Extended Abstract

Accelerator Programs as an Important Driver for Circular Economy Transformation: Applying Institutional Theory

Research in progress

1. Introduction

It is scientifically proven that our ecosystem is constantly deteriorating, which is why society must radically change its forms of production and consumption, among other things (Cullen & De Angelis, 2021; *Global Footprint Network*, 2023; WWF, 2022). This call has also been heard by scholars and practitioners, who in recent years have given considerable attention to the question of how to achieve a more environmentally and socially sustainable economy under the concept of sustainable development (Brehmer et al., 2018; Geissdoerfer et al., 2018). Within this paradigm of sustainable development, circular economy (CE hereafter) plays an important and relevant role. It is often referred to as a condition for operationalizing sustainable development (Geissdoerfer et al., 2018; Sauvé et al., 2016). As an alternative to the linear economic model, CE seeks to decouple prosperity from resource consumption (Sauvé et al., 2016) and is designed and intended to focus on recovery and thereby replace the end-of-life concept (Kirchherr et al., 2017).

Despite the evident demand for circularity, the Circularity Gap Report reveals a concerning downward trend in the level of circularity within global production systems, declining from 9.1% in 2018 to 8.6% in 2020 (Circle Economy, 2022). Contradicting it´s apparent economic downsize, there is a growing recognition among companies of all sizes about the potential benefits and value that the CE holds for both their operations and their stakeholders (Geissdoerfer et al., 2017). However, it has also been shown that this transition is made most quickly by small and medium-sized enterprises (SMEs) and new ventures (Bocken et al., 2014; Schaltegger et al., 2016), as they are smaller and more flexible to adapt to such emerging concepts. Researchers even state that startups in particular can adapt CE principles relatively easily as they develop their corporate culture from scratch (Bauwens et al., 2020; Rizos et al., 2016). They contribute to the development of the technological innovation system of CE by encouraging other market players to adapt CE in their businesses (Hansen et al., 2010; Hoffren & Apajalahti, 2009). New ventures are therefore key players in the innovation process to encourage a circular transition (Lewandowski, 2016; Rizos et al., 2016; Spender et al., 2017).

Yet the paradigm shift towards the CE relies on multiple, complex factors such as the emergence of innovative business models and the active participation of responsible consumers (Bocken et al., 2014; Ghisellini et al., 2016; Kirchherr et al., 2017). To obtain these radical changes a lot of capacities and resources, especially from young startups, are demanded. Research shows participating in a venture development program improves the outcome of participating firms through the services, and tangible and intangible resources offered (Cohen

& Hochberg, 2014; Hausberg & Korreck, 2020). This can increase the likelihood of a new venture becoming successful (Woolley & MacGregor, 2022) and stimulate higher survival rates (Bustamante, 2019). In this sense, accelerators can act as intermediaries in the ecosystem to function as a potentially valuable source for driving the much-needed CE transformation.

We build on institutional theory to dive deeper into this interrelation of young ventures, capacity building via intermediaries and the CE transformation, wherein accelerator programs act as hybrid organizations (Roundy, 2017). It is argued that accelerators combine entrepreneurial-market logic and community logic (Roundy, 2017). So far research in this field of hybrid organization focused on managing the tensions that arise along multiple logics (Pache & Santos, 2012), especially in the context of social entrepreneurship and social ventures leaving hybrid support organizations aside.

Hence, we postulate the following research question:

Which influence do CE-focused accelerator programs as hybrid support organizations have on CE transition through new ventures?

With CE being a hotly discussed topic and seen to operationalize sustainable development we want to add to this research gap and analyze the influence accelerator programs can bear on CE transformation.

2. Theoretical Background

As stated above, young ventures hold the promise to spur sustainable development, especially in the operationalization via CE principles. Two particular classifications emerge when discussing circular startups: 'born circular startups' and 'circular startups'. The former describes ventures conceived with an inherent circular model. Everything from their foundational vision to daily operations resonates with circular economy principles (Bocken et al., 2016; Geissdoerfer et al., 2017). In contrast, while resonating with circular philosophies, the latter may have navigated a transformative trajectory, evolving from traditional to circular models (Bocken et al., 2016). In this research paper, we focus on born circular startups.

These startups may be able to adopt CE principles from scratch, yet the accompanying complexity of their business model design pose the need for external support (Rizos et al., 2016). Accelerator programs fill this need with their ability to build up capacities and resources for the participating firms (Crișan et al., 2021).

