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Start-up selection criteria for corporate venturing: what matters for incumbents?

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Abstract: Incumbent companies face increasing pressures to become more sustainable, and thus, to strategically renew themselves. To proactively adjust to the changing environment, incumbents can engage in collaborations with start-ups by means of corporate venturing. As one of the first steps of the venturing process, a better understanding of the selection of start-ups for corporate venturing activities is needed to further systemise and align the activities. Through a systematic literature review, this study provides an overview of existing start-up selection criteria, which are validated by means of expert interviews with incumbents. We find that for incumbents, criteria related to the team, the product and technology, the market as well as to financial and strategic characteristics are pivotal whereas criteria related to transitions seem to play a subordinated role. Our findings highlight the necessity of a coherent and aligned venturing strategy to foster the successful renewal of incumbents in eras of transition.

Keywords: incumbents; start-ups; strategic renewal; corporate venturing; systematic literature review; expert interviews; transitions.

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1 Introduction

Global threats such as the Russian invasion on Ukraine and the climate crisis increase both political and societal pressure on businesses to shift from fossil-based raw materials to bio-based raw materials. The resulting accelerated transition towards sustainable business practices presents especially the slower-moving and more path-dependent incumbent companies with major challenges (Hübel and Scholz, 2020). On the other side, the more agile start-ups create opportunities from the global challenges for bio-based technologies and sustainable growth. They play a key role in shaping transitions through their innovative ideas and disruptive business models (Bohnsack et al., 2014; Hockerts and Wüstenhagen, 2010; Minola et al., 2017).

To explore and exploit the opportunities that come with transitions, incumbents can collaborate with start-ups (Rigtering and Behrens, 2021; Schönwälder and Weber, 2023; Suchek and Franco, 2023). So-called external corporate venturing allows to proactively deal with changes in the external environment on a regular basis and in this way fosters

an incumbent's strategic renewal (Agarwal and Helfat, 2009; Rigtering and Behrens, 2021; Weiss and Kanbach, 2023). External corporate venturing includes a plethora of ways for engaging with start-ups. From rather strategic activities such as start-up programs and incubators, to activities with both strategic and financial objectives such as accelerators, corporate venture capital and mergers and acquisitions, to financially driven activities such as venture funds or private equity investments (Gutmann, 2019).

Research suggests that the overall success of an incumbent's start-up engagement is contingent on a coherent corporate venturing strategy aligning these activities (Enkel and Sagmeister, 2020; Gutmann, 2019). External corporate venturing activities perform better if they are continuous and systematic (Benson and Ziedonis, 2009; Gutmann, 2019), which in turn is accompanied by a systematic selection of start-ups. Much of the corporate venturing research focuses on the performance of corporate venturing activities (Huang and Madhavan, 2021). Yet, little is known about what precedes successful activities. As one of the first steps of the venturing process (Gompers et al., 2020), the initial screening and selection allow to mitigate risks and counter asymmetric information (Weigand, 2019). Thereby, start-ups can be evaluated based on criteria related to the company itself, the entrepreneur(s) and the team, or intellectual property and alliances (Wessendorf et al., 2019). However, these are criteria categories for the general evaluation of start-ups. Research on what specific criteria incumbents apply in evaluating and selecting start-ups for their external corporate venturing is scarce and scattered across research on the different activities. A better understanding of the screening and selection of start-ups for external corporate venturing is needed to further systemise and align the activities and thus, improve the overall performance of the respective corporate venturing strategy.

To advance our understanding of the start-up selection in an external corporate venturing context this study conducts a systematic literature review to provide a holistic overview on existing start-up selection criteria. These criteria are subsequently reviewed and validated by means of expert interviews with managers from external corporate venturing activities. Our overview helps to better understand the start-up selection of incumbents. Thereby, this research paper adds to the current literature in two ways: first, it renders a concise overview and thus enables to systemise and align external corporate venturing activities (Benson and Ziedonis, 2009; Enkel and Sagmeister, 2020; Gutmann, 2019). Second, our findings contribute to the literature on strategic renewal by revealing inconsistencies and ambiguities in start-up selection (Post et al., 2020). Managers from incumbents benefit from this study since a holistic overview of start-up selection criteria for external corporate venturing is introduced. The overview helps them to systemise and align their activities and incorporate elements of strategic renewal in view of transitions.

