

SEP Project / Master Thesis:

How do stakeholder demands influence the way incubator organizations support starting entrepreneurs in implementing ESG initiatives in the North of the Netherlands?

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Abstract

This thesis explores how stakeholder demands affect business incubators' ESG support tools for entrepreneurs. The empirical research examines the complex relationships between internal and external stakeholder logics using qualitative methods in form of semi-structured interviews. Interview participants involve business incubator managers, mentors, and experts in the field of business incubator ecosystems. The findings indicate that public sector policies and financial resources are key to implementation of ESG support mechanisms. Public incubators prioritize sustainability more than private and hybrid incubators. Resource constraints, lack of frameworks, and interest conflicts of different stakeholders are key issues for slow implementation of ESG support mechanisms. Economic goals are often priorities above long-term sustainability. The thesis advocates for a comprehensive and standardization of an ESG framework for business incubators and entrepreneurs. A multi-stakeholder governance is crucial to balance economic, environmental, and social issues.



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Introduction

The urgency to shift to a more sustainable future has never been higher. With growing concerns about climate change, resource depletion, and socioeconomic inequities, private as well as public organizations all around the world need to adopt more sustainable practices (Doppelt, 2009; Marques et al., 2022; Schaltegger & Wagner, 2011).

Integrating Environmental, Social, and Governance (ESG) initiatives in business practices is increasingly becoming a global imperative. Business incubators, as pivotal enablers of entrepreneurial success, can play a crucial role in embedding ESG values into incubated entrepreneurship they support. Still the minority of business incubators actively advertises ESG as a core value for entrepreneurial success. Its widely unknown whether and how business incubators support incubated entrepreneurship by incorporating ESG to their business development (Bank et al., 2017; Carle, 2024; Galbraith et al., 2021; Marques et al., 2022).

Business incubators are organizational environments where entrepreneurs receive preparation to enter the market. This frequently coincides with the development of a comprehensive business strategy that can subsequently be presented to investors or other potential business partners. The economic aspect of developing a company strategy tends to take precedence because involved stakeholders focus on achieving favorable returns on investment in form of financial resources (Aerts et al., 2007; Galbraith et al., 2021; Margues et al., 2022; Rijnsoever, 2022; Wu & Wang, 2020).

Most of the research conducted on ESG activities in the corporate environment focuses on well-established organizations. With the shift towards a more sustainable future, there is a growing emphasis on how startups and emerging entrepreneurs align themselves with sustainability and integrate ESG efforts into their business development. Shareholders but also other stakeholders like customers or business partners increasingly demand ESG efforts from the corporates they are dealing with including startups (Albahari et al.,



2019; Autio et al., 2014; Ayyash et al., 2022; Carle, 2024; Leyden et al., 2014; Newth, 2016; Wu & Wang, 2020).

This thesis aims to explore the complex dynamics between internal and external stakeholder logics within business incubators and their influence on the support mechanisms for ESG initiatives.

The central research question is: "How do stakeholder demands influence the way incubator organizations support starting entrepreneurs in implementing ESG initiatives in the North of the Netherlands?"

Stakeholder theory which evaluates how stakeholders' expectations influence organizations strategy and outcomes is addressed as a theoretical foundation in this thesis (Bacq & Aguilera, 2022; Bridoux & Stoelhorst, 2022; Freeman, 2010; Freeman & Ginena, 2015; Govindarajan & Srivastava, 2020; Hugo, 2020; J. W. Stoelhorst, 2016; Key, 1999; McGahan, 2023; Newth, 2016; Stoelhorst, 2014).

The conducted research seeks to improve academic literature by linking these ideas with actual evaluations of ESG support methods applied in business incubators, while also contributing to the emerging scientific field of ESG inside startups and entrepreneurship

The objective is to investigate the combined influence of internal norms and external forces on incubation practices, providing fresh perspectives on the promotion of sustainable entrepreneurship.

Adopting a qualitative research approach, this thesis will utilize semi-structured interviews to gather data. Interviews will be conducted with incubator managers, mentors, and industry experts to capture a comprehensive view of the influences and outcomes related to ESG initiatives.

The research is expected to elucidate the diverse mechanisms through which business incubators support ESG initiatives, influenced by stakeholder demands. It identifies specific barriers that impede and facilitators that enhance effective ESG implementation. Based on these findings, the thesis proposes practical recommendations for business



incubators to optimize their support structures, potentially influencing both policy and operational adjustments to foster better sustainability support mechanisms.

Initially, a comprehensive literature review establishes the theoretical foundation. The methodology part involves an interview guide on which bases a total of six interviews are conducted. Collected data is analyzed according to content analysis as defined by Mayring (2020) to discern patterns and themes. These empirical findings will be integrated with the theoretical perspectives to draft a comprehensive analysis and discussion of the results.

This thesis not only aims to contribute to the academic field by linking theoretical frameworks with empirical investigation but also seeks to provide actionable insights for business incubators and policymakers. The recommendations derived from this research study could significantly influence the support mechanisms for ESG initiatives, thereby enhancing the sustainability practices of new ventures. Future research could expand on this foundation, exploring additional quantitative measures or extending the geographical scope of the study.

1. Theory and Conceptual Model

Stakeholder Theory and New Stakeholder Theory

Stakeholder theory (ST) has gained significant importance in comprehending the ways in which organizations engage with different stakeholders. The theory provides a robust theoretical foundation for understanding how stakeholder demands influence organizational practices and change (Bacq & Aguilera, 2022; Bridoux & Stoelhorst, 2022; Freeman, 2010; Key, 1999).

Stakeholders are defined as all the different parties involved either internally or externally within an organization. Freeman (2010, p. 46) defines stakeholders as: *"any group or*



individual who can affect or is affected by the achievement of the organization's objectives."

