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It's all about opportunities: sourcing and selection of new ventures to accelerate innovation

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One-fifth of the global companies complement their R&D activities with the use of corporate accelerators. Corporate accelerators are claimed to foster innovativeness by engaging with startups. However, we know little about how they work. The few previous studies about corporate accelerators have mainly focused on the design of corporate accelerators or the description of the phenomenon itself, but we have limited insights into the underlying mechanisms of corporate acceleration. This in-depth qualitative case study of a large German corporation in the automotive sector opens up how the sourcing and selection of new ventures accelerates corporate innovation. The unique access to internal data revealed the mechanisms that accelerate innovation by enhancing the corporate's entrepreneurial behavior. The study thereby contributes to understanding modes of corporate entrepreneurship and their function in the broader open innovation context, opening the black box of corporate acceleration, as well as giving valuable insights to R&D and innovation managers on the sourcing and selection process of startups.

1. Introduction

As organizations age and grow in structure, many of them lose their entrepreneurial spirit and innovativeness over time (Kuratko et al., 2014). Prominent examples like Nokia or Kodak - both equipped with a high number of resources and strong R&D departments in their peak times - show the consequences of decreasing entrepreneurial capabilities. One approach of established companies to foster innovation and stay entrepreneurial that has recently gained managerial and scholarly interest are corporate accelerators (Kohler, 2016; Moschner et al., 2019; Shankar and Shepherd, 2019). Corporate accelerators (CAs) evolved as one of the most important innovation vehicles for established firms, with almost one-fifth of global companies using some form of this model (Brigl et al., 2019) and investing

a significant amount of resources in these programs (Desai, 2016). CAs are, therefore, considered as an important mode of corporate entrepreneurship (CE) that help established organizations to pursue strategic innovation goals (Shankar and Shepherd, 2019).

Since research so far has primarily focused on general factors like typologies or design of CAs, we have a limited understanding of the underlying mechanisms and processes (Shankar and Shepherd, 2019). We are also still unclear on what makes this corporate entrepreneurship mode unique and how it supports an organization to act more entrepreneurial and innovative. Compared to other CE modes, which often require a more long-term-oriented commitment, CA programs foster innovation with intentional limited time and resources invested. The CA process can be split in three stages, namely sourcing and selection, acceleration and community formation

(Shankar and Shepherd, 2019), whereby the first process step - sourcing and selection of the right startups - is seen as critical for the overall success of such initiatives (Hutter et al., 2021; Simon et al., 2021). While research on CE is conducted since decades, there is a growing need to understand the variety of CE modes and their underlying structures and processes since they are not fully understood yet (Dess et al., 2003; Narayanan et al., 2009; Phan et al., 2009). This is particularly the case when it comes to understanding the opportunity identification and exploitation process in CE (Urbano et al., 2022).

To address these limitations, the study asks the following question: 'How do corporate accelerator units support the sourcing and selection process of new ventures for organizational innovation?'

The purpose of this study is to understand CAs in a more nuanced way and shed light on the important stage of sourcing and selecting the startups to accelerate. This goes in line with creating needed theoretical knowledge on different CE modes and the opportunity identification stage. I have, therefore, used a qualitative case study of a major German firm in the automotive industry to answer the above-stated question. The unique access to the company (interviews with organizational unit managers that were involved in the sourcing and selection process) distinguishes my study from previous studies that have focused on innovation or CA managers. This access provided an opportunity to study CAs as one form of CE in-depth and to look 'behind the scenes'.

The study makes three important contributions: First, it gives a detailed understanding of a particular CE mode and, therefore, expands the literature on this topic (Roberts and Berry, 1985; Ford et al., 2010; Kuratko and Audretsch, 2013). Second it highlights how CA units contribute to a more entrepreneurial behavior of firms (the 'how' of entrepreneurial action) by supporting the identification and exploitation of opportunities, which is one of the key mechanisms of CE. Third, it contributes to a more nuanced understanding of CAs as a phenomenon with increasing managerial and scholarly interest and how they contribute to corporate innovation (Shankar and Shepherd, 2019).

2. Theoretical framework

2.1. Corporate entrepreneurship

Corporate entrepreneurship is seen as a way for established organizations to stay innovative regarding new products, services and processes (Guth and Ginsberg, 1990) and has been studied for decades

(Westfall, 1969; Anderson et al., 2015). Sharma and Chrisman (1999) define CE as 'the process whereby an individual or a group of individuals, in association with an existing organization, create a new organization or instigate renewal or innovation within that organization'. Through CE initiatives, an organization can proactively engage in risky ventures and thereby foster innovation (Miller, 1983; Slevin and Covin, 1990). Staying innovative is accordingly described as a core function of CE initiatives (Dess et al., 2003). Covin and Miles (1999, p. 49) emphasize on the connection of innovation and CE by stating that 'without innovation there is no corporate entrepreneurship'.

Entrepreneurial behavior can be materialized in many different forms and mechanisms. However, the defining process and behavior of entrepreneurship is the recognition and exploitation of opportunities. Opportunities can be defined as potentially lucrative idea, which can be discovered by an entrepreneurial entity (Short et al., 2010). When an organization and its members act entrepreneurially, they will be more likely able to recognize opportunities and exploit them (Shane and Venkataraman, 2000). Therefore, CE is considered essential for corporations to identify, evaluate and capture new opportunities. CE can also be utilized to build new competencies and tap into opportunities that have not been part of the firm's scope of operations in the past (Kanter, 1989). Organizations that strategically use CE are recognized as more dynamic, flexible and able to turn arising opportunities into advantages (Morris et al., 2008).

While CE has been studied for decades, current developments have brought up a heterogeneous variety of CE activities and modes, which are not fully understood yet (Narayanan et al., 2009). There is a need to understand how firms develop effective structures, processes and capabilities that spur CE, especially in newer organizational contexts and forms (Dess et al., 2003; Phan et al., 2009). The 'how' of entrepreneurial action in organizations is, therefore, considered as a fruitful area of research (Bloodgood et al., 2015; Kazanjian et al., 2017).