The remainder of the article is organised as follows. First, relevant theories and concepts in the field of strategic renewal and corporate venturing are introduced, followed by a brief overview of the current state of research on the selection of start-ups. Building on this, Section 3 provides a detailed delineation of the systematic literature review procedure as well as a description of the expert interviews. The results are then presented in Section 4 and discussed in Section 5, outlining both theoretical and practical implications as well as potential avenues for further research.

2 Corporate venturing as a means for strategic renewal

By collaborating with young and innovative companies such as start-ups, incumbents can improve their research and development activities (Pinkow and Iversen, 2020; Weiblen and Chesbrough, 2015). They can overcome potential path dependencies (Vergne and Durand, 2010) and respectively invest in their absorptive capacity (Cohen and Levinthal, 1990; Enkel et al., 2017), thereby enhance their dynamic capabilities (Enkel and Sagmeister, 2020), and strategically renew themselves (Rigtering and Behrens, 2021; Weiss and Kanbach, 2023).

Corporate venturing is an important avenue for strategic renewal, as it allows for continuous change of the strategy that has the potential to affect the long-term prospects of a company (Agarwal and Helfat, 2009). Corporate venturing can be defined as "a set of corporate mechanisms designed to accelerate innovation and new business creation" (Gutmann, 2019). As such, internal activities such as employee training or the creation of corporate spin-offs also belong to the scope of corporate venturing (Åmo, 2010; Frank et al., 2016; Garrett, 2010). However, the focus of this study is on external activities, for only through external corporate venturing incumbents collaborate with start-ups, the actors behind more disruptive ideas and innovative business models (Bohnsack et al., 2014; Hockerts and Wüstenhagen, 2010; Weiblen and Chesbrough, 2015). There are numerous external corporate venturing activities, which are often not distinctly defined or delineated from each other. Some activities primarily serve to access and link technologies, products, and business models that lie outside of the incumbent's core business such as start-up programs or incubators (Enkel and Sagmeister, 2020; Ford and Probert, 2010). Other activities are driven mainly by financial objectives. Examples for this type of venturing encompass private equity investments and venture funds. Activities that mix both strategic and financial objectives include corporate venture capital (Bugl and Kanbach, 2022), accelerators (Veit et al., 2021), as well as mergers and acquisitions (Gutmann, 2019). Incumbents often pursue several of these activities simultaneously in their effort to explore and exploit opportunities through start-up collaborations (Enkel and Sagmeister, 2020; Gutmann, 2019; Weiss and Kanbach, 2023). A coherent corporate venturing strategy can help to strengthen the core business, leverage the ecosystem, and explore new markets and technologies (Pinkow and Iversen, 2020).

A well-defined corporate venturing strategy is accompanied by a systematic selection of start-ups for the respective activities, which in turn requires a clear evaluation of the entrepreneur(s) and their business models. This evaluation is often difficult and subjective. Due to a short company history, unfinished products, immature market offerings, or missing financial indicators, the evaluation of start-ups is associated with high risks and uncertainties. Clear criteria for the evaluation and selection help to minimise these risks and to make rational and informed selection decisions (Wessendorf et al., 2019).

In a systematic literature review on selection criteria applied by institutional venture capitalists and business angels, Wessendorf et al. (2019) name criteria categories related to the start-up's characteristics, the entrepreneur(s) and the team as well as to intellectual property and alliances. Here, the start-up's characteristics refer to criteria such as the start-up's age, structure, and presentation as well as to product characteristics and market characteristics. Criteria concerning the entrepreneur(s) and the team include the education and expertise of the team members and what industry, management, and start-up

experience they have. For intellectual property and alliances, criteria such as patents and applications as well as investor reputation are relevant (Wessendorf et al., 2019).

So far, the specific criteria used by incumbents to evaluate and select start-ups for their external corporate venturing activities are not well defined. To the best of our knowledge the extant body of literature lacks insights on the overarching selection strategy applied by incumbents for their venturing activities. Missing scientific definitions and diffuse boundaries between different corporate venturing activities have led to a scattered and fragmented body of literature. Considering that the landscape for external corporate venturing activities is growing and becoming more diverse (Gutmann, 2019; Steiber et al., 2020), understanding which criteria are relevant for external corporate venturing is vital to further align and systemise corporate venturing. This study therefore poses the research question: what selection criteria do incumbents apply within their external corporate venturing activities?