They are seen as integral to the organization's value creation process that includes financial, environmental, and social dimensions. Stakeholders influence both strategic directions and operational practices as well as organizational decision-making and shape organizational strategies and outcomes through continuous feedback and adaptation (Bacq & Aguilera, 2022; Bridoux & Stoelhorst, 2022; J. W. Stoelhorst, 2016; McGahan, 2023).

The theoretical framework of new stakeholder theory (NST) includes a more comprehensive approach towards stakeholder engagement within an organization. Whereas traditional stakeholder theory focuses on mainly the economical and ethical dimension and follows a descriptive approach new stakeholder theory also considers environmental as well as social perspectives on stakeholder integration into organizational processes. NST also includes the outcomes of stakeholder influence as important determinants to understand the interplay between stakeholders and organizations. This approach makes the theory not only descriptive but also analytical. NST makes the holistic view and analysis of stakeholders influence to organizational processes even more complex (Bridoux & Stoelhorst, 2022; Freeman & Ginena, 2015; Hugo, 2020; J. W. Stoelhorst, 2016; McGahan, 2023; Stoelhorst, 2014).

How Stakeholder demands impact organizations

NST aligns with modern definitions of corporate responsibility including social and environmental responsibility. There are a diverse range of stakeholders involved in organizational processes. According to authors like McGahan (2023) or Stoelhorst (2014) organizations such as corporates are the primary administrators to manage the relationships with the stakeholders.

Bridoux and Stoelhorst (2022, p. 799) point out that: *"stakeholder demands significantly influence strategic decisions and organizational behavior, necessitating strategic alignment with stakeholder needs."*



Stakeholder interactions are dynamic and involve continuous feedback loops that drive changes within organizations. Therefore, stakeholder governance plays a crucial role for organizations (Govindarajan & Srivastava, 2020; Stoelhorst, 2014). This can be very challenging because of the heterogenous motives of the stakeholders involved. The heterogenous motives lead to several challenges and barriers which can make organizational change a long-lasting and difficult process (Doppelt, 2009; Farri et al., 2022; Geovanny Perdomo Charry, José Arias-Pérez, 2015; van de Ven & Scott, 1995).

McGahan (2023) states that there are two main types of stakeholders: Self-regarding and reciprocal stakeholders. Self-regarding stakeholders involve parties that are only interested in their own profit maximization which don't necessarily has to align with fair behavior. Reciprocal stakeholders on the other hand value fairness, joint value creation and are dedicated to punishing unfair behavior.

The influence of stakeholders and their demands towards an organization depends on the individual relationship between the organization and each stakeholder as well as on external and internal pressures and rationales within the organization's ecosystem (Stoe-Ihorst, 2014).

For instance, within a capitalistic and economy driven market organizations that operate within that market such as for-profit oriented corporates, but also economic oriented public actors such as governments tend to priorities stakeholder demands that align with economic and capitalistic rationales rather than environmental or social stakeholders (Freeman & Ginena, 2015; Govindarajan & Srivastava, 2020).

Hugo (2020) suggests that shareholder governance is not enough in today's landscape facing severe societal and environmental challenges. Thus, organizations should implement a holistic stakeholder governance approach which goes beyond economic demands but balances the interests of economic, environmental, and social stakeholders (Hugo, 2020).



Business Incubators

Business incubators are recognized as crucial instruments for promoting innovation and entrepreneurship. They help entrepreneurs grow during their initial stages with the goal to participate in the market as well as stimulate regional development. Various definitions and types of business incubators are discussed within the academic community. Research on business incubators has grown significantly since 1985, but it remains fragmented with no universal definitions nor consensus on key success factors (Bruneel et al., 2012)

Business incubator landscape is broad, and several business incubator types have emerged having different stakeholder operating within their ecosystem and specialized on different business streams. According to Bruneel et al. (2012) the first generation of business incubators which developed in the 1980s was to provide workspace and shared resources such as administrative assistance. The second generation from the 1990s included services like initial business advice and mentorship for startups and emerging entrepreneurs with a business concept. The third generation from the 2000s onwards also emphasizes access to external networks which includes financial, technological, or professional resources (Bruneel et al., 2012).

With the market getting more complex regarding macro-developments such as sustainability transition, digitalization, automation, or deep tech as well as also getting more competitive there is a demand for business incubators to special or expand the offer that they provide to incubated entrepreneurs. That's why many sector- or theme- specific business incubators have emerged within the last decades (Ayyash et al., 2022; Bruneel et al., 2012; Gstraunthaler, 2010).

Albort-morant and Ribeiro-soriano (2026) describe several types of business incubators that operate in today's landscape:

- Traditional Incubators: They focus primarily on providing physical space, basic administrative services, and initial business advice.



- Technology-Based Incubators: They support entrepreneurship with a tech or deep tech driven business concept, offering specialized services such as access to advanced technologies, technical mentoring, and connections to industry-specific networks.
- University-Based Incubators: They are embedded within academic institutional ecosystem and can leverage university resources which includes research, faculty expertise, and student talent, to support entrepreneurship. Incubator ecosystems involved within academic institutions also often focuses on academic entrepreneurship such as university-based research and development (R&D) projects.
- Public Incubators: They are thoroughly publicly funded and focus on regional economic development as well as job creation. Those are for example owned and managed by municipalities and regional governments.
- Private Incubators: They often have profit-driven motives and might be part of larger corporate innovation strategies.

Mian et al. (2016) describe Accelerators as a type of business incubators that specifically focus on rapid scaling. Incubated entrepreneurs usually participate in a time-limited program that involves business development training and pitching business plans to investors or potential industry partners.

