acquisition; Continued ownership

Table 2.2: Entrepreneurial community studio dimensions

The entrepreneurial community studio is a bit more hierarchical and has more processes than the founder's sandbox studio (2.6.1). This is because the aim of the type is to accelerate the startup creation process using previous collective experiences of the EIR, with the end goal of a successful portfolio of venture studio startups. Thus, individuals do not have that much freedom to "solo" and just do their own thing. This venture studio targets more experienced founders, as the founding skill of its members is maybe this type's greatest asset. With the experience of the EIR and the relatively high freedom they retain in this type, these venture studios could really excel in transformational innovation.

Among the cases inspected in this thesis, the entrepreneurial community studio seems to be the most common type of venture studio.

Exemplary case: Atomic

Atomic has offices in Miami and San Francisco in the United States. With any EIR applicant, they look for ”a track record of building companies and products”.

Atomic has a limited partner / general partner structure, meaning it works in a dual-entity model. The ideas often come from the venture studio or the founders themselves. Each of the startups gets the initial seed funding from Atomic. After that, the philosophy is to ”support EIRs and then get out of their way”. Sam Altman, among other well-known individuals, has invested in Atomic’s startups.

Potential problems with the type

Having a lot of experienced founders working together can lead to conflicts in vision or ego. The venture studio has to ensure alignment and a positive working relationship between people with potentially very different personalities and goals. Finally, as this type relies on the expertise of experienced entrepreneurs, the venture studio has to figure out how to attract good EIR into the venture studio, convincing them of the value of communal entrepreneurship over solo venturing.

2.6.3 The Company as a Product Studio

The company as a product studio generates its revenue by selling relatively cheap startups with quick exits. The customers of these venture studios are often big corporations that

might want to expand into new markets, but don't have the capital to buy the most valued unicorns. These venture studios are highly hierarchical with standardized processes: a factory-like efficiency in company creation is the desired outcome of operations. [16], [17], [21]

Support Dimension	**Characteristic**
Type of Entrepreneur	Non-entrepreneur
Degree of Supporting Services	Full
Governance Structure	Hierarchy-like
Degree of Standardization	High
Main Type of Routine	Accelerating
Main Advantage for the Entrepreneur	Democratization of entrepreneurship
Level of Innovation	Adjacent
Driver of Innovation	Market
Source of Ideas	Venture studio
Fate of the Ventures	Acquisition

Table 2.3: Company as a product studio dimensions

A prominent characteristic of this venture studio type is the unique role of the entrepreneur. Rather than targeting experienced founders or ”hero entrepreneurs”, the EIR-role within this type of venture studio is very similar to any kind of job: almost anyone can be taught to do the required tasks. Denis Kovalevich calls this ”democratization of entrepreneurship” [16].

These types of venture studios exhibit strong hierarchy-like decision-making and heavily standardized processes, and in a way, exist in the total opposite to the founder's sandbox type of venture studio, where the EIR is the ”center of the universe”. Of course, the goals are also very different: rather than trying to provide their EIRs a perfect environment to cultivate their ideas, the company as a product studio is solely focused on efficiently

producing startups ready to be sold. This also means that the EIRs do not get large equity stakes (and thus decision-making power) in their own startups, though they might get small stakes in the venture studio itself [16].

One of the more interesting facets in the business model of the company as a product studio is the division of a large, horizontally and vertically integrated company into multiple startups. In practice, this means that hyperspecialized startups are produced to be responsible for certain parts of the supply chain, required to produce a complete product. This allows the individual startups to focus on what they are doing and become very good at that. At the same time, the venture studio can facilitate a level of synergy between the different startups that would be found between the departments of a larger corporation, while also not losing the agility of a small startup in innovation. This seems to be especially useful in deep tech [22], where the production of physical products often requires the collaboration of multiple supplier and producer companies. This operational model could also allow the venture studio to potentially replace an entire supply chain of an already existing product with its own more efficient alternative. [17], [21]

As the focus of the venture studio is a quick exit with each of its startups, the venture studio has to build these startups with the future exit in mind. In essence, the venture studio has to make sure that the startup does not depend on the EIR that builds it (the venture studio does not want to lose its EIRs with acquisitions), has clear knowledge management, and transferrable non-venture-studio staff operating the company. [17]

Finally, because the venture studio does not seek risk, the level of innovation is adjacent and market-driven. This type of venture studio identifies market inefficiencies and strikes at them by providing their own startups that can more cheaply produce the demanded products. The venture studio gets its profits by making things cheaper and enabling the consumption of otherwise too-expensive goods. [17]

Exemplary case: TechnoSpark

TechnoSpark Group is a private venture-building company that specializes in creating, developing, and selling high-tech startups in the hardware and deep-tech industries. It is based in the science town of Troitsk, being part of the city of Moscow, Russia. [21]

The model of TechnoSpark, and the ideas of its co-founder Denis Kovalevich, have been a bit controversial in some venture capital circles [16]: creation of a lot of cheap startups, that can be sold to larger corporations, that seek expansion into new markets and services. [21] Backed by the RUSNANO group[16], a big technology investor in Russia, TechnoSpark has been building more than 120 new technology startups between 2012 and 2022.

Denis Kovalevich calls the model of TechnoSpark a "conveyor of innovations": Every year the venture studio internally starts 10-15 new companies, some of which will become candidates for expansion. Every year, some of the portfolio companies, if successful enough, are prepared to be sold. TechnoSpark sells its companies at every stage of their lifecycle, often between 8-10 years from the company's inception. According to Kovalevich, the aim is to cut the amount of time to produce hardware startups by 2-3 times. [21]

Potential problems with the type

The very hierarchical and complex structure of this type can stand in the way of creative freedom, that might be required by innovation. Since the founders have little equity in their own startups, they have to be motivated by either an additional salary or a stake in the venture studio itself.

[16] https://en.wikipedia.org/wiki/Rusnano

2.6.4 The Copy-cat Studio

The copy-cat studio is somewhat similar to the company as a product studio. It is highly hierarchical and follows strict processes. However, its focus is not on selling companies to bigger corporations, but rather copying already proven ideas and adapting them into new markets. This way the venture studio tries to get rid of an internal ideation process and focus all of its know-how on efficient venture building.

Support Dimension	**Characteristic**
Type of Entrepreneur	Non-entrepreneur
Degree of Supporting Services	Full
Governance Structure	Hierarchy-like
Degree of Standardization	High
Main Type of Routine	Accelerating
Main Advantage for the Entrepreneur	Idea outsourcing
Level of Innovation	Adjacent
Driver of Innovation	Market
Source of Ideas	Venture studio
Fate of the Ventures	VC case; Acquisition; Continued ownership

Table 2.4: Copy-cat studio dimensions

Firstly, this type of venture studio does not need experienced founders, as copying proven business ideas does not require much skill from the founders. The venture studio is also hierarchy-like with clearly defined processes. The founder's only job is to copy businesses and make them profitable as fast as possible in a new market. The founders only have responsibility for the successful execution of their startups, and most likely get paid for their work too. This also means that the EIRs's equity stakes are much lower than in most other types of venture studios, probably less than 10%.

Exemplary case: Rocket Internet

The German Rocket Internet is a well-known case among venture studios. It started by copying successful startup ideas and adapting them into new markets, mainly outside the US and China [23]. The copy-cat model is not the only thing that sets Rocket Internet apart from many other venture studios: it recruits EIR-candidates predominantly from consulting firms, investment banking, and business schools; mostly people who have no prior founding experience. Additionally, it only gives about 5%-10% equity to the founders from its startups, but makes up for that by also paying the EIRs a ”competitive” salary. [24], [25]

Rocket Internet provides a full service to its founders and startups, including fundraising and the business ideas themselves.

Potential problems with the type

Copying business models and other successful startups might become a reputation and an IPR issue. The original startups are also highly likely to outcompete the copy-cats if they enter the same markets. Finally, the venture studio is in big trouble if the steady stream of outside ideas ever runs out.

2.6.5 The Strategic Partner Studio

The strategic partner studio partners up with corporations, universities, and other organizations, creating new startups based on the various partners' needs [10], [20]. The EIR-role targets experienced founders, and provides them full range of services to create their startups. The venture studio most likely has a fund that gets investments from the partners and other interested parties.

Support Dimension	Characteristic
Type of Entrepreneur	Mature
Degree of Supporting Services	Full
Governance Structure	Hybrid
Degree of Standardization	Medium
Main Type of Routine	Innovating
Main Advantage for the Entrepreneur	Leveraging corporate assets
Level of Innovation	Adjacent
Driver of Innovation	Opportunities
Source of Ideas	Venture studio; Partner
Fate of the Ventures	VC case; Acquisition

Table 2.5: Strategic partner studio dimensions

These types of venture studios have at least two value propositions, setting them apart from other venture studios:

Firstly, the venture studio itself can gain an advantage by outsourcing the ideation process to its corporate partners, who often have unique insights into their own industries. These ideas have the potential to be of higher quality, as they are based on real pain points experienced by the corporate partners. The partners providing the ideas are also easy to recruit as early adopters and first customers since the idea about solving the problems stems from their needs directly.

Secondly, strategic partner studios provide their corporate partners an easy way to innovate and invest outside the strict hierarchies and processes of the corporation itself, which can potentially be the death of any corporate-incubated startup. The big hypothesis of corporate builders is that corporations are good at creating efficient processes to cost-effectively produce products with an existing demand, but are horrible at innovating and

taking financial risk by exploring unproven, yet often necessary ideas.

The corporate builder studio is somewhat similar to the company as a product studio (2.6.3); the main difference is that the venture studio targets experienced founders and most likely has a corporate partner to develop the startup from the get-go. Also, the goal is not strictly an acquisition, where a partner buys the resulting startup. The venture studio and other investors (for example the partners) can exit during a VC case as well, and get their share of the buyout.

Exemplary case: High Alpha Studio

Founded in 2015 by Scott Dorsey, Eric Tobias, Kristian Andersen, and Mike Fitzgerald, High Alpha from Indianapolis, Indiana, United States, builds startups with its corporate partners and has launched about 40 companies over the last 8-9 years. High Alpha also invests in outside-venture-studio companies with its fund and has done so with over 100 companies. High Alpha mostly launches B2B software companies.