Roundy (2017) theorizes that accelerator programs act according to institutional theory as hybrid support organizations. As a hybrid organization, one combines two or more distinct institutional logics which represent "the formal and informal rules of action, interaction and

interpretation that guide and constrain decision makers" (Thornton & Ocasio, 1999). As accelerator programs are able to combine entrepreneurial-market logic and community logic (Roundy, 2017), it is stated that new ventures as entrepreneurial ecosystem participants are exposed to these logics of hybrid support organizations. By interacting with them along the entrepreneurial process, they are influenced by their logic which drives them (Roundy, 2017). Thus, accelerator programs specialized in the context of the CE can highly impact the transformation of the CE through the support of new ventures.

3. Methodology

To analyse, which influence CE-focused accelerator programs have on CE transition through new ventures, we firstly conducted a systematic literature review on accelerator programs and their role within an entrepreneurial ecosystem. We then analyze the findings, building on institutional theory. This will give insights into how they influence the development of new ventures from a theoretical point of view.

After laying the theoretical foundation, the focus will shift to practice. An analysis of the ecosystem of CE acceleration programs will shed light on the density of diffusion of the research subject. The focus will be on Germany, as access to this interest group can be guaranteed due to the origin of the authors. Furthermore, even though CE is a global matter, local solutions differ significantly due to sector specifics, or other influences (Crișan et al., 2021). Moreover, born circular startups who participate or have participated or and did not participate in an CE accelerator will be identified to further explore their development influenced by the hybrid support organizations. This also sheds light on the outreach of the programs. Expert interviews with the born circular startups will be conducted to collect the needed data.

4. Preliminary Results

Beside incubators' accelerators are defined as venture development programs providing essential services and physical infrastructure which is needed for the development of a new venture (Clayton et al., 2018; Spigel, 2017). While each type of venture development program maintains similar goals, their design and the range of services and resources that they offer varies (Woolley & MacGregor, 2022).

As a hybrid support organization, accelerators combine entrepreneurial-market logic and community logic (Roundy, 2017). The first logic focuses on providing the startups with a set of entrepreneurial behavior including knowledge about innovation, the creation of new markets,

business models, and technologies, but also coping with resource scarcity, uncertainty and the risk of failure (Cunningham et al., 2002). Conversely, community logic concentrates mostly on the value creation for the community but also on community needs, development, prosperity and trust (Reay et al., 2015; Thornton et al., 2012). Spreading this value accelerators can push CE in the form of incorporating CE from an entrepreneurial behavior point of view but also the value created for society. Research shows that accelerators emphasize more on one or the other logic proclaiming to categorize them on a continuum (Roundy, 2017).

The outcomes which these accelerators can bear can be analyzed according to the level on which they appear (Crișan et al., 2021). First on the startup level: Funding, validation, product development and knowledge can be measured as the top five outcomes of circular startups (Regmi et al., 2015). Whereas the number of participants and applications, the startups survival rate and gained funds are the outcomes on the accelerator level (Crișan et al., 2021). These outcomes are interrelated with the type of intervention an accelerator takes which include narrow, typical and extended interventions. Narrow interventions focus mainly on workshops, geek camp and space rentals (Gutstein & Brem, 2018). Whereas typical interventions go further by offering among other things mentoring, coaching and access to financing (Breznitz & Zhang, 2019) . Some accelerators extend that offer by for example office space, free housing, or financial support (Clarysse et al., 2016).

Whereas narrow interventions produce so-called soft outputs, such as learning, idea validation and the development of an entrepreneurial culture, typical interventions go beyond and trigger hard outcomes. They offer the participants access to investors, product development and launch support. Accelerators offering an extended intervention aim to create complex and often research-intensive products and services generating top hard outcomes: support to access relevant research, run complex technology transfer processes, and possess the capability to adapt their interventions to suit startups' characteristics and needs. (Crișan et al., 2021)

5. Discussion

With this paper, we want to shed light on how hybrid support organizations can impact the transition towards a CE. We understand this paper to be an exploratory research and want to reveal on one hand how accelerators influence CE transformation through new ventures by applying an institutional theory perspective. On the other hand, we examine how the logic continuum on which an accelerator positions himself influences the impact it has on new ventures and thus on CE transformation. The research is still in progress, but the preliminary results suggest that CE-focused accelerators play an important role in the transition to a CE.

6. References

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