Mian (1996) points out that there are also hybrid models of business incubators. Those hybrid incubators combine characteristics of different incubator types. For example, university and tech-based incubators that focus on technology transfer and commercialization while maintaining strong ties with academic R&D.

Bank et al. (2017) observe an increasing amount of sustainability profiled business incubators is observable. This type of incubator focuses on sustainable entrepreneurship such as green-tech and social or environmental primed business cases. Carle (2024) undermines this observation by addressing the rising demand for business incubator ecosystems with a sustainability focus.

According to Mrkajic (2017) there are two main different business incubator models:



- Nascent Incubation Model (NIM) which focuses on early-stage entrepreneurs by providing business capability development and infrastructural support. This model is common in non-profit sponsored incubators.
- Seed Incubation Model (SIM) which supports ventures in the seed stage. Those business incubators emphasize market reach development and networking support and are typically found in for-profit incubators.

The author argues that non-profit sponsors (NGOs, universities) tend to support NIM, while for-profit sponsors (private firms) support SIM (Mrkajic, 2017).

Stakeholders involved within Business Incubators

Several internal and external stakeholders can be identified within business incubator ecosystems. Soetanto and Jack (2016) identify universities and academic institutions as pivotal stakeholders in several types of business incubators. Those are primary stakeholders in university-based incubators. Also, other incubator types such as private, public and sector specific incubators that collaborate with academic institutions for example in terms of R&D, academic expertise, student talents or providing networking space are influenced by universities and academic institutions as a stakeholder group (Chan et al., 2022; Fuster et al., 2019; Mian, 1996; Soetanto & Jack, 2016; Stal et al., 2016).

Governments and public actors are key stakeholders to any type of business incubator. The public sector impacts business incubators either directly through subsidies, offering facilities or advisory services or indirectly through policies and requirements that business incubators or incubated entrepreneurs must comply with. Publicly owned business incubators are influenced directly by regional development agendas and demands from municipalities as well as regional governments (Ahmad, 2014; Bruneel et al., 2012; Marques et al., 2022; Potts, 2010).

Vanderstraeten et al. (2016) highlight the role of private sector involvement in incubation processes. This can for example be inform of special support, customization strategies that align with industry demands as well as sector specific investment and network



opportunities. Incubators that involve corporates or other private organizations as shareholders are influenced by strategic positioning of the organization. This means that if the organization follows a specific strategy the incubator is likely to act in favor of it or adopts it to their strategy as well (Ayyash et al., 2022; Bruneel et al., 2012; Hackett & Dilts, 2008; Vanderstraeten et al., 2016).

Incubated entrepreneurs are key stakeholders in every business incubator. Depending on the business idea and on the philosophy of the entrepreneurs they tend to choose an incubator that can offer the best support to them. It is important for incubators to keep the perspectives of entrepreneurs and startups in mind as well as the developments of entrepreneurship to meet their demands and to offer a wide range of support mechanisms to target individual need and attract them(Ayyash et al., 2022; Stoelhorst, 2014).

Hackett and Dilts (2007) address the major role of investors such as venture capitalists (VCs) as stakeholders within business incubator ecosystems. Investors often are main financial providers for entrepreneurs and startups. This makes it important for business incubators to hold good relationships with potential investors and provide network opportunities for incubated entrepreneurs to interact with them. In many performance-based incubators a main goal of the incubation process is to prepare entrepreneurs for investment rounds thus supporting them to develop a profound business plan that they can present to potential investors (Ayyash et al., 2022; Ikebuaku & Dinbabo, 2018; Mrkajic, 2017; Stoelhorst, 2014).

Customers and markets play an indirect but influential role in shaping the strategic positioning and the service offers of business incubators. The demands and preferences of customers and markets constantly change. Business incubators preparing entrepreneurs to meet specific market demands need to be aware of current trends within the market (Doh et al., 2010; Gstraunthaler, 2010; Massi et al., 2021; Mrkajic, 2017).



Support Mechanisms of Business Incubators

Incubator ecosystems offer a variety of support mechanisms depending on the type and the focus of the specific business incubator. As mentioned earlier types of business incubators and their support mechanisms changed over the past decades (Bruneel et al., 2012). Depending on the type and model of the incubator the support mechanisms can vary (Aerts et al., 2007; Albort-morant & Ribeiro-soriano, 2016; Al-edenat & Al ha-wamdeh, 2021; Cohen, 2013; S. A. Mian, 1996).

A key offering of business incubators is provision of infrastructure and resources such as office space and facilities. It is common that business incubators also offer different office materials and tools such as printers or telephone opportunities to assist incubated entrepreneurs and startups in their business development journey(Aerts et al., 2007; Albortmorant & Oghazi, 2016; Cohen, 2013; Gstraunthaler, 2010; Hjortso et al., 2015; S. Mian et al., 2016; Stal et al., 2016). Mian et. al (2016) note that sector specific incubators also usually offer cutting edge technology and assistance for product development such as construction machines and special tools.

Nowadays it is common that business incubators offer mentorship and individualized advise depending on the needs and questions of the incubated entrepreneurs. Mentorship can involve specific incubation programs, workshops, or master classes. Some business incubators provide incubation programs as a form of "traineeship" for incubated entrepreneurs during a specific program period. The programs are designed to teach tenants skills in product or service development as well as developing a business strategy that meets demands from potential cooperation partners (Albort-morant & Oghazi, 2016; Albort-morant & Ribeiro-soriano, 2016; Gstraunthaler, 2010; Marques et al., 2022).