A particular knowledge gap in the theoretical understanding of CE that was identified in the review by Urbano et al. (2022) is the missing understanding of the opportunity identification and exploitation process in CE. Building on the work of Ireland et al. (2009), Bloodgood et al. (2015) have introduced a framework for opportunity recognition, assessment, legitimation, and implementation in CE using a system dynamics perspective. But despite the growing literature on CE and an initial understanding of the opportunity identification

process, there are still aspects, which are not fully understood yet (Hornsby et al., 2009; Phan et al., 2009). This is especially the case for new CE modes that have just recently gained attractiveness (Shankar and Shepherd, 2019).

2.2. Corporate accelerators

A recent phenomenon in CE that has gained practical and scholarly importance during the last years are CAs (Kanbach and Stubner, 2016; Shankar and Shepherd, 2019; Leubner and Vedula, 2022). Since CAs focus on accelerating new ventures outside the organizations' boundaries in a more standardized approach (Weiblen and Chesbrough, 2015), they enable a firm to explore new opportunities in a limited amount of time and with limited risk (Kohler, 2016; Bettenmann et al., 2021). According to Shankar and Shepherd (2019), CAs differ from other CE modes for several reasons: (1) they accelerate already created ventures, (2) CAs rarely take an equity position and (3) they do not necessarily create a common outcome regarding the corporations' and ventures' interests. Prior research on CAs has focused on aspects like design and success factors (Kanbach and Stubner, 2016; Kohler, 2016; Richter et al., 2018), different models (Prexl et al., 2019) or process steps of CAs, for example, the acceleration phase (Shankar and Clausen, 2020).

The recent study of Shankar and Shepherd (2019) has contributed to a more nuanced understanding of CA models focusing on strategic and operational aspects of corporate acceleration. Shankar and Shepherd (2019) distinguish between venture emergence and strategic-fit CAs, whereby the latter focus on scouring startups to conduct proof-of-concept projects with organizational units. They divide the process of corporate acceleration into three stages: sourcing and selection, acceleration and community formation. The first step in this process - sourcing and selecting the right startups - is frequently mentioned as a crucial step for the overall success of a CA (Kohler, 2016; Prexl et al., 2019; Shankar and Shepherd, 2019; Hutter et al., 2021). However, we do not know much about the underlying mechanisms of this process step and how they differ from other CE modes like incubators (Ford et al., 2010) or corporate venture capital (Drover et al., 2017). The urge to understand this process step in corporate acceleration is underlined by multiple calls for research in this area in recent studies on CAs (Prexl et al., 2019; Shankar and Shepherd, 2019; Leubner and Vedula, 2022). The above discussion leads to the research question of this study: 'How do corporate accelerator units

support the sourcing and selection process of new ventures for organizational innovation?'

3. Method

This study aimed to understand the underlying mechanisms in the sourcing and selection process of CAs. To study the phenomenon, the research relies on an inductive qualitative research design (Gioia et al., 2013), focusing on a single case (Yin, 2017) of a large corporation. I have used a single case study to investigate a new phenomenon, where knowledge is still scarce and knowledge creation is revelatory (Yin, 2017). Single cases are useful to 'exploit opportunities to explore a significant phenomenon' (Eisenhardt and Graebner, 2007, p. 27) and have been used frequently in previous studies (e.g., Rohrbeck et al., 2009; Ford et al., 2010). The urge to use this approach has been underlined by the unique and limited access to R&D unit managers, which previous studies about CAs have not been able to access.

3.1. Empirical setting

A review of the literature and the interaction with experts from CAs helped to set up the case study and data for analysis. The CA to be studied had to fulfill the following initial criteria to conceptualize the case: (1) the company must have run the CA for at least three years; (2) it must have a consistent strategy focusing on accelerating the strategic fit (Shankar and Shepherd, 2019); (3) it must allow collecting data from organizational unit managers that were directly involved in the sourcing and selection process for the startups and the resulting PoC projects. This was crucial since qualitative research about CAs so far has focused on interviews with CA or innovation managers, not the organizational unit managers involved in selecting the startups and conducting PoC projects.

The accelerator of a German automotive manufacturer that fits the criteria was identified based on the author's professional network. I have chosen a corporation in the German automotive sector, since the global automotive industry currently faces one of the biggest transformations in its history of existence. This industry sector builds the biggest sector in the German economy and is described as highly innovative with 'world-class R&D' (Germany Trade and Invest, 2022). While all companies have the urge to stay innovative and get better, the biggest driver for established companies to act entrepreneurial are turbulences in their environment, for example, technological or competitive (Covin and Slevin, 1989;

Ireland et al., 2003). I, therefore, argue that the German automotive industry is an ideal setting for my research on innovation through engaging with startups.

The CA under research in the study has a considerable experience of six years and conducted eleven half-year programs that resulted in the acceleration of more than 150 startups. The acceleration phase of the CA focuses on conducting proof-of-concept projects between startups with organizational units of the company to accelerate innovation. Since the CA unit operates within the broader R&D organization, its main focus is working with different organizational R&D units.

3.2. Data collection

My study relies on semistructured interviews as a primary data source, going in line with most qualitative inductive research (Eisenhardt, 1989; Gephart, 2013). The interviews aim to obtain different perspectives on the sourcing and selection process of the CA. I initially interviewed two managers of the CA team to understand the core processes of the CA in general and the sourcing and selection process in particular. After further preparations for data collection, I started to collect data through interviews with thirteen organizational unit managers that were active in the sourcing and selection process. To clarify open questions after interviewing the organizational unit managers, I interviewed the two CA managers for a second time resulting in a total of 17 interviews (see Table 1). Due to the COVID-19 pandemic, the interviews were conducted *via* video calls.

To ensure that all relevant aspects are covered and to stay flexible to move in new directions during the interviews, I followed a semistructured interview guideline. I structured the guideline around two big topics, namely the search and selection process of the organizational units for startups in regard to the CA program. I began with open questions and asked the interviewees more detailed questions on specific selections of startups throughout the interview. The interviews ranged from 20 to 65 min and were recorded and transcribed afterwards. As the data collection advanced, I started collecting secondary data to ensure validity of the study through data triangulation (Denzin and Lincoln, 2011). This includes publicly available information about the CA and the startups (press releases, websites, data about the startups) as well as internal documents (presentations, meeting notes, PoC reports) from the CA unit and the organizational units. In total, 450 pages of secondary data has been collected.