High Alpha is structured similarly to a dual-entity model, and its fund has raised about 500 million dollars. High Alpha often lends out its teams to develop and test business ideas with its partners. In these cases, the teams are paid a salary. When they launch a company, a salary won't be paid anymore, and the partner makes a monetary investment in the new company, about 1-2 million dollars for each new startup created.

High Alpha targets experienced founders who feel like they can build faster and better within a venture studio context.

Potential problems with the type

The venture studio has to divert a significant amount of its attention and resources to cultivating partner relationships. It also has to create structures to mitigate any potential alignment issues between itself and the partners. As with any kind of investor, the partner expectations might also limit the creative freedom of the EIR.

2.6.6 Archetypal Comparisons

The different venture studio types present clear differences in their approaches, but also some commonalities:

The venture studio existing for the benefit of the EIR versus the venture studio and the EIR serving some other bigger goal is the first clear differentiator between the various types. The *founder's sandbox* and *entrepreneurial community* -studio types are clearly more geared towards the benefit of whatever goals the EIR want to achieve. The three remaining types, on the other hand, may be more indifferent to the individual wants of the EIR and rather focus on serving goals the venture studios have set for themselves.

The hierarchy of the organization is another differentiator. The *founder's sandbox*, *entrepreneurial community*, and *strategic partner* -types exhibit clearly more relaxed hierarchies than the *company as a product* and *copy-cat* -types. There might be a few reasons for this. The more hierarchy-like venture studios target non-entrepreneur EIR, who might benefit from stricter hierarchies and processes. Also, some of the low-hierarchy types exist as launchpads for the EIRs' own ideas, and don't use the EIR to serve the bigger goals of the venture studio.

The potential for transformational innovation also differentiates the types. The *founder's sandbox*, *entrepreneurial community* have probably the most potential for transforma-

tional innovation since there are few limiting factors on creative freedom or idea testing. The other types can limit the creativity of the EIR, with their overall business models, goals, and partnership structures.

The main type of routine, or what is the main role of the venture studio relating to the EIR, also differentiates the different types. The most common routine, *accelerating*, is not surprising, since one of the main ideas of venture studios overall is the facilitation of mass startup creation. Some types, however, see this as a supporting mechanism for their main goal, rather the as the main goal in and of itself. The *strategic partner* type aims to provide its partners with the perfect grounds for external innovation. The *founder's sandbox* type wants to offer its expertise and networks to visionary founders so that they can better launch their own startups.

2.6.7 Venture Studio Structures and Venture Studio Types

Each of the venture venture studio types has its own unique goals, and choosing a structure that supports these goals is essential. Next, we will discuss what structures would most likely fit what venture studio types and why we think that is the case.

Structures for the founder's sandbox studio

The founder's sandbox studio type has one main goal: let visionary founders implement their ideas within the venture studio, by providing them necessary support and guidance. The possible structures have to facilitate and support this goal.

A simpler structure, that could support this model, could be the **single venture studio with syndicate** model. It gives flexibility to the visions of the founders and also ensures that they can get additional funding outside the venture studio. Getting funding for the

new startups would be essential in this model, as transformational startups may not get profitable so quickly.

A more complicated structure could involve the addition of a fund, but it would be important to also keep some equity within the operational venture studio so that the EIR freedom is not compromised. **Dual-entity model** or the **dual-entity with a syndicate** could work if additional capital from a fund is desired.

Structures for the entrepreneurial community studio

The main goal of this entrepreneurial community studio is to create a collective of experienced entrepreneurs who can easily give each other peer support and distribute the risk of solo entrepreneurship. We think this type would work with almost any structure that contains a non-fund venture studio entity, as this type exists for the benefit of the EIR. Otherwise, the investor influence might be too heavy.

When starting out, a simple fitting structure could be the **single venture studio** or **single venture studio with syndicate** -model. These give freedom to the EIR and in the case of the syndicate, also some additional funding opportunities. Raising big sums of capital might be a problem, however.

If the venture studio has resources to implement a more complex structure, the addition of a fund to the mix could be a good idea. Either the **dual-entity model** or the **dual-entity with a syndicate** could work. The additional fund would allow the venture studio to raise much more capital for its ventures. Keeping some sort of a separate operational venture studio structure with ownership also ensures that the EIR freedom is not compromised too much by the investors' wants and needs.

Structures for the company as a product studio

The main goal relevant to the structure of a venture studio of this type is the ability to build a lot of acquisition ready startups. As this type is not concerned with the needs and wants of the EIR, we think any structure could be made to work with it. If the venture studio wants to be more agile and does not need as much capital, a **single venture studio structure** with or without a syndicate might be a good fit. In case more capital is wanted, for example as is the case with deep tech, having a fund within the venture studio structure would be very beneficial.

Structures for the copy-cat studio

The copy-cat studio is very similar to the company as a product studio: the needs and wants of the EIR are not a top priority. Also, agility might not be a concern with this type, as idea validation and generation are not needed. The most important thing with each startup is to get them to scale up quickly. With this in mind, any structure with a fund might be a good fit, as scaling often means a need for capital.

Structures for the strategic partner studio

The strategic partner studio wants to provide the means to innovate outside the organizational structures of its partners. Two things are important when thinking about a structure of this type: the ability for the partners to easily invest in the startups and the ability for the partners to influence the startups. For this reason, we think any structure with a fund would fit this type. The fund would allow the partners to easily invest in the startups, while also giving them some influence into the whole venture studio process. An addition of a syndicate would allow partners to invest in singular startups. For these reasons, the

dual-entity with a syndicate would probably be the best structure, but it might be easier to get started with a **single venture studio with a syndicate** or a **single fund** -structure.

2.7 Summary

This chapter lays an important foundation for the theories presented later in this thesis. As the research on venture studios is still emerging, we had to generate a lot of original research on the subject. Thus, this chapter also has the potential to contribute new knowledge to this field of research.

Firstly, through a literature review, we defined what the term venture studio means in section 2.3.2. A definition for the term venture studio was important since there are no commonly accepted academic definitions for it. This answered my first research question: *What is a venture studio?*

After this, we looked at the various venture studio structures from the point of view of investors and owners of the venture studio. This was done in chapter 2.4, and was based on a white paper by John Carbrey [18], [19] from FutureSight. This in part helps to answer the second research question: *What are the characteristics of successful venture studios?*

Finally, in sections 2.5 and 2.6 we formed an archetypal typology for venture studios. We defined a list of support dimensions and the differing characteristics that the possible venture studio types would have, based on the research by Mittermeier et al. [20] After this, we presented the different venture studio types based on commonalities and differences we noticed between different venture studios during my research. The types we formed are *Founder's Sandbox*, *Entrepreneurial Community*, *Company as a Product*, *Copy-cat*, and *Strategic Partner* -studio types. Lastly, the types were connected to suitable venture studio structures. All of this will help to answer the second research question: *What are*

the characteristics of successful venture studios?

3 Digital Sustainability Startups and Venture Studios

This chapter gives a view into the current situation of digital sustainability via a literature review. In the *Discussion and Conclusions* section (3.5), we will connect the findings of this chapter with the findings of the venture studio research in chapter 2. More concretely, we will offer a viewpoint into how venture studios fit within digital sustainability and what types of venture studios will fit what kinds of digital sustainability businesses. With this in mind, the goal of this chapter is to answer **RQ3 "What are the common characteristics of successful digital startups solving problems in sustainability?"** and **RQ4 "How should a venture studio, focusing on digital solutions for sustainability, conduct its operations and decision making?"**.

3.1 Methodology

This chapter will be based on a limited literature review on the subjects at hand.

Definitions and examples on some subjects were simply searched for from Google Scholar and Web of Science databases. Additionally, ChatGPT Plus was used for this task as well, if good sources were hard to find manually through the databases.

The literature review articles were found on the Web of Science database, with search phrases like digital, startup, sustainability, cleantech, climatech, and literature review. Additionally, Litmaps[1] was used to effectively search through citations to find additional interesting papers, using a few highly cited seed papers. Again, as noted by Zaheer et al. and Bandara et al. quality of the articles was determined by their citations [8], [9]. Quality was also checked against citations by year, so that newer research with less time to accumulate citations was also taken into account. Interesting articles were narrowed down by reading their abstracts and conclusions and figuring out if the article could help to answer RQ2.

3.1.1 Method for Digital Startups

The lookup process for various sources about digital startups began with testing various keyword combinations in the Web of Science database. After some refinement, the following search term combination provided acceptable results:

```
("digital startup"* OR "software startup"* OR "tech-startup"* OR "digital
entrepreneurship") AND "literature review"
```

With the term combination, results were narrowed down to about 60 and provided the articles by Zaheer and Berman [8], [9]. After this, Zaheer's research was used as a seed in Litmaps, which allowed the discovery of Elia's research [26].

3.1.2 Method for Sustainability Startups

The lookup process for the sustainability startups was the same as with digital startups. The following keyword combination was used in the Web of Science database:

[1] https://app.litmaps.com

```
(cleantech OR climatech OR green tech OR sustainability) AND ("startup"*)
AND "literature review"
```

This provided us with 21 results, and the research by Horne et al. [27] Horne's research was used as a seed papers on Litmaps. Searching the citations provided us with the research from Hällestrand et al. and Mondal et al. [28], [29]

3.1.3 Combining Digital Startups with Sustainability Startups

Although digitality and sustainability are researched separately, we draw parallels between the concepts throughout this chapter when discussing each topic. After the sections concerning literature review, section 3.5 takes the results of digital and sustainability startups and discusses the concepts together in more detail. We will also discuss the results of chapter 2 in the context of the said two concepts. The discussion mainly tries to combine digital sustainability and different venture studio types and form a set of routines that digital sustainability startups need to thrive within a venture studio context.