Business incubator ecosystems are known for the access to networks that they provide to their incubated entrepreneurs. Networking opportunities for incubated entrepreneurs can include industry connections for example with potential cooperation partners in form of value chain partnerships. Access to potential investors or other financial recourses is



crucial for most entrepreneurs. Incubators can facilitate the connection between entrepreneurs and venture capitalists, angel investors, and other sources of finance. Networks can also involve alumni of the incubation program that incubated entrepreneurs can connect with to share experience and exchange ideas(Albort-morant & Oghazi, 2016; Gstraunthaler, 2010; Lai & Lin, 2015; Theodorakopoulos et al., 2014; Vanderstraeten et al., 2016a)

Some business incubators offer direct financial support opportunities. This can come along with seed funding models or equity investment (Bruneel et al., 2012; Gstraunthaler, 2010; Hackett & Dilts, 2008). Potts (2010) states that particularly incubators backed by the public sector or academic institutions can offer financial support in form of subsidies or grants.

Sector specific Incubators for example tech incubators commonly offer access to specific technologies, tools and laboratories that are useful for product development. Managing innovation processes is a critical challenge for entrepreneurs. Incubators can support entrepreneurs by managing intellectual property, conduct patent research or navigate through the regulatory landscape (Gstraunthaler, 2010; Theodorakopoulos et al., 2014). Carle (2024) and Bank et al (2017) discuss the role of sustainability support mechanisms within business incubators. Sustainability related support mechanisms are primarily addressed in business incubators that focus on sustainable entrepreneurship but not so much in conventional types of business incubators.

Environmental, Social and Governance (ESG)

ESG refers to the idea that economic actors need to take responsibility for environmental social and governance structures within their value chain and incorporate sustainability principles to their business strategy. Economic actors must be aware of externalities that result from their economic behavior. The debate about ESG primarily established in western countries as a response to the liberal market economy, the profit principle and unsustainable behavior of economic actors which leads to externalities like environmental



pollution, bad working conditions, or social injustice (Nakajima et al., 2021; Silvola & Landau, 2023).

The liberal market economy is a well-established market system that dominates in many countries. Economic actors within this system are enabled to act fully market oriented without focusing on the human and environmental dimension. Commonly that leads to the situation that economic actors focus on their shareholders profit maximization without considering externalities to stakeholders beyond their customers. Critics about the externalities economic actors produce and how they contribute to commonwealth when acting totally through the "invisible hand" are gaining more publicity within the last decades (Farri et al., 2022; Loorbach & Wijsman, 2013; Schaltegger & Wagner, 2011).

ESG debate implicitly takes up the critic that the liberal market economy doesn't lead to maximization of commonwealth. ESG indicates how economic actors like companies or organizations must behave to act ethically, contribute to sustainable development, improve the quality of life of their workforce as well as of the society (Joubrel & Maksimovich, 2023; Nakajima et al., 2021; Silvola & Landau, 2023; Storero & Barychev, 2022).

Scholars address that corporates and other organizations can measure their ESG performance through several measurement tools such as ECOVADIS, GRI or FutureFit. Those tools can provide an overview about where the organization stands regarding their ESG efforts, how several ESG initiatives undertaken by the organization might impact the environment and society as well as provide guidelines to improve performance in environmental sustainability, social responsibility, and governance practices (Bril et al., 2023; Câmara, 2022; Silvola & Landau, 2023; Tahmid et al., 2022).

Tahmid et al. (2022) argue that ESG investment including reporting initiatives can increase firm value and stakeholder relationships. Also, the authors propose that the integration of ESG factors into business strategies including investment strategies is essential for achieving long-term sustainable growth.

ESG among early-stage entrepreneurs and startups



There is a lack of scholars that address how startups and early-stage businesses evaluate ESG related topic and implement ESG initiatives to their business strategy(Carle, 2024; Goschin et al., 2021; Mansouri & Momtaz, 2022; Nakajima et al., 2021). Mansouri, S., & Momtaz, P. P. (2022) and Goschin et al. (2023) note that the integration of ESG criteria in startups is becoming increasingly important, driven by investor demand, regulatory pressures, and the inherent value creation potential of sustainable practices.

Due to the economic dominance regarding stakeholder demands several challenges that slow down ESG considerations among entrepreneurs and startups occur. Goschin et al. (2023) identify slow comprehensive adoption, lack of common priorities and poor communication as three main challenges that entrepreneurs and early-stage startups face regarding the implementation of ESG initiatives. Although many stakeholders see ESG as important, economic priorities dominate. There often is a misalignment between ESG priorities of stakeholders such as investors and startups, complicating the integration process. Stakeholders do not regularly require them to report on ESG criteria, leading to a lack of dialogue and consistent action.

Carle (2024) argues that startups often lack the resources and capabilities to address ESG issues. The author also addresses a lack of a standardized framework what ESG in organizations mean leading to confusion among entrepreneurs and startups in how to address this topic.

2. Methodology

Research Method

The empirical research design adopts a qualitative research approach. The qualitative research focus offers an in-depth insight into how business incubators are influenced by stakeholder demands in implementing ESG support mechanisms for their incubated entrepreneurs. Semi-structed interviews were conducted because they are designed to



provide answers to questions which were developed beforehand as well as leave the opportunity to expand the interview frame depending on the topic addressed (Mayring, 2000).

Data Collection

A total of six semi-structured interviews were conducted. Four of the interviews were conducted with business incubator managers and mentors from business incubators in the North of the Netherlands and two were conducted with industry experts about business incubation ecosystems. Interviewees that operate within business incubators were selected based on the type and model of the incubator. As mentioned in the theoretical conceptualization there are several business incubator types and models addressing specific goals. Different types of business incubators also have different stakeholders involved and are influenced by their demands in different ways.

The diverse selection of interview partners is to provide empirical insights about how different types of incubators are influenced by different types of stakeholders. Incubatormanagers and mentors from one university-based incubator, one private business incubator, one public business incubator and one hybrid business incubator were selected. All business incubators researched for this thesis are based in the North of the Netherlands.