Table 1. List of data sources with details on the interviewed managers' profiles and duration

Interviews (managers from organizational units and the CA unit)		
Informant	Organizational unit	Duration (min)
Project manager new technology	R&D	31
Manager new business	R&D	41
Manager materials	R&D	24
Manager mobility services	Mobility services	41
Project manager materials	R&D	36
Project manager digitalization	Production	20
Project manager safety	R&D	32
Project manager interior	R&D	54
Manager innovation chassis	R&D	69
Manager interior	R&D	51
Manager navigation	R&D	54
Project manager digital innovation	Mobility services	49
Project manager technology monitoring	R&D	36
Project manager CA	R&D	37+35
Head of open innovation & CA	R&D	55+25
<i>Archival data</i>		
450 pages (press releases, websites, presentations, meeting notes, PoC reports, and Crunchbase data)		

3.3. Data analysis

The data analysis was structured as described by Gioia et al. (2013). The analysis followed an iterative process and, therefore, overlapped with collecting the data to compare emerging structures (Glaser and Strauss, 1967). The data was initially coded line-by-line with an open approach (Corbin and Strauss, 1998), keeping an open mind to label the interviewees' statements. For coding and structuring the data, I used MAXQDA, a software for qualitative data analysis. The first round of coding resulted in 694 codable statements. As I compared the labeled statements, I categorized and labeled similar ones. These statements were focusing on reasons for searching outside of the organization's boundaries, the initiation of the search process, the definition of the organizational units' problems and search fields, the interaction with the startups and the CA unit as well as the selection of startups through the units, among others.

As I continued with the analysis, an understanding of the informants' perspectives evolved. The whole dataset was then recoded with a specific

focus on the scouting and selection process of the CA. The second round of coding resulted in 347 coded statements. Continuing with structuring the codes allowed to create an initial classification of eight first-order categories. The coded statements were reassigned to first-order categories, which were changed, added or deleted where necessary. Through systematically clustering the first-order categories and identifying the unique aspects of the mechanisms, the analysis brought up eight second-order themes (Corbin and Strauss, 1998). This step included moving back and forth between the data and theoretical themes. Following the Gioia et al. (2013) method, the analysis proceeded with the abstraction of the second-order themes into higher-order theoretical dimensions. After analyzing the data, I engaged with an external researcher multiple times to discuss the findings until we have met a common ground. Four overarching dimensions have subsequently been developed: broader opportunity discovery, active opportunity generation, coordinated opportunity seizing and supported opportunity evaluation. Figure 1 shows the data structure with the categories, themes and dimensions that resulted from the data analysis.

4. Results

The analysis revealed a nuanced understanding of how CA units support an organization’s sourcing and selection process of startups to foster innovation. The following section describes the four differentiating dimensions identified for the mechanisms of sourcing (broader opportunity discovery, active opportunity generation and coordinated opportunity seizing) as shown in Figure 2 and the selection process (supported opportunity evaluation).

4.1. Sourcing process

4.1.1. Broader opportunity discovery

The first distinguishing mechanism of accelerating the sourcing process for startups through a CA unit is the search for organizational units’ demands. I have labeled this mechanism *broader opportunity discovery*, since the CA unit provides the organizational units access to a broad variety of startups and their technologies. The organizational units would not have the resources (e.g., time, budget or access to networks), which the CA unit can provide. I have

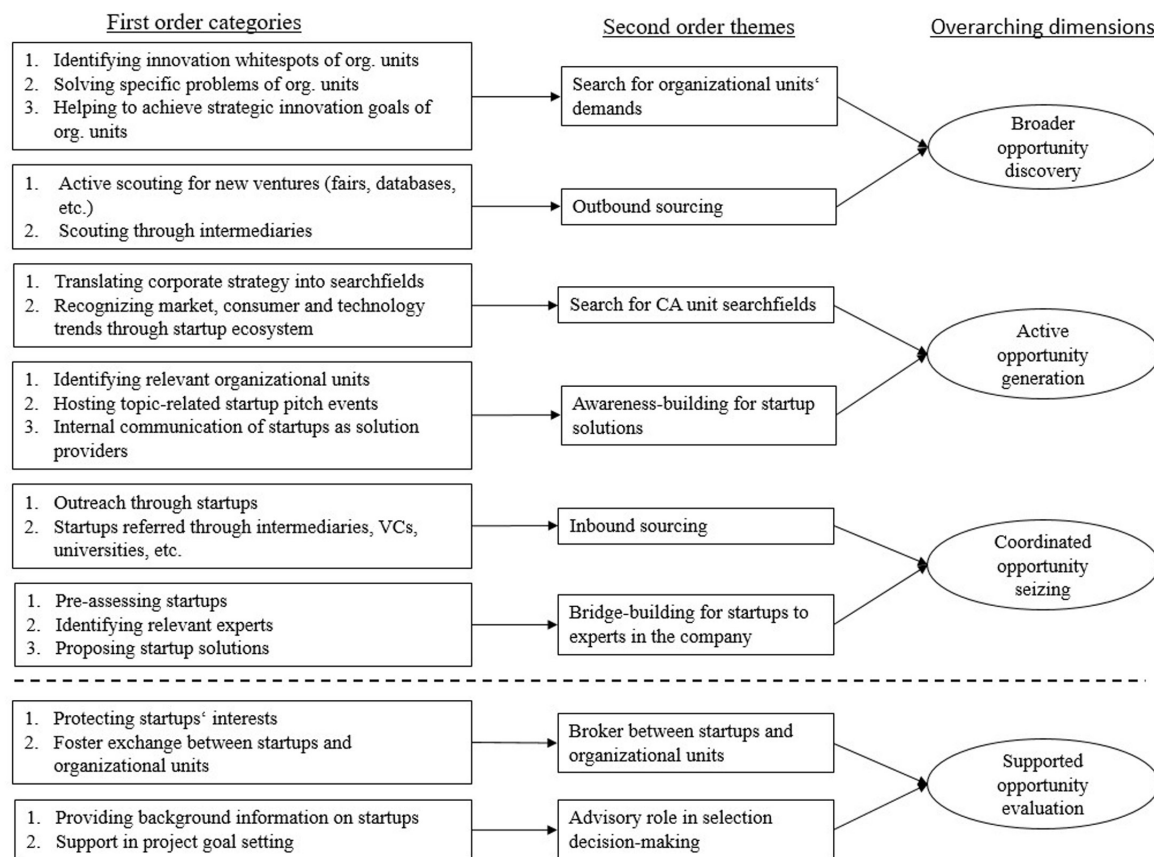


Figure 1. Data structure.