3 Methodology

To answer the research question, we conducted a comprehensive systematic literature review of scientific articles to identify the start-up selection criteria applied in external corporate venturing. The selection criteria found in this systematic literature review were inductively coded and grouped into criteria categories. Subsequently, the categories and the respective selection criteria were validated using interviews with experts from external corporate venturing activities. Also, the interviews were used to weigh the different categories and criteria in terms of the incumbents' preferences. An overview of the full research design is given in Figure 1.

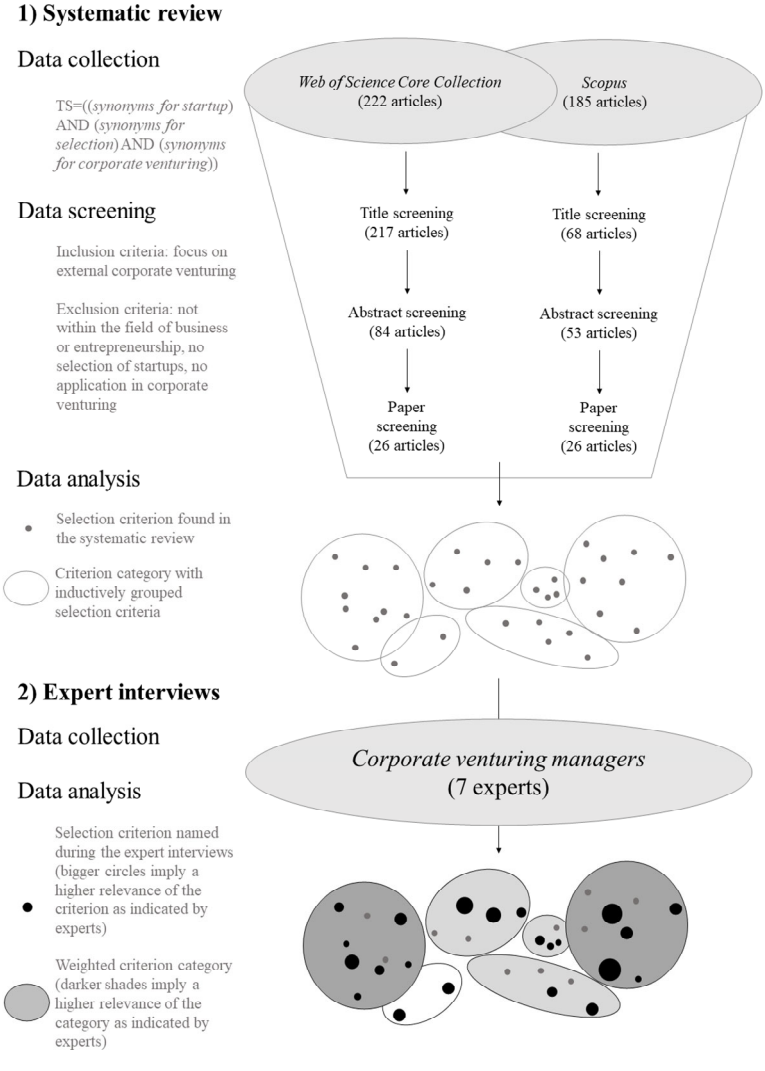
3.1 Systematic literature review

A systematic literature review synthesises research by means of a clearly defined procedure to generate a general overview of existing evidence and to determine future research efforts (Petticrew and Roberts, 2006). We searched both the Web of Science Core Collection (Clarivate, 2023) and Scopus (Elsevier BV, 2023) combining search terms for start-ups, selection, and external corporate venturing activities in the title-abstract-keywords fields. Using synonyms for those terms, we iteratively amended the search string to fit the topic of start-up selection criteria for external corporate venturing activities leading to the final search string TS = (((‘start up*’ OR start-up* OR start-up*) NEAR/10,000 entrepreneur*) AND (select* OR evaluat* OR assess* OR rate* OR rating* OR rated* OR criteri* OR factor* OR dimension* OR indicator* OR ‘decision mak*’ OR measure* OR ‘due diligence*’) AND ((CVC OR CV OR corporat* OR accelerator* OR ‘M&A’ OR merger* OR acquisition* OR incubator* OR ‘start-up program*’ OR ‘start-up program*’ OR ‘start up program*’ OR ‘private equity’ OR ‘venture fund*’) AND (compan* OR corporat* OR incumbent* OR ‘established firm*’))). After excluding review articles, documents in other languages than English were omitted from the search, leading to 222 journal articles in Web of Science and 185 in Scopus, respectively.