The first expert that was interviewed is a PhD researcher who conducted comprehensive research about sustainability in startups and has profound practical experience with business incubators. The second expert interviewed is from a governmental institution in the North of the Netherlands which advises entrepreneurs and business incubators about strategical positioning and development.

The interviews were conducted via a remote video conference tool. For ethical reasons information about the use of the collected data for academic purposes was provided. After of the interviewees the interviews got recorded and then transcribed with help of a transcription software as well as manually.



Method of Data Analysis

To evaluate the collected data from the conducted interviews a content analysis after Mayring (2012) is conducted. This content analysis enables to summarize and categorize the data from the interviews to provide a transparent overview (Mayring, 2000).

After transcription abductive coding was applied. First a deductive coding approach was used to scan the transcribed interviews and find descriptive themes that align with theory about the interplay between stakeholder demands, business incubators and their support mechanisms regarding ESG.

The deductive content analysis after Mayring (2000) covers the following steps that are summarized and pictured in Figure 1:

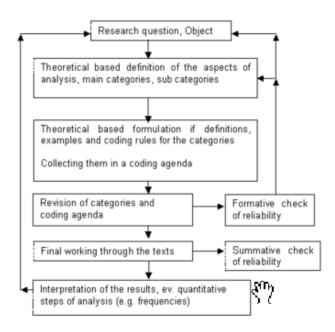


Figure 9 Step model of deductive category application; (Mayring, 2000, p. 5)

A total of 6 theme codes and 18 subcodes were predefined. The theme codes are listed below:

- 1. ESG Demands of Stakeholder Groups
- 2. Business Incubator Type and ESG support



- 3. Sustainability Awareness
- 4. ESG Support Mechanisms of Business Incubators
- 5. Regulatory and Market Drivers of ESG
- 6. Barriers and Challenges to ESG support implementation

The code book including definitions of predefined theme codes, subcodes and their coding rules can be found in the appendix.

In a next step an inductive coding approach was applied to create codes out of context from the semi-structured interviews. Besides the interview questions that were predefined additional questions were asked depending on the specific interview.

Fig. 2 provides an overview about inductive coding after Mayring (2000)

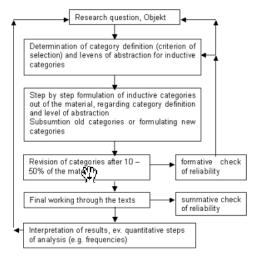


Fig. 1: Step model of inductive category development (MAYRING 2000) [11] (Mayring, 2000, p.4)

The inductive codes that were developed are:

1. Future of ESG in Incubators

The interview participants are anonymized to guarantee personal data protection. Business Incubator Managers are labeled as "BIM", Mentors as "M" and Experts as "E". The Interview participants are also labeled with numbers from one to six. For the Business



Incubator Managers, it is also stated in which business incubator type they are operating in to provide a better comparison and for the experts which expertise they have.

Table 1 provides an overview of the labeled interviews participants:

Interview Participant	Role / Business Incubator Type
BIM / M 1	Manager of University Based Incubator.
BIM / M 2	Manager of a Private Incubator.
BIM / M 3	Manager of a Hybrid Business Incubator.
M 1	Mentor and advisor at a Public Business
	Incubator.
E 1	General Expertise about Sustainability in
	Startups. Expertise about Business Incu-
	bator Networks and ESG relevance within
	Business Incubators. Worked at a Tech-
	Based Business Incubator in Paris,
	France.
E 2	General Expertise about Business Incu-
	bators, Worked with Business Incubators
	in the North of the Netherlands.

3. Results

1. ESG Demands of Stakeholder Groups

Through the interviews several stakeholder groups were identified that influence strategic orientation of business incubators. Therefore, also impacting their implementation of ESG support mechanisms.



To the question: "How do Government policies influence support for ESG initiatives within Business Incubators?", E 2 emphasizes the role of government policies in guiding incubators, stating that public sector funding is contingent on meeting these requirements (E 2, May 14, 2024, p. 2).

BIM / M 3 observes: "... it is integrated fully into all EU subsidies. So, anyone who's going for subsidy applications needs to be considering this." (BIM / M 1, May 22, 2024, p. 3).

BIM / M3, BIM M2 and E1 provide answers that align with this observation. The answers indicate that Government policies and public grants significantly influence ESG priorities for startups. Incubators align their support mechanisms with public sector demands to ensure that entrepreneurs can access funding and comply with regulatory requirements.

Private investors such as VCs can be identified as an impactful stakeholder group operating within the business incubator. ESG criteria are increasingly considered by private investors, pushing incubators to integrate ESG support into their programs to attract investment for incubated entrepreneurs.

BIM / M 2 states how investor demands shape ESG adoption, emphasizing the need to prepare startups for these expectations (BIM / M 2, May 16, 2024, p. 5).

E 1 notes: "VCs dedicated to impact energy and sustainability...all have different criteria about these topics and how entrepreneurs should address them." (E 1, May 18, 2024, p. 4)

In contrast to that BIM / M 2, BIM / M 1 and BIM / M 3 argue that private investors on the one side want to see sustainability efforts of entrepreneurs they invest in but on the other side still prioritize economic goals and financial return of investments (BIM / M2, May 16, 2024, p.3; BIM / M3, May 23, 2024, p.3; BIM / M 1, May 22, 2024, p. 3).