3.2 Business In Sustainability

3.2.1 Background

According to Alhaddi, Hanan, sustainability can be defined as ”improving the social and environmental performance of the present generation without compromising the ability of future generations to meet their social and environmental needs”[30]. One common way to measure the sustainability performance of companies is the so-called *triple bottom line* or TBL framework. It provides a ”framework for measuring the performance of the business and the success of the organization using three lines: economic, social, and en-

vironmental". These aspects of the framework can also be referred to as profit, people, and planet respectively. Sustainability as a term can be confusing, since often literature may talk about sustainability, but only focus on either social or environmental aspects of it. In this chapter, and this thesis as a whole, we try to keep in mind both the social and the environmental aspects of sustainability.[30]

One additional piece of information, that is important in laying the foundations for the information of this chapter, is the economic context of sustainability in our societies historically and in the future. Economic models so far have mostly emphasized the infinite growth of the economy, which often comes at the expense of unnecessary social and environmental suffering. Raworth juxtaposes the historical angles and viewpoints on good economies against a direction we should strive toward in the future. The main concept Raworth introduces is the *doughnut economy* (figure 3.1), where economic growth is balanced between a social foundation and an ecological ceiling; growth will not come at the expense of either of them. In practice, this means policies and economic models that promote the distribution of wealth (not only money but also land, enterprise, technology, and other sources of well-being), penalize polluting modes of business, and reward development and usage of recyclable materials and products [31]. These problem spaces are the territories of sustainability businesses, whether they are early-stage startups or more mature enterprises.

3.2.2 Characteristics of Successful Sustainability Startups

Many of the same variables that affect digital startups' successes also determine whether a sustainability startup succeeds or not. Sustainability business also involves many unique variables that are not present in other kinds of business environments: the goals are often not strictly economic (maximum profit), but also social and environmental in nature. Often, the social and environmental goals of these kinds of businesses are as valuable as the

Figure 3.1: An illustration of the doughnut economy. Source: https://doughnuteconomics.org/about-doughnut-economics

economic goals. [28], [30]

If we take a look at various research regarding sustainability startups and similar enterprises, we can notice some common themes that heavily affect the success of these businesses:

Sustainability friendly policy

Because economic incentives are not often the main drivers of sustainability innovation, and many of the benefits are social and environmental in nature, sustainability-friendly government policy has a key place in the success of sustainability businesses. [28]

In practice, this means policy that penalizes non-sustainable business practices and rewards sustainable practices, for example through taxation. Indeed, sustainability ventures

should participate in political and industry advisory bodies to affect government policy-making. [28]

Opportunities in public funding, -initiatives and -collaboration

Somewhat tied to the implementation of sustainability-friendly policy is the existence of publicly funded initiatives and collaboration opportunities that also play a major role in the success of local sustainability startups. [28], [32]

Being a part of an ecosystem of sustainability-focused actors

On top of having publicly driven opportunities around the startup, successful sustainability startups often collaborate and are part of a wider ecosystem of similarly minded private actors. These include investors, other sustainability startups, SMEs, and even larger corporations. [28]

3.2.3 Challenges of Making Non-digital Deep Tech Profitable

Much of the sustainability innovation, especially if the goal is to have a large impact on these sustainability problems, happens with so-called deep tech[22]. When considering different kinds of digital startups developing deep tech, the digitality would, in many cases, come through the usage of digital artifacts (see section 3.4.1), as the deep tech startups' main products are often new kinds of physical innovations like biofuels, new materials or solar technology (unless they are developing advanced A.I. algorithms for example) [22]. Hällerstrand et al. detailed in their research the success factors and challenges, faced by 14 ventures developing green innovations in the biofuel, bioenergy, biochemistry, and biomaterial sectors. [28] Although these startups are mostly non-digital, the findings are

still relevant to digital startups that also develop physical products. The unique challenges faced by the startups in Hällerstrands research were the following:

Heavy R&D requirements

Developing disruptive technologies is often an R&D-heavy task. The new venture requires stable funding, highly educated personnel, and a considerable amount of time to develop new products.

Funding opportunities

New disruptive technologies are often perceived as a major investment risk in the eyes of banks and other traditional providers of funding. Startups developing disruptive technologies often have to look for private funders that are willing to take on the associated risks, especially at the beginning.

Premium prices

The price tag of innovative new sustainable products can often be higher than the price tag of old corresponding products, most likely because sustainable products are often harder to manufacture and do not yet have well-refined production processes, which could lower the production costs significantly. As one of the main drivers for consumers in choosing one product over another is cheaper prices [33], this presents a major obstacle in the adoption of new disruptive innovations.

3.3 A Framework for Commercializing Green Innovations

The study by Hällerstrand et al. is also of great interest to this thesis, due to the framework presented in the paper, which tries to detail how the risks with deep tech green innovation can be mitigated. The framework detailed three critical areas or *capabilities* that the startup has to implement well to succeed. [28]

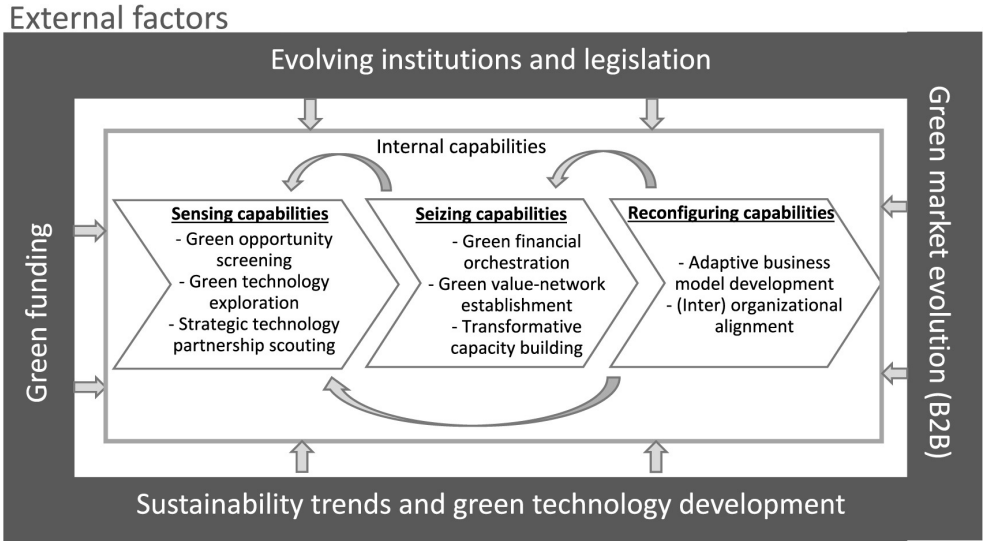

Figure 3.2: An illustration of the green innovation framework by Hällerstrand et al.

3.3.1 Sensing Capabilities

Sensing capabilities refer to the startup's ability to explore technology and assess market opportunities. In practice, this refers to the ability to quickly roll out and test new concepts. Sensing capabilities can be further divided into *green business opportunity screening*, *green technology exploration*, and *strategic technology partnership scouting (STP)*. [28]

Green business opportunity screening refers to the startup's ability to identify market opportunities that can be solved via the application of green technology knowledge.

Often, several hypotheses and assumptions about new green technologies' real-world applications have to be created and tested before finding an economically sound solution. [28]

Green technology exploration activities involve participating in globally distributed pioneering R&D teams and processes, following sustainability trends set by global goals (for example UN Sustainable Development Goals[2]), lobbying for sustainability-friendly legislation, and implementation of processes that scan for new market opportunities. [28]

Strategic technology partnership scouting refers to activities where the startup continuously explores new inter-organizational strategic partnerships, to find synergies and do learning and platform building together. Partnerships often consist of open R&D processes that explore new green market opportunities and front-end technologies.[3] Developing structured ways of partnership-focused value capture is essential to the startup's success. [28]

3.3.2 Seizing Capabilities

Seizing capabilities set deep tech green innovation apart from purely digital startups maybe the most. Seizing not only refers to the ability to fund the startup's innovation process but also the ability to develop infrastructure that produces these new innovative solutions at industrial scales [28].

Green financial orchestration is concerned with fundraising that is characteristic of green technology startups. Funds are often raised from a diverse set of sources, namely

[2]https://sdgs.un.org/goals

[3]https://en.wikipedia.org/wiki/Front-end_engineering

crowdfunding, venture capital, grants, scholarships, industry credits, and both private and public funding. First funds for the businesses are often private equity from the founders themselves or ”friends, family, and fools” [34]. Routines for fundraising throughout the entire commercialization process of the startup’s products are raised as a key to success. [28]

Establishment of new green value networks refers to the early stages of the startup’s lifecycle, where building seizing capabilities often means building cross-industrial partnerships and networks, joint ventures, and strategic alliances, as the small startup can’t yet afford to build the necessary production infrastructure and test its new concepts by itself. The startup’s network is called a ”green value-network” and consists of the startup’s early adopters and collaborators in development and production. [28]

Green capacity building often happens at later stages of the startup’s lifecycle, when it has to begin to build its own ”green capacity”. This means engineering and constructing industrial-scale production facilities and development of green flagship [4] proof of concepts in industrial settings. Green capacity building is important in gaining stakeholder legitimacy and market attractiveness. Most of the ventures initiated their green capacity building via joint development projects in strategic alliances. [28]

3.3.3 Reconfiguring Capabilities

Hällestrand’s research concluded that if the startup wants to survive the rapidly evolving and dynamic green technology markets, it has to be able to adapt old ideas into new concepts and quickly abandon ideas that are not commercially viable. [28]

[4] https://en.wikipedia.org/wiki/Core_product

Adaptive business model development refers to activities where the startup commits to continuous technological development, with a market-oriented approach. Technology diversification (applying technology to new markets and developing new products and services), the ability to quickly abandon economically non-viable ideas, and partnering with committed customers were mentioned to be keys to success in this regard. [28]

(Inter) organizational alignment refers to the successful management of partnerships and other value networks. Patenting technological discoveries was seen as especially important in capturing value from inventions. Most of the startups in Hällerstrand's research did not participate in joint R&D projects if they were not granted a fair share of future income or guaranteed exclusive rights to intellectual property. [28]

3.4 Digital Startups

3.4.1 What is a Digital Sustainability Startup?

Zaheer et al. give the following definition for digital startups:

A digital startup is a firm, or an organization within an established firm, in its early stages of development and growth in which digital technologies enable at least one component of a business model in a way that is not just functional but vital to the firm.

The definition by Zaheer et al. could be clarified further: what are digital technologies, and how does sustainability show itself in digital technologies? Zaheer et al. and Elia et al. [9], [26] divide digital technologies into three distinct, but related categories. Any kind of early-stage business that utilizes at least one of these three categories in the core of their business model can be considered to be a digital startup, be it software consulting

companies, companies developing SaaS, PaaS, or IaaS products or companies developing consumer-focused digital applications and platforms.