Following the dual control principle, the collected journal articles were screened and analysed by two individual researchers. The results of the screening and the analysis were then discussed and combined. During the title screening, all articles not within the field of

business or entrepreneurship were excluded. After screening the abstracts, articles not mentioning the selection of start-ups were excluded. The remaining articles were screened by full text for whether they included start-up selection criteria applied within external corporate venturing, resulting in a sample of 26 relevant articles. A qualitative content analysis was performed to analyse the collected data in more detail. Using the qualitative data analysis software MAXQDA (Verbi GmbH, 2023), a summative content analysis following Hsieh and Shannon (2005) was conducted: the material from the articles was paraphrased and passages containing the key content were abstracted. Subsequently, paraphrases with the same meaning were summarised and clustered. This resulted in a list of selection criteria that were ultimately grouped into criteria categories. The coding structure can be found in Appendix A.

Figure 1 Research design



3.2 Expert interviews

The empirical data was collected through semi-structured expert interviews with managers from external corporate venturing activities. The interviews focused on deepening the knowledge of the start-up selection criteria applied in external corporate venturing. Following the approach of Kaiser (2014), we prepared an interview guideline that broke down the research question into analytical dimensions and developed question complexes containing the preliminary interview questions. The complete interview guideline can be found in Appendix B.

Suitable interview partners were chosen according to which experts possessed relevant information and were willing and available to participate in the study (Kaiser, 2014). To ensure a focus on corporate venturing, only incumbents whose core business is something other than finance or start-up support were considered. To provide relevance of strategic renewal and a need for transition, our study was conducted with incumbents rooted in the chemical industry (Hübel and Scholz, 2020). The numerous different external corporate venturing activities were covered as comprehensively as possible, by conducting interviews with experts from more strategically focused activities such as start-up programs (one interview), over activities with mixed objectives such as accelerator programs (one interview), corporate venture capital entities (two interviews) and merger and acquisition departments (one interview) to financially driven activities such as venture funds (two interviews), leading to seven interviews. The interviews were conducted during December 2021 and January 2022 and lasted between 34 to 63 minutes. Due to COVID-19, all interviews were conducted using Zoom (Zoom Video Communications Inc., 2023) or Microsoft Teams (Microsoft, 2023). With the respondents' consent, the interviews were recorded and transcribed. Using MAXQDA (Verbi GmbH, 2023), the transcripts were deductively coded (Elo and Kyngäs, 2008; Mayring, 2015) applying the start-up selection categories developed through the systematic literature review. In this way, the expert interviews validated and complemented the start-up selection criteria found in scientific literature. The interviews allowed for a more nuanced weighting of the criteria, which in turn helped to elicit incumbents' start-up selection preferences.

4 Results

This section presents the results on the start-up selection criteria applied in external corporate venturing for both the systematic literature review and the expert interviews. First, the general sample of the systematic literature review is described followed by a description of the expert interviews. Subsequently, the focus of the paper, the selection criteria, are introduced in five categories, stating the criteria identified in the systematic literature review and validating them through the expert interviews. From this, we develop five novel propositions that elicit the incumbents' start-up selection preferences.

4.1 Systematic literature review

The 26 identified articles were published between 1992 and 2021, amongst others in the *Journal of Business Venturing*, the *Strategic Management Journal*, and *Research Policy*. Most of the identified articles comprised quantitative studies. These studies drew upon

databanks for start-ups, investors, or patents. For the data, variables such as the start-up's founding date (Park and Steensma, 2013; Park and Bae, 2018), patents (Kim and Park, 2017; Ma, 2020; Ozmel et al., 2017; Park and Steensma, 2013; Park and Bae, 2018), or industry affiliation (Dushnitsky and Shaver, 2009; Lantz et al., 2011; Ma, 2020; Park and Bae, 2018; Röhm et al., 2018) as well as the amount and timing of investments (Andersson and Xiao, 2016; Benson and Ziedonis, 2009; Chemmanur et al., 2014; Dushnitsky and Shaver, 2009; Kim and Park, 2017; Lehmann and Schwerdtfeger, 2016) were analysed to derive selection criteria. The qualitative studies in the sample employed case studies as well as expert interviews, or panel discussions. The remaining study was of conceptual nature.