To the question whether it's feasible that in the near future investors prioritize sustainability goals over economic goals, BIM / M 3 states that: "... They would say I don't care if it's sustainable or not. It's our money that you're using, and I want you to use it as efficiently as possible in your startup company." (BIM / M3, May 23, 2024, p. 8)



Employees and Business Incubator Manager are also identified as a stakeholder group that influences implementation of ESG support mechanisms within business incubators through their values and advocacy. E 1 states that: "...some of the employees started first to challenge some of our positioning and offers in that respect." (Interview with E1, May 18, p. 3)

To the question: "How do you evaluate sustainability within business incubators and their support for startups and emerging entrepreneurs?", BIM / M 1 points out that: "I feel that the incubator I'm inheriting has not supported it enough. It's part of my redevelopment of the program. So, I will be reestablishing an entire track within the incubator focused on sustainable entrepreneurship enabling specifically societal impact." (BIM / M1, May 22, p.1)

In the interview's incubated entrepreneurs are addressed as a stakeholder group that can influence strategic positioning of business incubators regarding their ESG support offer. Even though there is a consensus of interview participants that there is an increasing awareness of entrepreneurs and startups addressing ESG and sustainability topics interview participants state that often economic priorities dominate.

M 1 explains, "Most of the startups we deal with have their niche products, but ESG is starting to become a significant topic even for them as investors increasingly look for these criteria." (M 1, May 22, 2024, p. 4)

2. Business Incubator Types and ESG support

Evaluating the answers of the interview participants indicate that public incubators are driven by public policies and therefore more likely to integrate ESG initiatives due to the demand from government stakeholders.

E 2 highlights that public incubators often have more robust sustainability frameworks due to direct government influence and funding (Interview with E 2, May 14, 2024, p. 3). BIM / M 2 points out: " ... as Founded in Friesland for instance is a public funded



organization, they can implement ESG related support mechanisms more easily because there is also money for that." (BIM, M2, May 16, 2024, p. 5)

The answers indicate that private incubators may prioritize economic success but are increasingly acknowledging the importance of ESG to attract investments and meet the demands of large corporate partners.

BIM / M 2 states: "For me as an individual and non-supported incubator, I will only do it when there is demand and there's money to pay for it." (BIM / M 2, May 16, 2024, p. 5)

BIM / M2 also points out that: "... if you want to deliver your products to a company like Nestle or Unilever or Shell or one of the big, listed companies, you do have to comply to all the goals they have to comply to because then you're immediately entering into the EU law regulations about the sustainability paragraph" (BIM / M2, May 16, 2024, p. 3)

Also, with hybrid incubator ecosystems the economic paradigm seems to dominate. BIM / M 3 states: "While we recognize the importance of sustainability, the immediate focus tends to be on economic viability and securing initial investments." (BIM / M 3, May 23, 2024, p. 4)

University Based Incubators tend to follow the positioning of the academic institution that finances them. For them it might be easier than for private incubators to secure investments for ESG support implementations. Still as BIM / M1 indicates business incubator managers seem to have a significant influence on the positioning of the incubator they are inhering.

Sector specific incubators are dedicated to the specific sector they focus on. Some incubators are specifically dedicated to sustainability, focusing on supporting startups with clean tech and green business models. E 1 highlights the growth of incubators specialized in sustainability, noting a significant increase in their number over recent years (E 1, May 18, 2024, p. 5).



M 1 discusses initiatives like Be-Start, also an incubator program in the North of the Netherlands, which funds and supports sustainability-focused startups (M 1, May 22, 2024, p. 4).

3. Sustainability Awareness

Incubators employ various strategies to raise awareness and promote sustainability among startups through mentorship and training. According to the evaluation of the interviews there is a tendency of public business incubators and sector specific incubators that are dedicated to sustainable entrepreneurship to promote sustainability to a greater extent than the other incubator types that were addressed during the interviews.

M 1 notes: " So we have three core values we'll be putting in place which is sustainability, community and team building." (BIM / M 1, May 22, 2024, p. 2).

4. ESG Support Mechanisms of Business Incubators

Among the interview participants there is a consensus about the importance of personalized coaching, and mentorship to increase sustainability awareness and implement ESG initiatives to the business strategy of incubated entrepreneurs. Yet there are almost no standardized programs to support entrepreneurs implementing ESG initiatives.

M 1 elaborates on initiatives that support sustainability for startups, including business coaching and workshops (Interview with M 1, May 22, 2024, p. 4).

BIM / M 2 states, "We do one on one coaching based on demand, that means some of the startups need me or one of my colleagues like every day, some of them once a month, and everything in between." (BIM / M 2, May 16, 2024, p. 3)

E1 was the only one from the interview participants who mentions in the incubator she worked there was a specific person within the incubator that is responsible about sustainability and ESG support mechanisms. E 1 notes, "First, we started to talk about sustainability in the acceleration program. Second, there was a person dedicated to sustainability and providing mentorship" (E 1, May 18, 2024, p. 6).



In average the support that was stated most was individual mentorship and advise when ESG related topics need to be addressed for example regarding public funding applications. Except E1 no interview participant states that there is standardized ESG support for incubated entrepreneurs within the incubator they are operating in.

Access to networks can be a valuable support mechanism that fosters ESG awareness and implementation. There is a consensus among the interview participants that the networks provided by the business incubators can connect entrepreneurs with potential partners and companies that can enhance knowledge about ESG related topics.

5. Regulatory and Market Drivers of ESG

Compliance with governmental regulations and policies seems to be a primary driver to implement ESG support mechanisms at business incubators as well as for entrepreneurs to address ESG topics. To apply for public grants or subsidies entrepreneurs must comply with ESG efforts and integrate them to their strategy.

E 1 mentions, "Every public grant asks about sustainability." (E 1, May 18, 2024, p. 5)

BIM / M 2 adds, "Local innovation funds ... require ESG compliance, which means startups must integrate these elements to receive financial support." (M 1, May 16, 2024, p. 3)

Even though several interviewees identify that a shift towards a more sustainable direction even for startups, there seems still not to be a significant demand for entrepreneurs and startups to do that in today's environment.