Digital artifacts refer to digital technologies, be it a component, media piece, or an application, that is ”part of a product or service and offers specific functionality and value to the end-user”. Examples include Amazon Dash Button or Nike+ Sensor. Digital artifacts are extensions to physical products or services.

Embedded devices and IoT [35], [36] are very common when extending physical products. Examples can include smart products like wearables that monitor physical activity and smart waste sorting bins [37], [38].

An artifact extending a physical service can be something as simple as a web page. Also, any content hosted by sustainable digital platforms can be considered to be a digital artifact.

Digital infrastructure is the ”set of digital technology tools and systems that offer communication, collaboration, and computing capabilities”. Amazon Web Services, Microsoft Azure (cloud computing), MIT Fab Central and Stanford FabLearn Labs (digital prototyping and mockups), Upwork (freelancing platform), and Kickstarter (crowdfunding) are general examples of these.

Sustainability-focused digital infrastructure often aims to improve the efficiency of processes and manage physical assets. Due to this, they often overlap with digital artifacts and work in conjunction with them. Examples include resource management systems (precision agriculture and energy management systems) [35], [36], renewable energy grid balancers [39], supply chain management systems [40], AI in sustainable materials discovery and design [41], and waste management- and recycling systems [38].

Digital platforms are ”shared, common sets of services as well as architectures that serve to host complementary offerings, including **digital artifacts**”. They are software-based platforms that offer various kinds of services and host content for end users. General examples include web browsers, operating systems like iOS, and platforms for digital artifacts like Uber and Airbnb.

Sustainability-focused digital platforms often connect people with services and provide them with otherwise inaccessible information. Examples include e-education platforms [42], telemedicine [43], and circular economy-focused e-commerce platforms [44].

3.4.2 Characteristics of Successful Digital Startups

Whether a digital startup succeeds can be divided at least into three groups of factors: personal factors, organizational factors, and external factors. [45]

Personal factors are concerned with the characteristics of the startup entrepreneur that lead to their success.

Digital startup research noted that personal passion, ability to use social networks, the surrounding ecosystem, external support like government programs, and overcoming institutional voids (for example women starting a business in a male-dominated field) were the main drivers of success on a personal level. [45]

Organizational factors are variables that stem from the organizational structure and culture of the startup.

Firstly, research shows that startups, whose founders have an academic background in technical or business domains, usually have a higher chance of getting equity investment.

Secondly, having a culture of paying attention to customer feedback is important. Weirdly enough, it seems like the digital startup has to choose between customer orientation and technical orientation, as focusing on both can hinder the startup's success. [45]

External factors refer to variables outside of the digital startup, that affect its success. Choosing the right environment to grow a company proves to be as important as the previous two factors, in terms of probability of success.

Zaheer and Berman identified that many successful digital startups are created in innovation hubs and spatial clusters, which have a strong network and environment to support the incubation of new digital startups. In these places, fellow entrepreneurs offer their help and guidance to less experienced startups, and private funding is readily available through venture capital. Additionally, entrepreneurial communities like hackerspaces, the overall functioning environment in the city, and local publicly funded initiatives that provide a fertile ground for related startup activity are good predictors of success. For the entrepreneurs themselves, the main reasons for the relocation of their businesses were social network density and funding opportunities. [9], [45]

3.5 Combining Venture Studios with Digital Sustainability

With the knowledge of the research so far in this thesis, we are finally bringing all of the information together; we will discuss how the venture studio model could be utilized in the context of digital sustainability. First, we will discuss general design considerations for digital sustainability venture studios. These relate to the day-to-day activities that are most likely shared across all types of venture studios. After this, we will connect the venture

studio types with different digital startup types: artifacts, platforms, and infrastructure. More specifically, we want to find out if some venture studio types would be better suited to create certain types of digital startups.

3.5.1 Venture Studios as a Natural Solution for Innovation in Sustainability

As the findings in this chapter show, creating sustainability startups can be challenging, since their innovation requires a good deal of risktaking and dealing with often very complex technologies, maybe more so than with other kinds of startups. This is especially true with deep tech, which is slower to iterate and harder to scale and fund compared to purely digital products. Additionally, Hällerstrand et al. state that rapidly accelerating the green innovation domain comes with a risk of new technologies becoming obsolete before reaching commercialization [28].

Venture studios can naturally solve many of the problems stated previously. Firstly, scaling and funding can be made much easier since venture studios most likely have more economic leverage compared to independent individuals: they can be supported by a fund and can more easily maintain a network of private investors. There is also the possibility to easily delegate any fundraising processes from founders to other staff, which leaves the EIR more room to focus on the other areas of startup development. Additionally, venture studios can better develop a reputation and trust with a history of creating multiple startups, which might ease convincing potential partners and investors of their startups' potential. Again, this is especially important with deep tech, because it is arguably the most risk-prone form of venture building, requiring high trust from everyone involved.

Finally, Hällerstrand et al. state that a way to deal with the risks of rapid innovation is to ”develop parallel green innovations along complementary, competing, or conflicting green

trajectories." As the venture studio model is fundamentally about parallel innovation, it has the potential to very easily tackle this problem.

3.5.2 Designing a Digital Sustainability Venture Studio

In this section, we will detail some vital activities and traits every digital sustainability venture studio should cultivate, based on the findings in this thesis. All of these apply, regardless of the types of digital sustainability startups one creates.

Partnerships

Cultivating a network of potential partners serves many functions in a successful venture studio. Firstly, partners can provide various synergies for digital sustainability products: they can provide testing infrastructure, production facilities, and joint research opportunities. Additionally, all partners might be any venture studio startup's potential early adopters [28], [32].

Secondly, partners can reveal valuable market opportunities that the venture studio itself may not notice. For example, many academic institutions often have innovations that could be commercialized by private partners [10]. In addition to this, the strategic partner type shows, that many private corporations can benefit from collaborative startup creation outside their hierarchies (2.6.5).

Influencing legislation

Since sustainability is often very dependent on supportive legislation, the venture studio should focus some of its resources on lobbying and informing legislators about the benefits

of sustainable technologies.

Market opportunity exploration

As pointed out by Hällerstrand et al., sustainability (or green technology) startups should dedicate time to explore market opportunities that can be solved with sustainable technology knowledge. In addition, venture studio startups should participate in globally distributed joint projects that explore these market opportunities.

Recruiting EIR and the founding teams

Recruitment of the founding teams of the startups is one of the most important aspects when running successful venture studios. The personalities and backgrounds of the entrepreneurs are already important outside the venture studio context [45], though there should be additional considerations when working within one: depending on the type of the venture studio an EIR with classic entrepreneurial tendencies might not be what venture studio should look for, and a certain kind of specialist might fit better (2.6.3) [46].

Geographic location

In chapter 3.4.2 was stated that one of the most important external factors in a digital startup's success was the surrounding environment of the startup. The startup should have easy access to services and networks that benefit its growth. With this in mind, every venture studio should choose a location that serves the startups it tries to cultivate. Looking at local sustainability-focused government programs for businesses, other startups in the same field, and recurring networking opportunities in the locale will be a good starting point for any venture studio about to choose their location.

Funding

Venture studio operations will be very capital-intensive, and good plans for fundraising have to be thought through before the venture studio is founded. Based on the type of venture studio one wants to build (2.6), the venture studio should consider including a fund or/and a syndicate of private investors to raise money. In addition, a digital sustainability venture studio should explore funding options that are common within the nice: crowdfunding, grants, scholarships, industry credits, and public funding services. Thinking about how to create processes to effectively raise these types of funding would be beneficial.

3.5.3 Designing a digital sustainability deep tech venture studio

On top of the general considerations of any digital sustainability venture studio, a deep tech digital sustainability venture studio has to consider a few additional things.

Research and development

Deep tech venture studios have to dedicate considerable time to R&D activities since novel technology is being applied at the core of the business. On top of internal R&D, the venture studio should cultivate partnership networks, where these activities can be done jointly with other startups and organizations globally.

Capacity building

Capacity building means building infrastructure for the production of the deep tech venture studio's products. These could be factories for mass building of physical goods, or data

centers for hosting breakthrough A.I. When the resources of the startups or the venture studio itself are limited, capacity building can be done through partnerships. If the venture studio or its startups have more economic leverage, they can consider building their own facilities for this.

Patenting

Deep tech is often a novel innovation, that many competitors would be more than happy to copy. Thus any deep tech venture studio should dedicate resources to ensure proper patenting for their startups' innovations so that the hard work behind innovation won't turn out into the profit of somebody else.

3.5.4 Optmizer-creator model as a basis for a venture studio type

Rather than thinking about what types of digital sustainability startups would benefit from what types of venture studio types the most, aspiring venture studio founders might benefit from thinking about what they want to achieve with their venture studios. Fundamentally, we think it does not matter whether one develops digital platforms, infrastructure, or artifacts: every venture studio type might be successful in creating any of these. What truly matters is whether one wants to create something truly new or optimize things. Being a **creator** or an **optimizer**?

To start exploring this question, thinking about the hierarchy and goals of the venture studio could be a good starting point. Is the goal the creation of an environment, where entrepreneurs can test their own ideas? More relaxed hierarchies of *founder's sandbox* (chapter 2.6.1) or *entrepreneurial community* (chapter 2.6.2) -studios might be a good fit. On the other hand, if stricter hierarchies serving some universal goal are needed, *company*

as a product (chapter 2.6.3), *strategic partner* (chapter 2.6.5) or *copy-cat* (chapter 2.6.4) - types might fit more.

Creators of new unique things probably want more relaxed hierarchies, because these allow more freedom of thought. Freedom of thought on the other hand gives room for unconventional ideas, that give birth to new, unique things. Optimizers probably want more hierarchies, since freedom of thought comes second to efficient solutions. Fundamentally, optimizers want to improve something that already exists and make it much better. Most freedom can be found in the *entrepreneurial community studio*. Its startups are most likely more risky than other types, but might also have the most potential to innovate something truly unique. The *company as a product studio* is most hierarchical since it identifies market inefficiencies, creates startups to improve the inefficiencies and then sells the startups to a willing customer. The process is very calculated, and most likely does not require unconventional thinking.