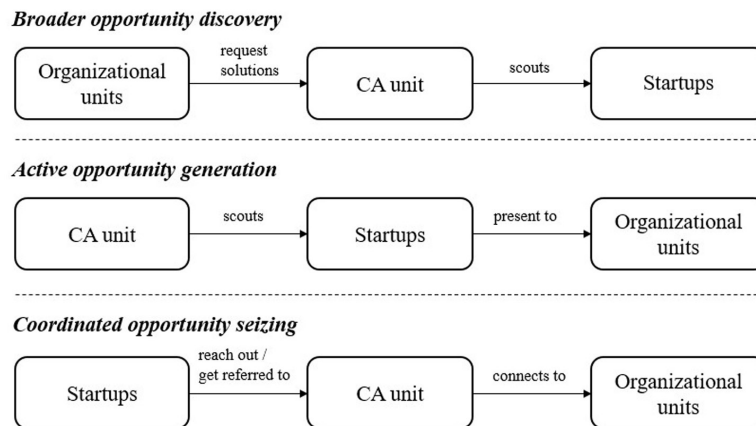


Figure 2. Overview of the roles of the three key parties in the CA sourcing process.

observed that the CA unit interacts with a variety of organizational units within the company to identify their innovation white spots and strategic goals that can be supported through the help of startup technologies. The CA team supports the organizational units in identifying areas in which startups can add value next to existing partners like suppliers. The startups identified in these areas – frequently called search fields during the interviews – can help the organizational units solve specific problems or get an overview of technologies that could be relevant for their field of work. A manager remarked: ‘So if we have a specific problem, we of course ask our suppliers what they have to offer. But we also go directly to the CA team and ask them to look for innovative startups. These can be very specific areas where we then also give our specific requirements to the CA unit.’

Next to very narrow search fields coming from the organizational units, the CA unit also supports the organizational units in finding innovative solutions that are not connected to a current issue but go more into the direction of forward-looking innovation search. This was described by a CA executive as following: ‘Or we also have business units working in new fields that we haven’t worked in before as a company. So that means, for example, new materials that we now think is an interesting field to work in ... and it could be also relevant for future customers. And so we start working on new fields as an organization ... and therefore we need solutions from startups.’

The CA team also helps the organizational units to achieve their strategic innovation goals by searching for startup solutions. This is best expressed through the following quote from a manager: ‘Sustainability for example is an integral part of our strategy. And if we as a unit want to achieve a goal in this field, then we look at how we can make our products more sustainable through startups and their technologies. [...] And I have to say very clearly that the search for

startups and the resulting projects help us to achieve these goals.’

The second unique aspect when discovering opportunities during the acceleration of search through CAs is the outbound sourcing process. While other types of accelerators typically receive applications for their programs, I have observed a very outbound-focused strategy to identify potential new ventures to accelerate. While many of the managers told me that they are always looking for innovative startup solutions, it was mentioned frequently that the primary source of startups for their units is the CA unit. One manager described it with ‘We are always keeping our eyes open for new solutions and that’s how we also identify new topics and projects. But when it comes to startups, our main source is the CA unit.’

When I asked the CA executives how they identify the startups for the demands of the organizational units, they mentioned different sources, always referring to an outbound scouting process for the search fields. As sources for new ventures one of them mentioned that ‘This can reach from a simple google search over databases like CBInsights to fairs and events like Slush in Helsinki.’ However, the main source for startups in a specific search field are intermediaries, which actively scout new ventures for the organization. A CA executive explained it like following: ‘Our main source for startups is definitely Plug and Play [Name of intermediary]. We give them our search fields and they are responsible for the actual scouting. So they have to identify relevant startups all over the world and propose them to us. And then we select the most relevant ones that they have sourced for us.’

4.1.2. Active opportunity generation

Next to the discovery of opportunities through the CA unit, the data analysis revealed another

distinguishing mechanism when it comes to the acceleration of sourcing. I have labeled this mechanism as *active opportunity generation*, since the CA unit here does not engage in the sourcing process based on the search field of a single organizational unit, but rather comes up actively with own search fields that can support organizational units to reach strategic goals of the company. The CA unit, therefore, can steer the organizational units' attention toward specific topics. What makes this mechanism unique is the search for startups in thematic fields that the CA unit defines. Compared to the opportunity discovery process, the search fields are not provided by the organizational units, but are defined by the CA unit itself. By picking up corporate strategic goals (e.g., a more sustainable production) and translating them into search fields for startup sourcing, the CA unit takes a more active role in shaping the search fields for the organization's search for startups through the CA. But even before some topics have been integrated as strategic goals of the company, the CA unit acts as a radar for market, consumer and technology developments through observing the developments in the startup ecosystem. One of the organizational unit managers described it like following: *'Through the CA unit, we have a pretty strong look into the outside world. And through looking outside of our organization, we can also see trends that are developing there that we should be aware of as a company.'*

The CA unit, therefore, takes an active role in defining search fields for startups that could be relevant for different organizational units to achieve overall strategic goals. They also inspire the organizational units and make them aware of developments next to their own research and development activities. The CA manager told me that they can *'[...] proactively steer the scouting and [you can] try to steer it through special scouting initiatives.'* In this context, several interviewees also referred to a 'push or pull' logic when setting up search fields through either the organizational unit or the CA unit. A unit manager highlighted: *'We have heavily discussed this push or pull approach. So do we just give the CA unit our demands and then try to integrate startup solutions in our unit? ... But then you have the risk of missing things out. Or that you get stuck in a rut. So I think it's the best to use both approaches.'*