E 2 points out: "There is a rising demand for greener products and greener businesses" (E 2, May 14, 2024, p. 2). In contrast to that BIM / M 2 states that: "I am in the situation that as long as the market doesn't ask for it, I favor the startups not to do it." (BIM / M 2, May 16, 2024, p.5)

Answers indicate that while market demand is a powerful driver for to implementation of ESG support mechanisms, it can also lead to a reactive rather than proactive approach



to sustainability meaning that business incubators as well as entrepreneurs only integrate ESG criteria when necessary.

6. Barriers and Challenges to ESG support implementation

The answers of the interview participants indicate that incubators balance the need for economic success with sustainability goals, usually prioritizing immediate business viability over long-term ESG integration. While ESG is becoming more prominent, the immediate need for economic survival often takes precedence, potentially limiting the depth of ESG initiatives.

A potential conflict of interests can be identified amongst stakeholder groups that operate within business incubator ecosystems. Public actors such as governments and municipalities demand ESG integration to business strategy when applying for public grants or subsidies. In contrast to that private investors tend to prioritize economic goals and financial return of investment. According to interviewees there is a rising demand of investors for ESG criteria, but it is not a priority yet.

Another significant challenge that can be identified through the interview responses are resource constraints of entrepreneurs. Emerging businesses often lack time and financial resources to focus on ESG initiatives amidst other business pressures. The answers indicate that while regulations drive ESG adoption, they can also be perceived as bureaucratic hurdles by startups. E 1 and BIM / M 1's observations suggest that startups might view compliance as a box-ticking exercise rather than a genuine commitment to sustainability, which could undermine the effectiveness of these regulations.

Several interview participants state that the lack of standardized ESG criteria can lead to inconsistencies in how startups approach and implement ESG measures also making it difficult to report ESG initiatives.

E1 points out that there is no unified framework in how to address ESG: "Another challenge is also that there is not a unified definition of what ESG, and sustainability means for businesses." (E 1, May 18, 2024, p. 5)



The complexity of ESG reporting as well as the lack of data might also be a challenge for business incubators to implement ESG support mechanisms that aim at reporting initiatives.

E 1 highlights, " ... you still don't have data that you can use for reporting because you need at least one year to collect the data. But I think as an incubator it should be your job to prepare entrepreneurs to receive this kind of question and prepare them for later ESG reporting" (E1, May 18, 2024, p.5)

Most interview participants state that the topic of ESG reporting and related support mechanisms to prepare entrepreneurs for reporting initiatives have not yet been addressed within the business incubator they are operating in.

Future of ESG support in Business Incubators

The answers from the interviews to questions regarding the future of ESG support implementation within business incubators indicate that ESG becomes integral to business incubator operation.

BIM / M 2 states: "when there's a need and necessity definitely a go for it. And bigger companies and authorities have that need, then you should work on it. (BIM / M 2, May 16, 2024, p. 4)

E1 sees an increasing demand of multiple stakeholders for ESG implementation in business strategies even at early-stage businesses. This indicates that there is a need for business incubators to adopt to this demand and prepare incubated entrepreneurs to comply with ESG criteria.

M1 states that governments and public actors function as driving forces of ESG implementation and policies. Stricter regulations can also boost a more comprehensive approach towards implementation of ESG support mechanisms within business incubator ecosystems.



4. Discussion

The qualitative content analysis reveals that stakeholder demands have an influence on how business incubators implement ESG support mechanisms. Public sector requirements drive ESG compliance through grants and funding. Private investors increasingly demand ESG efforts from the entrepreneurs they invest in. Yet economic drivers and financial return of investment seems to dominate.

Other stakeholder groups such as employees or potential customers can be important drivers to ESG support implementation depending on the individual values and advocacy. The empirical finding about different stakeholder interests aligns with NST's recognition of the heterogeneity of stakeholder motives (McGahan, 2023; Stoelhorst, 2014). Theory and empirical findings both highlight the critical role of stakeholder demands in shaping ESG support mechanisms.

However, the practical challenge of balancing economic and ESG goals is more pronounced in real-world settings. This underscores the need for a holistic stakeholder governance approach, which balances economic, environmental, and social stakeholder interests as suggested by Hugo (2020).

The analysis shows public incubators being more inclined towards integrating ESG support mechanism due to policy mandates. Private and hybrid incubators start to adopt ESG support mechanisms due to market and policy demands, but economic pressures and recourse constraints slow this process.

Public incubators are driven by government policies, while private incubators focus on economic viability and investor expectations (Ayyash et al., 2022). Different types of business incubators, such as public, private, and hybrid, interact with various stakeholders, influencing their strategic focus (Bruneel et al., 2012; Mian, 1996). This interplay can lead to tradeoffs between economic viability and sustainability highlighting the need for tailored strategies that accommodate the diverse needs and pressures faced by different types of incubators.



In today's setting it is observable that entrepreneurs often prioritize immediate financial needs over long-term ESG goals. Business incubators can play a vital role in educating and mentoring startups on ESG issues (Albort-morant & Ribeiro-soriano, 2016). Interviews indicate that public and sector-specific incubators dedicated to sustainable entrepreneurship are more proactive in promoting sustainability.

A major challenge that was identified through the empirical research is that there is no unified framework on how to address ESG. The findings suggest that awareness-raising is critical, but without systemic integration, these efforts might not lead to substantial changes how business incubators address ESG support mechanisms as well as amongst entrepreneurs to implement ESG efforts to their business strategy. As identified by Goschin et al. (2023) slow comprehensive adoption, lack of common priorities and poor communication are three main challenges that entrepreneurs and early-stage startups face regarding the implementation of ESG initiatives.