There are other considerations, like the current resources ready to be utilized in the creation of the venture studio or one's willingness to take risks. By reading chapter 2.6, we can get an idea of these other considerations. However, the creator and optimizer mindset is probably more important when choosing the structure. After this, considering other factors that will affect the choice of the final venture studio type is more meaningful.

3.6 Summary

In this chapter, we inspected the intersection between digitality and sustainability and finally connected these to the venture studio research of chapter 2. We began the research with a literature review, which gave us a good view into the current knowledge of digitality and sustainability. After the theoretical background was set, we continued with a discussion, where we connected the found theories with the earlier venture studio research

and offered our own opinions on various aspects of digital sustainability venture studios. This chapter tried to answer RQ3 ”What are the common characteristics of successful digital startups solving problems in sustainability?” and RQ4 ”How should a venture studio, focusing on digital solutions for sustainability, conduct its operations and decision making?”

Firstly, we found that sustainable businesses operate in unique ways compared to non-sustainable businesses. Most importantly, they consider environmental and social impact as factors of success on top of the economic impact of the business. Because of this, sustainability businesses have to consider lobbying, partnerships, and fundraising from unique points of view in relation to business success.

The main point of this chapter was to connect digital sustainability to the venture studio phenomena (RQ4). We found that digital sustainability venture studios should most likely include processes to tackle the unique challenges of digital sustainability mentioned earlier. On top of this, we tried to challenge the notion of finding the perfect venture studio type for the kinds of digital startups one wants to create: it might be wiser to think about whether one wants to be a **creator** or an **optimizer** (section 3.5.4).

4 Interviews

This chapter is the final chapter of this thesis that presents new research. Here we are aiming to confirm or challenge previous theories, which are mainly developed through reading literature and gathering information from the internet. This chapter has a key role in answering all of the research questions of this thesis (Section 1.2).

4.1 Methodology

This chapter is based on a thematic [47] analysis of semi-structured interviews with 3 people, each having unique backgrounds and perspectives relating to the topics of this thesis. The interviews were recorded with OBS-studio [48], transcribed with Open AI whisper large-v3 model [49] running on a personal computer, and manually coded with QualCoder [50]. Coding quantified the feelings of the participants regarding the findings of my thesis. The codings mainly include suggestions, validation, and criticism regarding my findings. Finally, all the codings are gathered and refined into themes that we will explain in more detail later in this chapter.

The following questions regarding venture studios were prepared for the interviews:

1. Do you agree with the venture studio definition?

2. Do you think the five different venture studio types make sense?
3. Do you think there could be more venture studio types?
4. Do the venture studio structures make sense with each type?

Additionally, the following questions were prepared regarding digital sustainability and venture studios:

1. Do you think the activities and traits of good digital sustainability venture studios make sense?
2. Do you think the additional activities for deep tech venture studios make sense?
3. Do you think the optimizer vs creator approach is a good starting point when deciding what kind of a venture studio you should found?

Since the interviews were semi-structured, additional questions were asked as interesting observations and themes arose.

Two of the interviews were in Finnish, and one was in English. The quotes from the interviews are grammatically corrected and shortened, but the originals can be found from Appendix A and B.

4.2 Results

This section presents the results of the thematic analysis. The results are presented in association with six themes: venture studio definition, alternatives for typology, validation of most activities, activity improvement, critique of the optimizer vs. creator model, and critique of the presented venture studio structures.

4.2.1 Theme 1: Venture Studio Definition

Firstly, all participants thought that the definition differentiates venture studios from other kinds of models and is probably a good definition:

"Yeah, I think it is a good definition." [Appendix A.2.1]

"I can't say if it is a good definition, but at least based on my experience it would differentiate it enough from more traditional VC operations." [Appendix A.1.1]

While participants agreed on the definition, they also saw that the term itself is a bit ambiguous and might be argued to be just another form of venture building that can be seen in other similar models throughout history:

"All activities that lead to the creation of new venture can be seen as venture building." [Appendix A.2.2]

"I can buy the thought that it is a different operating model by definition. On the other hand, I feel like there have been things like this before, but they have not been called venture studios." [Appendix A.1.2]

4.2.2 Theme 2: Alternatives for Typology

One participant criticized the venture studio typology presented in this thesis. They saw that venture studios might be very hard to strictly categorize into an archetypal typology since most venture studios have overlapping characteristics:

"It would be good to question if those two are the same thing, but just with different kinds of employees." [Appendix A.1.3]

"It would be easier to for example type the go-to-market strategy or the strongest marketing

spearhead or specific parts of the venture studio. If we try to put the whole venture studio operating model into a box, then I don't think we can reach the business model" [Appendix A.2.3]

These suggest that venture studios might be better categorized based on their go-to-market strategies, marketing approaches, or target customer segments, which might not have that much overlap.

4.2.3 Theme 3: Validation of Most Activities

Participants generally agreed with most of the activities we argued for a digital sustainability venture studio. Especially patient capital was seen as important:

"You need patient capital. You also need to be patient in getting to your sustainability goals. Most of the challenges are complex, and nuanced. And that's why they require complex and nuanced answers." [Appendix B.1.1]

One participant reinforced the idea that sustainable solutions can struggle from not having strictly economic goals:

"We have one portfolio company that builds a replacement for bricks. The biggest problem with these sustainability technologies is that they are often not the best at being commercialized; Our capitalistic model does not give any value to the planet directly." [Appendix A.2.4]

This reinforces the idea that pro-sustainability policy, -investors, and a sustainability-friendly overall atmosphere in society are crucial for the thriving of any digital sustainability venture studio.

IPR protection was also seen as important by one participant:

“IP, of course. Especially when you look at ICT, IP is where the value is.” [Appendix B.1.5]

4.2.4 Theme 4: Activity Improvement

Participants also gave feedback on specific activities. Firstly, the location of the venture studios in ”innovation hubs” needed clarification:

“So if you do sustainable agriculture, building a company in Helsinki or Turku might not be the best idea.” [Appendix B.1.2]

The quote suggests that on top of being located in innovation hubs, the venture studio should also make sure that the surrounding area deals with the problems the venture studio tries to solve.

One interviewer was sceptical of the need to be regulatorily compliant since regulations can slow down innovation:

“Regular compliance, I don’t know. I mean, we have to also remember that there are some things where regulations might have, or regulations or standardization might have stopped those business models.” [Appendix B.1.3]

Although influencing legislation might still be a good idea, trying to comply with existing legislation might not be.

Finally, one interviewee wanted to highlight the handprint effects of digitality [51].

“The biggest thing that separates ICT from many other fields is the huge potential of handprint effects.” [Appendix B.1.4]

In essence, handprint effects are indirect sustainability improvements that digital solutions

provide only by the virtue of being a more efficient solution to a problem, compared to some older methods or technologies.

4.2.5 Theme 5: Critique of the Optimizer vs. Creator Model

The optimizer vs creator approach was somewhat criticized by one participant:

“Creator focus is a dangerous starting point. It is really hard to find a groundbreaking idea. Because if you find the groundbreaking idea immediately, then it probably isn’t that groundbreaking.” [Appendix A.2.5]

This quote suggests that many venture studios should not start as a ”creator”, because being a creator is much more risky and harder to do than being an optimizer. Instead, venture studios should have a long-term vision and the go-to-market strategy as separate:

“Go-to-market can be within the optimizer focus, and the vision can be groundbreaking.” [Appendix A.2.6]

4.2.6 Theme 6: Critique of the Presented Venture Studio Structures

One participant critiqued the presented venture studio structures (Section 2.6.7). They mainly pointed out that the venture studio structures might evolve a lot during the lifetime of the venture studio, a single venture studio might have multiple types of investors backing them, and that the real constraining factor with all the structures is the ability of the founders to raise money and what kinds of LPs there is onboard the venture studio.

“It depends heavily on what kinds of LPs there are onboard and what kind of a track record the founders have on raising money. I don’t buy that the funding mechanism influences the overall structure of the venture studio.” [Appendix A.2.8]

"We might have a multitude of different funds working behind the scenes, each of which will work with the ideas of different EIR. This way we can get funding from different funds based on where they fit the best." [Appendix A.2.9]

On the other hand, the same interviewee also saw that investors do have some influence on the EIR and what kinds of projects they can work on:

"I guess, especially if we are talking about this kind of Company as a Product studio or Strategic Partner studio, that the playbook indeed guides a lot of the work. You can't just implement whatever ideas with the money of the corporation. So, in a way, the investor always gives the mandate on what the venture studio can do. And if we go towards the route that there is a fund behind this all, the same things apply. The fund has its specific theme and investment strategy, and you can't go outside of that." [Appendix A.2.7]

4.3 Discussion About the Interview Results

The interviews proved to provide valuable insights regarding my previous theories. Firstly, the venture studio definition seemed to be good in the minds of most participants. However, many of them also saw that venture studio as a term might be a bit ambiguous and may just be a redefinition for similar business models that have existed for a long time. This might mean that future research into the phenomena should also take other similar modes of business into account since these models might not differ that much after all.

Secondly, although my archetypal typology seemed useful, many participants also saw that it might be hard to categorize all of the possible business models of different venture studios into boxes. This is because venture studio models might have a lot of overlap and the jump from one model to another might not be as clear as we theorized. One participant suggested that venture studios should rather be categorized by their go-to-market strate-

gies, marketing spearheads or other singular characteristics of their business model. This way, there would not be so much overlap according to them. This would be an interesting topic for some other thesis.

The participants seemed to generally agree with the key activities presented for digital sustainability venture studios (Section 3.5.2). Especially patient capital was highlighted as important, as raising money and introducing novel and strictly not economic new technologies are hard in the type of capitalism in the modern world. Processes for protecting the IP were also seen as important. On the other hand, there was also some room for improvement and further considerations: the location of the venture studio in innovation hubs should be coupled with an environment that deals with the problems the venture studio tries to solve, influencing legislation might be useful, but regulatory compliance could slow down innovation and finally digital technologies can also cause sustainability improvements through handprint effects.

One participant working within a venture studio criticized the optimizer vs. creator approach. The main danger they saw with that was the fact that groundbreaking ideas are hard to produce and it would be safer to start with the optimizer route in most cases. The approaches are not exclusive, and you can be agnostic between the two.