A distinguishing mechanism for opportunity generation that goes hand in hand with the search for CA unit search fields is the awareness-building for startup solutions inside the organization. The CA unit, therefore, identifies organizational units in the company that could potentially be interested in the

startups they present. They have, therefore, built a network of internal contacts (e.g., topic experts) and actively communicate startup solutions in different formats like their social intranet, newsletter or direct messaging. The CA managers called this critical function the 'matchmaking' process. One of the CA executives told me that this step is crucial for success when it comes to generating opportunities for the organizational units: *'If the startups pitch their ideas and you don't have the right audience from your organization, then nothing will come out at the end.'*

The interviewed managers from the organizational units told me they are frequently invited to startup pitch events from the CA unit, where startups for different search fields defined by the CA unit present their ideas. An organizational unit manager's statement describes the CA unit's active role and the more passive role of the organizational unit in this setting very well: *'Since we do have very limited time, we have reduced the active search for startups. But we still participate at the CA unit events and always get to know interesting startups. New projects come in all the time without us actively looking for them. That's also the interesting thing ... that the projects we then do with interesting startups gradually come in almost by themselves. I wouldn't have thought that in the beginning. But that's what I'm experiencing right now.'*

4.1.3. Coordinated opportunity seizing

The third mechanism of a CA unit to support the sourcing process for startups for their organization is coordinated opportunity seizing. The CA unit acts as an entry point for startups to access the larger organization and, therefore, coordinates all further activities that can follow with the organizational units. The data analysis revealed two differentiating mechanisms – inbound sourcing and bridge building for startups to experts in the company.

The first distinguishing mechanism for opportunity seizing is inbound sourcing. In comparison to opportunity discovery and opportunity generation, which both follow an active outbound sourcing approach, the CA unit also uses inbound sourcing to identify relevant startups. This can be the case when startups reach out directly to representatives of the CA unit (e.g., via their website, E-Mail or LinkedIn). Another source for startups can be referrals from the CA unit's network within the startup ecosystem, through intermediaries, venture capitalists or universities. During the interviews, a CA executive for example told me: *'We get emails with pitchdecks every day. They come via mail or LinkedIn directly from the startups. Or someone in our network introduces them to us, for example a venture capital firm.'*

The CA unit's task then is to decide whether the startup's solution could be relevant for one of the organizational units. If this is the case, they identify relevant organizational units and experts within the company and propose the startup's solution to them. The CA manager explained it like the following: *'I think the most common form is that we get to know a startup through the introduction of someone in our network. This can be by written form like one-pagers or short descriptions or pitch decks. And if we think the startup solution could be interesting, we as a startup scouting team align with the respective experts in this field in our company.'*

In comparison to the opportunity generation process – following an inbound sourcing logic – the startups do not necessarily match a current search field of the CA unit or an organizational unit's search fields. The CA unit, however, tries to build a bridge for startups to experts within the company to evaluate the startup's solution with the expertise of the organizational units. The manager of an organizational unit described it with: *'We weren't really actively looking for new solutions in this field, but then someone from the CA unit has sent me information about that startup. And we found the technology really interesting.'*

4.2. Selection process

4.2.1. Supported opportunity evaluation

All three approaches for sourcing new ventures are followed by an evaluation process conducted by the CA unit and the organizational units. I have labeled this overarching dimension supported opportunity evaluation. The CA unit accelerates the selection process of startups in two distinguishing ways: brokering between the startups and organizational units and playing an advisory role in the selection decision-making for the organizational units.

The analysis of the interviews showed that the CA team frequently acts as a broker between the startups that were identified during the sourcing process and the organizational units already in this early stage of acceleration. The CA unit can take a more neutral position between the startups (the 'outside world') and the organizational units (the 'internal world'). With this, the CA unit balances the needs and expectations of both parties and supports them during the evaluation process. Since the CA unit's ultimate goal is the implementation of new technologies in the companies' products or processes after successful PoC projects with one of the organizational units, it fosters the initial and ongoing exchange with ventures that could potentially be accelerated. Take, for example, the quote of one interviewee regarding this

approach: *'We have seen this startup at one of the pitch events and that was pretty interesting but we did not think about it further ... until they [the CA unit] reached out to us again and asked whether we would be interested in a follow-up discussion with that startup. And after we took that chance and did some more meetings, we have actually started a project with them.'*

The second distinguishing mechanism for the opportunity evaluation process conducted by the CA unit is taking an advisory role toward the organizational units when it comes to making the selection decisions. The CA unit is constantly in exchange with the units that showed interest in specific startups. Once the organizational units come closer to an actual selection, the CA unit provides detailed information on the startup and benchmarks them regarding potential alternatives. When the organizational unit has decided on which startup to accelerate, the CA unit was engaged in setting a joint goal for the PoC project, again functioning as a moderator between the internal units and the startup. Setting the right expectations and goals for the PoC projects was mentioned as a very relevant process step regarding the limited timeframe and resources of the project that follows the selection. One of the managers told me that *'the overall goals of our internal project where the startup could contribute to were set already in advance ... but we did not really know how we should integrate the startup's solution into that project. And then we thought: Hey let's ask the experts who supported already so many startup projects. And then we made a workshop together with our team, their team [the CA unit] and the startup team where we figured out how that could work'.*

5. Discussion

The purpose of this study was to examine how the sourcing and selection process in CAs contributes to accelerate innovation and to explore the underlying mechanisms. I identified and described a set of distinguishing practices the CA unit uses to support the sourcing and selection process of new ventures for the organizational units. The study makes several important theoretical and managerial contributions that are illustrated in the following.