Findings suggest that the lack of standardized frameworks can lead to proform behavior of business incubators and entrepreneurs only implementing ESG when necessary. This highlights a gap between theoretical ideals and practical implementation. A development to that direction needs to be prevented because sustainability transition can only be achieved when all involved stakeholders fully comply with ESG criteria.

The complexity of ESG reporting might be frightening for entrepreneurs and Business incubators have not holistically addressed this topic. Even though ESG reporting is not crucial for entrepreneurs and early-stage businesses it is important to prepare them how to handle ESG reporting in the future.

ESG support mechanisms are not yet integral to business incubators support strategy. To implement ESG to core support programs of business incubators a paradigm diverse stakeholder groups must give a higher ranking to sustainability efforts. Often economic interests are prioritized. A multi stakeholder approach balancing the demands and needs of all involved stakeholders can lead to a more sustainable approach in how business operate and ESG can become an integral part in preparing entrepreneurs for the market.



Implications

The empirical research findings provide clearance about the current state how ESG is handled in business incubator ecosystems and how ESG support mechanisms are implemented. The insights of the findings reveal that conflicting interests and economic pressures slow down the process to address ESG topics and integrate ESG support mechanisms of business incubators.

Based on the research findings business incubators can adapt ESG support mechanisms stated in this thesis.

Governments are crucial drivers for ESG implementations amongst various stakeholders including business incubators and entrepreneurs. This thesis can provide practical recommendations about how governments can act to support business incubators in ESG support implementation.

This thesis highlights that managing interests from diverse stakeholders is challenging and complex. Business incubators can use insights from this thesis to educate involved stakeholder groups about the long-term benefits of ESG investment.

There is a gap of research investigating sustainability in entrepreneurs, startups, business incubators and how different stakeholder interests are managed in those ecosystems. The academic community can use this thesis to develop further frameworks that deepen the connection between theoretical and practical implication of stakeholder demands, business incubators and ESG support mechanisms.

Recommendations

Public incubators should keep leveraging government policies and funding to bolster ESG projects. To also guarantee that other business incubator types such as private business incubators implement ESG support mechanisms and have less economic pressure to do



so Governments could consider providing subsidies or financial rewards to incubators that integrate ESG principles and support mechanisms to their incubation program.

While educating entrepreneurs about ESG through mentorship and individual advice seems to be a valid support tool a comprehensive and standardized approach to ESG support implementation amongst business incubators needs to be initialized. Incubators should also educate investors on the long-terms benefits of embracing ESG standards while effectively balancing economic gains with sustainability goals. This might involve hosting workshops, seminars and case studies that highlight integration ESG factors.

A crucial step is to develop a comprehensive and standardized framework of ESG and how it can be applied by business incubators and entrepreneurs. ESG is complex which is why the framework needs to be adjusted to the specific group of adopters.

There is a need to progress Stakeholder theory and NST to address the practical challenges of aligning economic and ESG goals. Researchers have an opportunity to explore models that can effectively integrate these elements.

Limitations

The empirical research conducted in this thesis is based on a limited number of interviews, which may not fully capture the diversity of stakeholder demands and incubator responses. To prevent this limitation future research can adapt a broader sample scope. Also, a mixed methods approach is advisable as this can ensure more reliable data collection and results.

Through the focus on incubators in the North of the Netherlands, the generalizability of the findings is limited.

The conducted research primarily examines the perspectives of incubator managers and mentors and limited number of experts. This potentially leads to overlooking the views of other important stakeholders such as entrepreneurs and investors.



Future Research

Future studies could include a wider geographic scope to capture regional variations in stakeholder demands and ESG support mechanisms. Comparative studies across different countries or regions could provide valuable insights. To consider business incubators from other regions and maybe to compare geographical differences with each other could enhance the validity of the results.

Conducting longitudinal studies can provide deeper insights into the evolving nature of stakeholder demands and the long-term impact of ESG initiatives in incubators. This would provide a more comprehensive picture understanding the progress, drivers, challenges, and barriers of ESG support mechanisms within business incubator ecosystems over time.

Including a broader range of stakeholder perspectives, such as those of entrepreneur's investors, government representatives or potential business partners and customers can enrich the understanding of ESG integration in business incubators and the importance for entrepreneurs to comply with ESG criteria.

5. Conclusion

This thesis examines how stakeholder demands influence implementation of ESG support mechanisms within business incubator ecosystems in the North of the Netherlands.

The research question can be answered by combining practical insights of business incubators in the North of the Netherlands, Mentors and Experts with theoretical concepts about stakeholder theory, New Stakeholder Theory, different business incubator types as well as ESG and sustainability. The empirical research provides a thorough investigation of the relationship between different stakeholder groups and the current state of implementation of ESG support mechanisms within business incubators. Also operational



procedures, conflicting interests as well as barriers and challenges to successful and comprehensive implementation of ESG support mechanisms are addressed and elaborated.

The incorporation ESG support mechanisms into business incubators are an intricate yet necessary process for promoting sustainable entrepreneurship. Business incubators can improve their support systems and contribute to a more sustainable future by tackling the difficulties they face and utilizing the influence of stakeholders.

This research thesis offers a valuable basis for further investigations and actual implementations in the realm of sustainable entrepreneurship. Further research about the interplay between stakeholder demands, Business Incubators and ESG should broaden the geographical coverage and incorporate a wider array of stakeholder viewpoints to enhance the conclusions of this thesis and facilitate more efficient integration of ESG factors in business incubation ecosystems.



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Appendix

https://1drv.ms/f/s!AgiBIhkzJcoZgthJI8rFKRc-xUt_nQ