Finally, the presented venture studio structures got criticized, but also some validation from one participant. They mostly saw that the EIRs ability to raise money and the LPs on board were the limiting factors on freedom, not the structure itself. On the other hand, they also admitted that the partner or fund mandate can also heavily limit the freedom of the EIR. These things can be mitigated by having multiple investors behind the venture studio in their minds, however.

4.3.1 Improved Venture Studio Structures

Based on the findings and previous discussions, we will next detail a few improvements on the theorized ideal structures per archetype, detailed previously in this thesis.

Firstly venture studios should think about the ability of their EIR to raise money for their projects: EIR with an impressive track record of projects will find it easier to raise money in any kind of structure, lessening the limitations placed by the investor wants and needs.

Secondly, the venture studio should focus on bringing on a diverse array of investors and other funding structures that are aligned with the venture studio's mission. This coupled with able entrepreneurs will make any kind of funding structure work with any kind of venture studio type, without much limitation.

Based on these modifications, the structure of choice will now depend on the experience of the EIR and the venture studio vision, not on its type. Any venture studio creator should also keep in mind that the structure should evolve along the venture studio and will not probably stay the same forever.

4.3.2 Refined List of Venture Studio Activities

Next, we will detail a refined list of digital sustainability venture studio activities, based on the interviews. All venture studios will probably benefit from the following activities:

1. Partnerships: Developing strategic partnerships for innovation, infrastructure access, and market reach.

2. Influencing legislation: Engaging with policymakers to shape a regulatory environment conducive to sustainable innovation.

3. Market opportunity exploration: On top of exploring novelty and new solutions, the venture studio should also keep in mind the handprint effect of digital technologies, and how simply adopting digital products can have a net positive impact on sustainability in some industries.

4. Recruiting EIR and the founding teams: Attracting and assembling EIRs and founding teams that align with the venture studio's mission.

5. Geographic location and relevance: On top of being located in innovation hubs, venture studios should also ensure that they have access to geographical areas, where their problems are relevant.

6. Funding: securing diverse funding sources suitable for capital-intensive and long-term digital sustainability ventures.

In addition, venture studios focusing on **deep tech** should also consider:

1. Research and development: Allocating resources to foundational scientific and technological discovery.

2. Capacity building: Developing infrastructure needed for production or deployment, such as manufacturing facilities or data centers.

3. Patenting: Protecting intellectual property through a robust IP strategy.

4.3.3 Starting as an Optimizer, Aiming to be a Creator

The dichotomy between the optimizer and the creator venture studios was challenged in the interviews. The creator type might be what the venture studio is aiming for, but in practice achieving this immediately is hard: novel groundbreaking innovation requires

skill and money. A more realistic approach is not to pit optimizing and creating against each other, but rather to see both on an evolving spectrum. Many venture studios will benefit from starting as an optimizer, giving them time to build experience, networks, funding structures, and ideas, that can be transformed into the engine behind a creator venture studio later down the line.

If we think about this in terms of the venture studio types detailed previously (Section 2.6) more hierarchical types might be the easiest starting point, but in time they might evolve into less hierarchical innovator types, based on the long-term vision of the venture studio. This can sound counterintuitive, since organizations often have to develop and strengthen their processes and hierarchies as they evolve [52]. However, becoming a creator might not necessarily mean fewer processes on the venture studio level. Rather, it would be mean a more chaotic environment for the startups within. Theories worth exploring regarding to this are presented by the *Cynefin framework* of Dave Snowden [53]. In essence, the venture studio would most likely create an environment of controlled chaos within its structures to cultivate innovation.

4.4 Summary

The results of this chapter both validate and challenge the theories based on the earlier research. Participants generally agreed on the venture studio definition and different venture studio types but also highlighted the blurred boundaries between the types and suggested other possibly more robust ways to categorize different venture studios. These included using the presented types as a foundation to a go-to-market strategy based typology and studying the marketing spearheads of different venture studios and typing those. Many activities, like patient capital, patenting, and lobbying were affirmed, while the location of the venture studio was also seen as important to be coupled with an environment where

the solved problems are common. Finally, the creator vs. optimizer approach was refined to be seen as more of a spectrum, rather than a hard choice between the two. Many venture studios might have an easier time starting as an optimizer, but can evolve to a creator if that is their vision or even be agnostic between the two.

5 Conclusions

5.1 Summary of the Thesis

This thesis explored the intersection between digital sustainability and venture studios. The topics at hand were explored using the following research questions, more specifically:

1. RQ1: What is a venture studio?
2. RQ2: What are the characteristics of successful venture studios?
3. RQ3: What are the common characteristics of successful digital startups solving problems in sustainability?
4. RQ4: How should a venture studio, focusing on digital solutions for sustainability, conduct its operations and decision-making?

Firstly, our thesis defined a venture studio as such (Section 2.3.2):

Venture studio is a business that internally co-founds and develops startups with resources like people, expertise, capital, and networks. They develop repeatable processes for startup creation and are deeply involved with their startups well past the initial stages of their life

cycle, providing ongoing support and guidance. They typically take a profitable share of the startups for themselves.

The definition was also generally agreed by interviewees in chapter 4. However, they pointed out that the definition (and the concept of venture studios overall) is a bit ambiguous, and is very similar to other kinds of venture building done throughout history.

Chapter 2 explored RQ2 by defining common venture studio practices and structures and by forming an ideal-type system for different kinds of venture studios. This thesis formed five types in total: founder's sandbox-, entrepreneurial community-, company as a product-, copy-cat-, and strategic partner types. Finally, the ideal types were connected with different funding structures that would best serve each type.

Chapter 3 developed theories regarding RQ3 and RQ4. We found that successful digital sustainability startups most likely invest time in partnerships, lobbying, market exploration, patenting, capacity building, R&D, being present in important geographical innovation hubs, and raising funding. Venture studios developing these kinds of startups would, in turn cultivate these activities within their structures, with deep tech having to develop more focus on R&D, capacity building, and patenting.

Finally, chapter 4 interviews both agreed and challenged my theories regarding RQ2. Firstly, the interviewees pointed out that whole business models of various venture studios can be hard to fully capture within a strict type. They saw that the different types might have a lot of overlap, or even be the same kind of venture studio under the hood. Instead, it was suggested that venture studios could be typed based on singular and important business functions, that might not have that much overlap; Go-to-market strategy and the venture studio marketing spearhead were among the suggestions to use as a basis for this kind of typology (Section 4.2.2). The second major critique of my theories was that the funding structures might not be the only limiting factor when thinking about the goals

of the venture studio. It was suggested that the ability of the EIR to raise money and their experience was also important factors.

The interviews mostly agreed with my theories but also suggested some improvements. Firstly, venture studios should look for areas where their solutions are needed, on top of being present in major global innovation hubs. Secondly, regulatory compliance can be seen as somewhat of a hindrance to innovation, even if influencing legislation is beneficial. Digital sustainability venture studios probably benefit from places where the laws allow experimentation within their fields of research.

Overall, this thesis provides some groundwork for further discussion and theories regarding the venture studio phenomenon and digital sustainability. Its theories can also inform the decisions of aspiring venture studio founders. Further research could investigate the same themes but with larger data sets and from different angles. In a world where new sustainable solutions are in high demand, venture studios are most likely a tool worth studying.

5.2 Limitations of the Research

Venture studios

There are a few major limitations with the research in chapter 2, that every reader should keep in mind. Firstly the venture studio typology is not most likely at all comprehensive, and other venture studio types might very well exist. To keep this thesis from exploding in size and complexity, we did not collect 100s of cases for the typology. Secondly, venture studio research is still in its infancy, and the literature is sparse and very scattered. There are still many unknowns within this field of research and even the definition of the term ”venture studio” varies from study to study. Due to these factors, there might be some

things my research has missed or does not take into account.

Digital sustainability startups

The research integrates existing knowledge and mainly works as a way to offer my own opinions on the subjects at hand. All of this provides a solid foundation for the interviews, which we presented later in this thesis. As such, readers should also read the results of the interviews to get a more complete look into the subject, which is not solely based on my opinion and observations.

Interviews

The research is qualitative and has a small sample size. It reflects the ideas of the author and the specific interviewees on the subject, but might fail to capture hard facts and wider opinions on the subjects at hand.

5.3 Recommendations for Future Study

Venture studios

In terms of the limitations of the study, future researchers could dedicate a separate standalone study to form a more comprehensive typology for venture studios. A dedicated literature review, consolidating the knowledge on venture studios, would also be very beneficial in this field of research.

Outside of the limitations, it would be interesting to see action research that studies the day-to-day activities of different venture studios in detail. This would give researchers

concrete insight into the venture studio phenomenon, which would support more abstract theories.

Digital sustainability startups

Digital sustainability startups might benefit from research, that tries to categorize the most common types of startups. The categorization could be based on the three way division of artifacts, infrastructure, or platforms for example. There was some trouble when trying to find examples of different kinds of digital sustainability startups.

Interviews

Future studies could reproduce the research, but with a larger sample size. Either as interviews or even questionnaires. The results could also be compared to quantitative data, which would make the theories more robust. A separate study on the alternative typology models discussed could also be very beneficial.

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Appendix A Original Quotes in Finnish

A.1 Interviewee 1

A.1.1

”Ja onko mä samaa mieltä, että se on oikea määritelmä vai ei, mutta sen mä pystyn sanomaan, että mun kokemusten mukaan, niin toi määritelmä ainakin erottaisi sen Venture Studio-toiminnan perinteisestä VC-toiminnasta, että sillä lailla se on hyvä määritelmä.”

A.1.2

”Sparrina tuosta, niin kyllä minä ostan ajatuksen, että tämä on ehkä vähän määritelmällisesti erilainen toimintamalli kuin joku perinteinen. Toisaalta tuntuu vähän, että kyllä tämmöisiäkin on ollut, mutta niitä ei ole ehkä kutsuttu Venture Studioiksi.”

A.1.3

”Sitä kannattaa kyseenalaistaa, että onko nuo kaksi eri kategoriaa vai sama kategoria, vaan vähän eri miehityksellä. Ainahan ne miehitykset eroavat.”

A.2 Interviewee 2

A.2.1

”Joo, toi on mun mielestä ihan hyvä määritelmä.”

A.2.2

”Toi on sinänsä aika lavea, että kaiken tyyppinen tämmöinen uuden bisneksen synnyttäminen, niin voidaan nähdä venture buildinginä.”