5.1. Theoretical implications

While one of the core functions of CE is to recognize and evaluate new opportunities (Morris et al., 2008), relatively few studies have so far analyzed the opportunity identification process of

CE activities (O'Connor and Rice, 2001; Foss et al., 2013; Bloodgood et al., 2015). By investigating the underlying mechanisms of a specific form of CE, namely CAs, my study sheds light on how these units engage in the opportunity identification process for their organizations to foster innovation and entrepreneurial behavior. The CA unit can engage in multiple functions when it comes to the identification of opportunities. My study gives a nuanced understanding of this stage by providing insights into the different functions, that is the discovery, generation and seizing of opportunities. It also sheds light on how the CA unit supports the organizational units in evaluating opportunities.

I thereby add valuable knowledge to the opportunity recognition and assessment stage of CE that has been introduced in the framework of Bloodgood et al. (2015). At the same time, by focusing on a specific mode of CE, namely CAs, I contribute to understanding how firms develop effective structures and processes that spur CE (Dess et al., 2003; Narayanan et al., 2009; Phan et al., 2009). This knowledge is especially needed for newer organizational forms and CE modes (Shankar and Shepherd, 2019).

By supporting the organizational units in the opportunity identification and evaluation process, the CA unit also contributes to a more entrepreneurial behavior of the larger organization ultimately resulting in a more innovative firm. The CA unit not only expands the horizon of organizational units, but actively directs their attention to certain topics. My study, therefore, offers insights on 'how' firms engage in entrepreneurial action through CAs on a firm-level (Kazanjian et al., 2017; Shankar and Shepherd, 2019) and expands the literature on different CE forms (Roberts and Berry, 1985; Kuratko and Audretsch, 2013).

Since research on CAs is still limited (Gutmann, 2019), my paper has made several contributions to the understanding of CAs. Through focusing on the initial stage of sourcing and selecting startups in CAs and understanding the underlying mechanisms that have been described, the study responds to calls for a more comprehensive understanding of how incumbent firms source and select startups for their acceleration programs (Prexl et al., 2019; Shankar and Shepherd, 2019; Leubner and Vedula, 2022). While prior research has focused on higher-level attributes like the design or success factors of CAs (Kanbach and Stubner, 2016; Kohler, 2016; Moschner et al., 2019), I have shifted the perspective toward the underlying mechanisms in corporate acceleration (Shankar and Clausen, 2020). This was possible through interviewing the organizational units' managers involved in the search and selection process.

I, therefore, contribute to the better understanding of the phenomenon of corporate acceleration as one mode for CE (Shankar and Shepherd, 2019). Moving away from higher-level attributes to understanding the underlying mechanisms of corporate acceleration in the future will further develop the literature on this phenomenon. The study also reveals how CAs source and select startups, for example, by actively scouting for startups rather than taking in applications from startups like independent accelerators predominantly do. My study, therefore, informs the broader literature on CE by clearly distinguishing CAs from other types of accelerators like government or independent sponsored accelerators (Cohen et al., 2019) and also other CE forms like incubators (Ford et al., 2010) or corporate venture capital (Drover et al., 2017).

5.2. Managerial implications

While the first CAs were established around ten years ago, companies still seem to struggle with the implementation and operation in practice, sometimes resulting in the termination of the initiative or significant change in their strategy (Moschner et al., 2019). From the results of the study, several important managerial implications can be drawn for innovation and R&D managers.

First, organizations must decide in which approach the CA unit should engage. It can be organized as a more passive support function for the organizational units in solving their problems through the help of startups or sourcing startups in specific search fields. It can, however, also be organized using a more active approach when initiating the sourcing with own search fields. In consequence, the CA unit contributes more actively to achieving the organization's strategic innovation goals and fostering entrepreneurial behavior by steering the organizational units' managers attention toward specific opportunities that may not have been on their radar before. Second, R&D managers should emphasize more on the process step of sourcing and selecting new ventures in the overall process of collaborating with external startups. While a significant number of resources gets drawn toward the collaboration phase when conducting PoC projects, the sourcing and selection of the right ventures to accelerate is a difficult step. However, this part of the process has a high impact on the overall success of such initiatives. Third, while it has been the case that ventures were selected more on coincidence than in a structured manner, a structured approach toward the sourcing and selection of new ventures seems to be more beneficial. When the CA unit works together with the organizational R&D units

from the beginning (e.g., jointly defining the search field) throughout the whole process, the outcome of the sourcing, as well as the subsequent selection of the venture, has shown to be more promising when it comes to further process steps like the integration of the technology into the products or processes of the organization. Finally, higher-level management should consider where to anchor the CA unit from an organizational perspective. While some firms place CA units in strategy, marketing or finance, my study shows that to foster innovation, the CA unit should work in close collaboration with the R&D units. This can happen best if the CA unit itself is centered in the R&D department.

5.3. Limitations and future research

My study investigates the sourcing and selection process of CAs using a single case study in the automotive sector with interviews focusing on CA unit and organizational unit managers. While this approach was chosen to understand the underlying mechanisms of CAs in-depth, the generalizability of my findings is limited due to the narrow context. Future researchers could examine CAs using multiple case studies or perspectives of different stakeholders, thereby identify differentiating and common mechanisms in CAs regarding their outcomes. Future research could also investigate CAs in different sectors, firm sizes or geographical locations. My research intentionally focused on sourcing and selection new ventures as initial stage of acceleration. While the study was very focused on understanding this critical stage in a more detailed way, it also has limits when it comes to understanding the 'big picture' of corporate acceleration. Future research could, therefore, focus on how the different stages of CAs (sourcing and selection, acceleration, community formation) are connected to each other and which mechanisms in these stages lead to the overall success of CAs. While the study reveals different mechanisms when it comes to the identification of new ventures to accelerate, I have not studied in detail how these mechanisms interact. I have observed that the different mechanisms can lead to different outcomes regarding the efforts and following outcomes of the CA. Future research could, therefore, focus on the interdependency of these mechanisms to understand which of them creates the most value for organizations.