A.2.3

”Eli ehkä pohdittavaa, että tuossa näen, että on aika paljon overlapia monissa, studioissa. Että sitten helpompi olisi tyypitellä esimerkiksi sitä go to marketia, tai sitten vaikka, että mikä on niiden vahvin tämmöinen markkinointikärki, tai tiettyjä osia siitä studiosta. Mutta jos me yritetään laittaa se koko studion bisnesmalli yhteen boksiin, niin noi ei ehkä hirveän hyvin tavoita sitä bisnesmallia.”

A.2.4

”Meilläkin on yksi portfolio-firma, joka rakentaa tiilin korviketta, ja näissä varsinkin tämmöisissä teknologioissa, jotka on tällaisella sustainability-fokuksella, niin on ongelma, että ne ei välttämättä ole vielä kaupallisesti kaikkein parhaita, koska meidän kapitalistinen malli ei välttämättä, tai se ei anna mitään arvoa sille planeetalle suoraan.”

A.2.5

”Creator-studio vähän vaarallinen lähtökohta aloittaa. Sulla on tosi vaikea löytää se groundbreaking idea ihan viidessä minuutissa tai vaikka edes viidessä kuukaudessa, koska silloinhan, jos sä löytäisit sen groundbreaking idean heti, niin silloin se luultavasti ei ole niin groundbreaking”

A.2.6

”Go-to-market voi olla tämmöinen optimizer-tyyppinen ratkaisu, ja sitten se visio on tuommoinen groundbreaking creator-studio-ratkaisu.”

A.2.7

”Joo, no toi oli hyvä tarkennus, että joo, voi tulla. Ja mä luulen, että varsinkin jos on tää kompaniassa product studio, niin siinä niin kuin sanottu, niin se playbook ohjaa varmaan siinä tyypissä ehkä vähän enemmän, ja varsinkin myös jos sä oot corporate venture studio, niin siinäkin, tiedäksä, ei voi toteuttaa sen asiakkaan, eli tän corporatein rahoilla mitä tahansa ideoita, vaan sen pitää olla tietynlainen. Että tietyllä tavalla se rahoittaja antaa aina sen mandaatin, että mitä se studio voi tehdä, ja se mandaatti voi olla hyvin tämmöinen generalistinen, ja se voi olla varsinkin silloin, jos kyse on syndikaatista, niin silloin voi olla enemmän vapausasteita. Sitten jos mennään siihen, että siellä taustalla on rahasto, niin yleensä siihen iskee sitten rahaston lainalaisuudet. Rahasto myy niiden limited partnerseille tietynlaista mandaattia, mikä on se sijoitustrategia ja teema, ja mihin se rahasto sijoittaa, ja siitä ne ei pysty ikinä poikkeamaan.”

A.2.8

”Riippuu tosi paljon siitä, että ketkä siinä on LP:eitä ja minkälainen track record niillä studion foundereilla on nostaa sitä rahaa. Mä en ole ihan varma, että vaikuttaako se rahoitusmekanismi hirveästi siihen, että minkälainen struktuuri siinä on.”

A.2.9

”Ja esimerkiksi tämmöinen community studio niin kuin mekin, niin teoriassahan meillä voi olla useampia erilaisia rahastoja tässä taustalla, jotka rahoittaa vähän erilaisia EIR:ien ideoita ja sillä tavalla me voidaan sitten saada eri rahastoista rahoitusta riippuen, että mihin se sopii.”

Appendix B Original Quotes in English

B.1 Interviewee 3

B.1.1

”You need patient capital. You also need to be patient in getting to your sustainability goals. Most of the challenges are really complex, really nuanced. And that’s why they require really complex, nuanced answers.”

B.1.2

”So if you do sustainable agriculture, building a company in Helsinki or Turku might not be a best idea.”

B.1.3

”Regular compliance, I don’t know. I mean, we have to also remember that there are some things where regulations might have, or regulations or standardization might have actually stopped those business models.”

B.1.4

”The biggest thing that separates ICT from many other fields is the huge potential of handprint effects.”

B.1.5

”IP, of course, I mean a lot of, especially when you look at ICTs, IP is where the value is.”

Appendix C Venture Studio Case Data

The table contents containing the full data is attached here:

Case	Notes	Sources
TechnoSpark	- Produce companies as sellable products - The role of the entrepreneur is a job like managers: everyone can do it if they are taught - Split vertically spread out corporations into small startups, that are responsible for certain parts of the supply chain - A small few million exit is enough, if companies are produced like in a factory - Big corporations want to buy small startups - Founders get little equity (10% or less) in their startups but also small stakes in the studio itself - Ideas sourced from the studio, generate more ideas as you do business and discover new problems	Denis Kovalevich, Thinking Like A Venture Builder: Four Dialogues About The Venture Building Mindset Between A Serial Entrepreneur And Beginners Who Are Starting Their Journey In Technological Entrepreneurship. Independently published, 2024. [Online]. Available: https://www.amazon.com/Thinking-Like-Venture-Builder-entrepreneurship/dp/B0DFG4YMWJ A. Szigeti, Startup Studio Playbook: For entrepreneurs, pioneers and creators who want to build ventures faster and with higher chance of success. Master the studio framework and start building. 2019. [18] Denis Kovalevich, Thinking Like A Venture Builder: Four Dialogues About The Venture Building Mindset Between A Serial Entrepreneur And Beginners Who Are Starting Their Journey In Technological Entrepreneurship. Independently published, 2024. [Online]. Available: https://www.amazon.com/Thinking-Like-Venture-Builder-entrepreneurship/dp/B0DFG4YMWJ Max Pog & Venture Studios, Regular startups built by regular people for regular companies. Denis Kovalevich on startup studios, (Mar. 15, 2024). Accessed: Apr. 06, 2024. [Online Video]. Available: https://www.youtube.com/watch?v=y815UDiSIIY
Atomic VC	- Only invest in startups we build - Limited partner, general partner structure - Person first or idea first (the idea comes from the individual or from the studio) - We provide the initial seed funding - Support EIRs and then get out of their way - Make atomic the best way to found companies, by providing cheatcodes and leapfrogs	Inside Atomic: Great startups are built, not discovered. 2023. Accessed: Apr. 21, 2025. [Online]. Available: https://open.spotify.com/episode/49UBDESNjn5ruybw4roYMp “About F(o)unded by Atomic,” Medium. Accessed: Apr. 21, 2025. [Online]. Available: https://medium.com/the-atomic-blog/about “Atomic - Confluence.VC.” Accessed: Apr. 21, 2025. [Online]. Available: https://confluence.vc/funds/atomico/ “Atomic’s Studio-Fund Model: Insights from Jack Abraham - YouTube.” Accessed: Apr. 21, 2025. [Online]. Available: https://www.youtube.com/watch?v=_TXAi6WzEoQ D. Sloan, “OpenAI’s Sam Altman is funding a green-energy moonshot as AI’s power demands grow to ‘insatiable’ levels,” Fortune. Accessed: Apr. 21, 2025. [Online]. Available: https://fortune.com/2024/04/22/sam-altman-ai-energy-power-consumption-startup-renewable-solar/

Idealab	- Founded in 96 by Bill Gross - Between 96 and 2016, Idealab went on to create 150 companies in many different industries. - Idealab invested the first 250k dollars in each. - Then went on to help attain additional funding (more than 3.5B dollars over the yars) - Of 150 companies, 60 closed or did not succeed, 45 successful IPOs and acquisitions, 45 currently operating ones. - 7 companies with more than 1 billion exits. - Created more than 10 000 jobs. - Focused on big disruptive opportunities. - cleantech sustainability for example - "Try get all the shared resources under one roof, to try and help companies succeed. I wanted to try and have an entrepreneurship factory." - Brainstorm ideas for products and services that are needed in cleantech and other areas (technology solutions).	“Idealab.” Accessed: Apr. 21, 2025. [Online]. Available: https://www.idealab.com/ “Bill Gross’s 25 Lessons from Idealab,” 25-lessons.idealab.com. Accessed: Apr. 21, 2025. [Online]. Available: https://www.25-lessons.idealab.com

Rocket Internet	- Rocket Internet's recruits are predominantly from consulting firms, investment banking, and business schools (not experienced founders) -"We identify and build proven Internet business models and transfer them to new, underserved or untapped markets, mainly outside the United States and China, where we seek to scale them into market leading online companies". - Focuses on particular types of businesses, namely online retailing, online marketplaces (including food delivery, real estate, travel, and transport), and fintech (especially payment services in areas underserved by banks). - The CEOs appointed to Rocket Internet's business startups are remunerated by salary and (small) equity stakes in their businesses. - Rocket Internet has decoupled the evaluation of business ideas from the evaluation of founding teams. - The organization is famous for copying other entrepreneurs' successful business ideas and business models. - Standard set of legal entities and human resource structures for its companies, as well as a physical campus where startups can make use of information technology and other assets	R. Köhler and O. Baumann, "Organizing a Venture Factory: Company Builder Incubators and the Case of Rocket Internet," Sep. 01, 2016, Social Science Research Network, Rochester, NY: 2700098. doi: 10.2139/ssrn.2700098. "Rocket Internet - Prospectus for the public offering." Rocket Internet, Sep. 23, 2014. Accessed: Oct. 17, 2024. [Online]. Available: https://silo.tips/download/rocket-internet-ag-berlin O. Baumann et al., "Rocket Internet: organizing a startup factory," J Org Design, vol. 7, no. 1, p. 13, Nov. 2018, doi: 10.1186/s41469-018-0037-2.

Hexa (eFounders)	- 10+ companies, 2 exits - 5-year anniversary this year, eFounders' companies have reached a valuation of $125M all together with more than $1,5M in MRR (Monthly Recurring Revenue). - Brainstorm ideas with the studio staff - network of companies - A network of companies that frequently test their MVPs - 4 different phases: inception, build, scale, growth. - among the 20 ideas we have per year, we only keep 4 that we want to build. - However, it's quite rare that we definitely give up on an idea. Very often, we just decide that we won't develop this project now but keep the idea in the back of our mind. - For our co-founders, we're not looking for 'managers' but for exceptionally skilled and ambitious entrepreneurs. - At eFounders, the goal is for each of our startups to become fully independent. So co-founders need to picture themselves running a billion-dollar company in the long term. - Digital product focus - eFounders' team is multi-disciplinary: we have a unique mix of talent in order to support our projects in every way. Creative, Tech, Product, Marketing, Sales, Admin - The two basic words that define best eFounders are: 'Startup Studio' and 'SaaS'. - eFounders' philosophy is that our startups become 100% operationally independent after 18 months (and they leave the studio). - Recruits "Most brilliant founders, who are willing to do it in a team" - Recruits very ambitios people, who also have their feet on the ground so that they can take feedback - Idea generation: Venture partner at hexa has an idea that they want to build and a willing EIR does that, someone comes with an idea and hexa helps them (not so common anymore), an EIR and Hexa agree on an idea to execute. - 70 (founder) / 30 (studio) shares post seed - Core team of 20, founder team of 5 running projects - Has built three unicorns - All financial investors in the same company, no limited partnership, no complicated fund structures, no obligations to investors, gives the studio freedom - Hexa belives that with experience you can build better companies	A. Szigeti, Startup Studio Playbook: For entrepreneurs, pioneers and creators who want to build ventures faster and with higher chance of success. Master the studio framework and start building. 2019. [18] Denis Kovalevich, Thinking Like A Venture Builder: Four Dialogues About The Venture Building Mindset Between A Serial Entrepreneur And Beginners Who Are Starting Their Journey In Technological Entrepreneurship. Independently published, 2024. [Online]. Available: https://www.amazon.com/Thinking-Like-Venture-Builder-entrepreneurship/dp/B0DFG4YMWJ Max Pog + VCs, Family Offices & Venture Studios, Created 40 startups, total valued $5B+. Quentin Nickmans @ Hexa / eFounders, (Nov. 06, 2023). Accessed: Apr. 21, 2025. [Online Video]. Available: https://www.youtube.com/watch?v=zCpcL2YfXbQ

Betaworks	- Since 2007 they have invested in way more than a hundred companies. - invest into or create themselves. - Core team for startup building. This includes data science, designer, branding, distribution along with deep product experience and a considerable network of investors. - They fund startups internally for the beginning, until it gets traction. As the startup experiment grows and starts to look like a good business, Betaworks helps the startup team to raise funds, set up a dedicated company and grow. - Hackers can join and explore product ideas and build something together. Already existing teams can get seed investment. And Betaworks is also a great place to find a startup for those who want to join one. - Hacker In-Residence program - "Daniel already had a family, the high-risk startup world was not his best option. The creative environment combined with the safety that Betaworks provided was the ideal playground for him." - The recruitment criteria, among cultural fit, is to be able to build something on your own. - 50% Betaworks - 50% team equity. "Considering the added resources and benefits - the space, the team, the network, the expertise - it's a fair deal." - Betaworks partners will guide you through the challenging process of growing a startup. They can provide valuable back-office services so you don't have to hire a dedicated admin staff for the startup.	A. Szigeti, Startup Studio Playbook: For entrepreneurs, pioneers and creators who want to build ventures faster and with higher chance of success. Master the studio framework and start building. 2019. [18] Denis Kovalevich, Thinking Like A Venture Builder: Four Dialogues About The Venture Building Mindset Between A Serial Entrepreneur And Beginners Who Are Starting Their Journey In Technological Entrepreneurship. Independently published, 2024. [Online]. Available: https://www.amazon.com/Thinking-Like-Venture-Builder-entrepreneurship/dp/B0DFG4YMWJ

High Alpha	- Venture studio and a fund - Over the last 8-9 years, launched about 40 companies - Mostly launching B2B software companies - Founded in 2015 in Indianapolis - Has built unicorns - Has invested into about a 100 other companies from its fund - Started working exclusively with corporations, nowadays there are also university partners - High Alpha uses the dual entity strategy for structure - 500 milj dollars of funds raised for investing in the companies - Team of 40 people, 1-2 million of average investment from a partner - Launch valuation about 10 million - Total capital raised around 50 million dollars - "In corpos it is much harder to innovate nowadays, thats why we partner with them" - "M&A and internal R&D is not so effective anymore" - "External startups can do things, that big corpos focused on effective execution can't do. Startups don't want to be capital efficient but innovative" - They don't manage a fund, but instead rent out their team to corpo and university partners, develop businesses for them, they pay for that work - After launching a company, they don't get paid anymore - Cap table split: founders own at least 51%, ensures that investors remain happy, vs takes 20% and rest goes to capital providers like corpos and unis (minority stake) - "We view that more value can be made with venture backed startups" - Universities want their innovations to be turned into concrete technologies that help the economy - Universities want to build a alumni network, that can invest into common goals and opportunities in various industries - Software startups require atleast 1 million initial funding - Corpo vs independent startup: "it easier to move fast independently, but harder to figure out the real problems" - Structures and incentives are very important with corporate venture studios - Often corpors come in with the ideas, othertimes we have the ideas start to do them - Investor-founders can have conflicts of interest (dual entity structure helps with this) - Ultimate objective of the studio is very important, if you want to fund a studio, fund it so that the funding activity does not become a distraction - Corpos require their own ways of collaboration, they (corpos) are not designed to launch startups - Stages: similar to other studios, incorporate relatively early and not incubate that long incentivice founders as early as possible, align partners around a broad theme, address problems with what technologies, strategyc opportunity areas, ideate business models within those, within a few weeks you can ideate few hundred ideas, next some rapid testing and nail down to about 30 ideas customer conversations, market reseearch etc., next down to 5-10 a hypothesis to validate how to make money etc, next about 3 are sleceted to sprint weeks, where the business is gotten ready to launch more customer validation etc at the end of the week a pitch and decision whether to launch or not. All of this pre-launch. - At some point, it might be more efficient to just create a new studio for certain partners, with its own fund and structure - 11 or 12 startups a year at most, normally 4-5 - What is it like to scale the studio model - Powerlaw curve - A wide portfolio achieves more success, how can you launch 100 companies usccesfully? More studios. - Ideal co-founder: 45 of age, most have been in succesful startups before, they have experience, they just want to move faster as studio allows this - We want to go into markets, where we can get almost a monopoly initially "competition is for losers" - Common failure modes: not enough capital for the studio (avoid sequental launching, you have to launch alot of ventures at the same time), portfolio can also scale and complexity scales with it, founders are not able to manage everything, you need deep operating experience, clear view on the startup-studio relationship	Max Pog + VCs, Family Offices & Venture Studios, 4 layers of company creation with a venture studio model. Elliott Parker | High Alpha Innovation, (Apr. 23, 2024). Accessed: Apr. 21, 2025. [Online Video]. Available: https://www.youtube.com/watch?v=BqG2LOTVTik “About Us | High Alpha.” Accessed: Apr. 21, 2025. [Online]. Available: https://www.highalpha.com/about

Highline Beta	- Started in summer of 2016 - Built 9 companies, first launched in 2019 since previous years went to build a fund - 9 investements to outside companies - goal to build 4-5 companies a year - "let's work with big companies to validate and investigate the problems they have and spin out a company, corporate is the first partner and investor", done this a couple of times - We helped to spinning things out, but more often than not it slipped into internal building at the end - Now we work with founders sometimes without a corpo partner day 1, sometimes a partner is from day 1 - "We are not a vertical studio today, we are more horizontal with no industry focus. Fiancial well being for all is our theme but nothing more specific." - We source ideas from within studio, foudners that come to us and corporate partners - We are sub 20% equity studio, lower than most studios - Typically solo founder, goal is to get the company in the market in first 6 months, after we look to potentially bring in a co-founder - Equity and deal structure has varied from 15% to 25% equity, nowadays studio takes 10% common equity "sweat equity" for being a co-founder, 250k check of initial funding gives the studio additional 8%, closer to launch invest additional 250k and bring in other investors and valuation can't be known at that point - We provide services from 0 to 1, design development, go to market, help to recruit, help to raise capital, services provided in exchange for services	Max Pog + VCs, Family Offices & Venture Studios, Nobody has the perfect formula. The venture studio model. Ben Yoskovitz @ Highline Beta, (May 14, 2024). Accessed: Apr. 21, 2025. [Online Video]. Available: https://www.youtube.com/watch?v=nIsIB50RA6E “Highline Beta - Venture Studio and Venture Capital.” Accessed: Apr. 21, 2025. [Online]. Available: https://www.highlinebeta.com/

Carbon 13	- Climatetech studio - Takes in a cohort of founders, that want to build climatetech startups - Launched 150 startups in 2,5 years - Invests initially about 150k $ 6-15 startups from each cohort and takes about 10% equity - After 4 months these startups are prepared for a demo day and 80% receive additional funding - So far, Carbon13 invested in 65 startups – total of $10M+. TVPI of 2-3x. - The average age of entrepreneurs joining their cohorts is 38. 30% are women. 30-50% have business ideas. 40-60% are full-time employees or freelancers. 50% are locals (Germany & UK), and others are from the US, India, Nigeria, and other parts of Europe. 64% of the teams have at least one female co-founder - 30 mil$ fund	Max Pog + VCs, Family Offices & Venture Studios, Venture builder in Climate Tech: 150 startups created in 2.5 years. Michael Langguth @ Carbon13, (Apr. 02, 2024). Accessed: Apr. 21, 2025. [Online Video]. Available: https://www.youtube.com/watch?v=ijrsZEQC0wU "Home," Carbon13. Accessed: Apr. 21, 2025. [Online]. Available: https://carbonthirteen.com/
Venturerock	- Started in 2018 - "Venture studios look for more experienced founders, compared ot accelerators" - We invest a total of 2.2 million in every company as long as they make progress, from pre seed to series A - IRR of a venture builder is higher than accelerator, 86% about for vs and half that for accelerator - "People required at the start are often not the right people to scale" - "Building a company is like a relay marathon: give the stick to the righ people at the right time" - 20k in SPV and 30k into services	Max Pog + VCs, Family Offices & Venture Studios, Accelerators VS Venture Studios. Startupbootcamp & Venturerock | Marc Wesselink, (Dec. 08, 2023). Accessed: Apr. 21, 2025. [Online Video]. Available: https://www.youtube.com/watch?v=pgP0ymxoh24 "Homepage," Venturerock. Accessed: Apr. 21, 2025. [Online]. Available: https://venturerock.com/