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Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

References

- Anderson, B.S., Kreiser, P.M., Kuratko, D.F., Hornsby, J.S., and Eshima, Y. (2015) Reconceptualizing entrepreneurial orientation. *Strategic Management Journal*, **36**, 10, 1579–1596. <https://doi.org/10.1002/smj.2298>.
- Bettenmann, D., Giones, F., Brem, A., and Gneiting, P. (2021) Break out to open innovation. *MIT Sloan Management Review* (winter issue).
- Bloodgood, J.M., Hornsby, J.S., Burkemper, A.C., and Sarooghi, H. (2015, Small Business Economics) A system dynamics perspective of corporate entrepreneurship, **45**, 383–402. <https://doi.org/10.1007/s11187-015-9634-4>.
- Brigl M, Gross-Selbeck S, Dehnert N, Schmiege F, and Simon S (2019) *After the Honeymoon Ends – Making Corporate-Startup Relationships Work*. Available at: http://image-src.bcg.com/Images/BCG-After-the-Honeymoon-Ends-July-2019-R2_tcm9-222810.pdf [Accessed 18 December 2021].
- Cohen, S., Fehder, D.C., Hochberg, Y.V., and Murray, F. (2019) The design of startup accelerators. *Research Policy*, **48**, 7, 1781–1797. <https://doi.org/10.1016/j.respol.2019.04.003>.
- Corbin, J. and Strauss, A. (1998) *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Thousand Oaks, CA: Sage Publications.
- Covin, J.G. and Miles, M.P. (1999) Corporate entrepreneurship and the pursuit of competitive advantage. *Entrepreneurship Theory and Practice*, **23**, 3, 47–63.
- Covin, J.G. and Slevin, D.P. (1989) Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, **10**, 1, 75–87.
- Denzin, N.K. and Lincoln, Y.S. (2011) *The SAGE handbook of qualitative research*. London: Sage Handbooks.
- Desai, F. (2016) *Innovation Formats Expand As Corporate Accelerator Launches Peak*. Available at: <https://www.forbes.com/sites/falgunidesai/2016/01/22/innovation-formats-expand-as-corporate-accelerator-launches-peak/> [Accessed 18 December 2021].
- Dess, G.G., Ireland, R.D., Zahra, S.A., Floyd, S.W., Janney, J.J., and Lane, P.J. (2003) Emerging issues in corporate entrepreneurship. *Journal of Management*, **29**, 3, 351–378. https://doi.org/10.1016/S0149-2063_03_00015-1.
- Drover, W., Busenitz, L., Matusik, S., Townsend, D., Anglin, A., and Dushnitsky, G. (2017) A review and road map of entrepreneurial equity financing research: venture capital, corporate venture capital, angel investment, crowdfunding, and accelerators. *Journal of Management*, **43**, 6, 1820–1853.

- Eisenhardt, K.M. (1989) Building theories from case study research. *Academy of Management Review*, **14**, 4, 532–550. <https://doi.org/10.5465/amr.1989.4308385>.
- Eisenhardt, K.M. and Graebner, M.E. (2007) Theory building from cases: opportunities and challenges. *Academy of Management Journal*, **50**, 1, 25–32.
- Ford, S., Garnsey, E., and Probert, D. (2010) Evolving corporate entrepreneurship strategy: technology incubation at Philips. *R and D Management*, **40**, 1, 81–90. <https://doi.org/10.1111/j.1467-9310.2009.00580.x>.
- Foss, N.J., Lyngsie, J., and Zahra, S.A. (2013) The role of external knowledge sources and organizational design in the process of opportunity exploitation. *Strategic Management Journal*, **1471**, 1453–1471. <https://doi.org/10.1002/smj.2135>.
- Gephart, R.P. (2013) Doing research with words: qualitative methodologies and industrial/organizational psychology. In: Editors, Cortina, J.M. & Landis, R.S., *Modern Research Methods for the Study of Behavior in Organizations*. New York, NY: Routledge. <https://doi.org/10.4324/9780203585146>.
- Germany Trade & Invest (2022) *Automotive Industry in Germany*. Available at: <https://www.gtai.de/en/invest/industries/mobility/automotive-industry> [Accessed 10 December 2022].
- Gioia, D.A., Corley, K.G., and Hamilton, A.L. (2013) Seeking qualitative rigor in inductive research: notes on the Gioia methodology. *Organizational Research Methods*, **16**, 1, 15–31. <https://doi.org/10.1177/1094428112452151>.
- Glaser, B.G. and Strauss, A.L. (1967) *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Mill Valley, CA: Sociology Press. <https://doi.org/10.4324/9780203793206>.
- Guth, W.D. and Ginsberg, A. (1990) ‘Guest Editors’ Introduction: corporate entrepreneurship William D. Guth; Ari Ginsberg *Strategic Management Journal*, Vol. 11, Special Issue: Corporate entrepreneurship (summer, 1990), pp. 5–15. *Strategic Management Journal*, **11**, 5–15.
- Gutmann, T. (2019) Harmonizing corporate venturing modes: an integrative review and research agenda. *Management Review Quarterly*, **69**, 121–157. <https://doi.org/10.1007/s11301-018-0148-4>.
- Hornsby, J.S., Kuratko, D.F., Shepherd, D.A., and Bott, J.P. (2009) Managers’ corporate entrepreneurial actions: examining perception and position. *Journal of Business Venturing*, **24**, 3, 236–247. <https://doi.org/10.1016/j.jbusvent.2008.03.002>.
- Hutter, K., Gfrerer, A., and Lindner, B. (2021) From popular to profitable: incumbents’ experiences and challenges with external corporate accelerators. *International Journal of Innovation Management*, **25**, 3, 2150035. <https://doi.org/10.1142/S1363919621500353>.
- Ireland, R.D., Covin, J.G., and Kuratko, D.F. (2009) Conceptualizing corporate entrepreneurship strategy. *Entrepreneurship Theory and Practice*, **979**, 19–46.
- Ireland, R.D., Hitt, M.A., and Sirmon, D.G. (2003) A model of strategic entrepreneurship: the construct and its dimensions. *Journal of Management*, **29**, 6, 963–989.
- Kanbach, D. and Stubner, S. (2016) Corporate accelerators as recent form of startup engagement: the what, the why, and the how. *The Journal of Applied Business Research*, **6**, 1761–1775.
- Kanter, R.M. (1989) Swimming in newstreams: mastering innovation dilemmas. *California Management Review*, **31**, 4, 45–69.
- Kazanjian, R., Drazin, R., and Glynn, M. (2017) Implementing strategies for corporate entrepreneurship: a knowledge-based perspective. *Strategic Entrepreneurship: Creating a New Mindset*, 173–199. <https://doi.org/10.1002/9781405164085.ch9>.
- Kohler, T. (2016) Corporate accelerators: building bridges between corporations and startups. *Business Horizons*, **59**, 3, 347–357. <https://doi.org/10.1016/j.bushor.2016.01.008>.
- Kuratko, D.F. and Audretsch, D.B. (2013) Clarifying the domains of corporate entrepreneurship. *International Entrepreneurship and Management Journal*, **9**, 3, 323–335.
- Kuratko, D.F., Covin, J.G., and Hornsby, J.S. (2014) Why implementing corporate innovation is so difficult. *Business Horizons*, **57**, 5, 647–655. <https://doi.org/10.1016/j.bushor.2014.05.007>.
- Leubner, A. and Vedula, S. (2022) Looking back to speed forward: The origins, evolution, and path forward for corporate accelerator research. *Academy of Management Proceedings*, **2022**, 1, 12340.
- Miller, D. (1983) The correlates of entrepreneurship in three types of firms. *Management Science*, **29**, 7, 770–791.
- Morris, M.H., Kuratko, D.F., and Covin, J.G. (2008) *Corporate Entrepreneurship and Innovation: Entrepreneurial Development Within Organizations*. Cincinnati, OH: Thomson/SouthWestern Publishers.
- Moschner, S.L., Fink, A.A., Kurpjuweit, S., Wagner, S.M., and Herstatt, C. (2019) Toward a better understanding of corporate accelerator models. *Business Horizons*, **62**, 5, 637–647. <https://doi.org/10.1016/j.bushor.2019.05.006>.
- Narayanan, V.K., Yang, Y., and Zahra, S.A. (2009) Corporate venturing and value creation: a review and proposed framework. *Research Policy*, **38**, 1, 58–76. <https://doi.org/10.1016/j.respol.2008.08.015>.
- O’Connor, G.C. and Rice, M.P. (2001) Opportunity recognition and breakthrough innovation in large established firms. *California Management Review*, **43**, 2, 95–116. <https://doi.org/10.2307/41166077>.
- Phan, P.H., Wright, M., Ucbasaran, D., and Tan, W.L. (2009) Corporate entrepreneurship: current research and future directions. *Journal of Business Venturing*, **24**, 3, 197–205. <https://doi.org/10.1016/j.jbusvent.2009.01.007>.
- Prexl, K.M., Hubert, M., Beck, S., Heiden, C., and Prügl, R. (2019) Identifying and analysing the drivers of heterogeneity among ecosystem builder accelerators. *R and D Management*, **49**, 4, 624–638. <https://doi.org/10.1111/radm.12352>.
- Richter, N., Jackson, P., and Schildhauer, T. (2018) Outsourcing creativity: an abductive study of open innovation using corporate accelerators. *Creativity*

- and *Innovation Management*, **27**, 1, 69–78. <https://doi.org/10.1111/caim.12252>.
- Roberts, E.B. and Berry, C.A. (1985) Entering new businesses: strategies for success. *MIT Sloan Management Review*, **26**, 3, 3–17.
- Rohrbeck, R., Hölzle, K., and Georg, H. (2009) How deutsche Telekom creates an open innovation ecosystem. *R and D Management*, **39**, 420–430. <https://doi.org/10.1111/j.1467-9310.2009.00568.x>.
- Shane, S. and Venkataraman, S. (2000) The promise of entrepreneurship as a field of research. *Academy of Management Review*, **25**, 1, 217–226. <https://doi.org/10.5465/amr.2000.2791611>.
- Shankar, R.K. and Clausen, T.H. (2020) Scale quickly or fail fast: an inductive study of acceleration. *Technovation*, **98**, 102174. <https://doi.org/10.1016/j.technovation.2020.102174>.
- Shankar, R.K. and Shepherd, D.A. (2019) Accelerating strategic fit or venture emergence: different paths adopted by corporate accelerators. *Journal of Business Venturing*, **34**, 5, 105886. <https://doi.org/10.1016/j.jbusvent.2018.06.004>.
- Sharma, P. and Chrisman, J.J. (1999) Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. *Entrepreneurship Theory and Practice*, **23**, 3, 11–28. <https://doi.org/10.1177/104225879902300302>.
- Short, J.C., Ketchen, D.J., Jr., Shook, C.L., and Ireland, R.D. (2010) The concept of “opportunity” in entrepreneurship research: past accomplishments and future challenges. *Journal of Management*, **36**, 1, 40–65.
- Simon, F., Rese, A., Homfeldt, F., Schiele, H., Harms, R., and Delke, V. (2021) Identifying start-up partners: which search practices and combination strategies are effective? *International Journal of Innovation Management*, **25**, 7, 2150080. <https://doi.org/10.1142/S1363919621500808>.
- Slevin, D.P. and Covin, J.G. (1990) Juggling entrepreneurial style and organizational structure. *MIT Sloan Management Review*, **31**, 2, 43.
- Urbano, D., Turro, A., Wright, M., and Zahra, S. (2022) Corporate entrepreneurship: a systematic literature review and future research agenda. *Small Business Economics*, **1–25**, 1541–1565. <https://doi.org/10.1007/s11187-021-00590-6>.
- Weiblen, T. and Chesbrough, H.W. (2015) Engaging with startups to enhance corporate innovation. *California Management Review*, **57**, 66–90. <https://doi.org/10.1525/cmr.2015.57.2.66>.
- Westfall, S.L. (1969) Simulating corporate entrepreneurship in U.S. industry. *Academy of Management Journal*, **12**, 2, 235–246. <https://doi.org/10.5465/254819>.
- Yin, R.K. (2017) *Case Study Research: Design and Methods*, 6th edn. Thousand Oaks, CA: Sage.

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