Each of the articles identified in this systematic literature review, contained information on how incumbents select start-ups for their external corporate venturing activities. The criteria mentioned in the articles were inductively assigned to the categories

1 team criteria
2 product and technology criteria
3 market criteria
4 financial criteria
5 strategic criteria.

An overview of the identified studies, including details on the sample composition as well as the included start-up selection criteria is given in Table 1.

4.2 Expert interviews

The semi-structured expert interviews were conducted to validate and potentially further expand the selection criteria identified in the systematic literature review and gain a better understanding of the incumbents' selection preferences. An overview of all experts is given in Table 2. To this end, we applied the theory-derived selection criteria to deductively code the transcribed interviews based on the categories found in the systematic literature review

1 team criteria
2 product and technology criteria
3 market criteria
4 financial criteria
5 strategic criteria.

We specifically looked at whether findings from the systematic literature review were confirmed by the experts. Criteria that were either not mentioned by the experts or for which it remained unclear whether the criterion had a positive or negative influence on the selection were categorised as conflicting. We also identified new codes reflecting emerging criteria which have not been revealed by the literature review. An overview of all identified selection criteria can be found in Table 3.

Table 1 Studies identified in the systematic literature review

Research design	*Study*	*Data*		*Activity*	*Criteria*				
		Collection	*Sample*		*Team*	*Product*	*Market*	*Financial*	*Strategic*
Conceptual	Hamilton (2001)	-	-	Corporate venture capital, private equity		✓		✓	✓
Qualitative	Ben-Mahmoud-Jouini et al. (2018)	Case study	35 managers, start-ups, business units (Europe)	Accelerators	✓	✓	✓	✓	✓
	Enkel and Sagmeister (2020)	Case study	9 incumbents	Start-up programs, incubators, accelerators, corporate venture capital		✓	✓	✓	✓
	Henderson (2009)	Case study	5 incumbents (Europe, USA)	Corporate venture capital, mergers and acquisitions, venture funds	✓	✓	✓	✓	✓
	Kanbach and Stubner (2016)	Case study	34 managers (Europe)	Accelerators		✓	✓	✓	✓
	Kohler (2016)	Expert interviews	40 managers, start-ups (Europe)	Accelerators	✓		✓	✓	
	Kreusel et al. (2018)	Expert interviews	6 incumbents (Europe)	Incubators, accelerators		✓	✓	✓	
	Nijkamp et al. (2004)	Case study	2 incumbents	Corporate venture capital			✓	✓	✓
	Prashantham and Kumar (2019)	Panel discussion	4 incumbents	Start-up programs, incubators, accelerators	✓	✓	✓		✓
	Rigtering and Behrens (2021)	Case study	8 incumbents (Europe)	Start-up programs, private equity	✓	✓	✓		✓
	Steiber and Alänge (2020)	Case study	10 incumbents (Europe)		✓	✓	✓	✓	✓
	Steiber et al. (2021)	Case study	8 incumbents (Europe, USA)					✓	
	Wójcik et al. (2020)	Case study	33 managers, start-ups, outside experts	Accelerators, mergers and acquisitions	✓	✓	✓	✓	✓

Source: Authors

Table 1 Studies identified in the systematic literature review (continued)

Research design	*Study*	*Data*		*Criteria*				
		Collection	*Sample*	*Activity*	*Team*	*Product*	*Market*	*Financial*	*Strategic*
Mixed method	Bruno et al. (1992)	Start-up databank, expert interviews	250 start-ups (Europe, USA)	Mergers and acquisitions	✓	✓	✓	✓	
Quantitative	Andersson and Xiao (2016)	Start-up databank	80,007 start-ups (Europe)	Mergers and acquisitions	✓	✓	✓	✓	
	Benson and Ziedonis (2009)	Investor databank	34 incumbents, 242 start-ups	Corporate venture capital, mergers and acquisitions		✓			
	Chemmanur et al. (2014)	Start-up, investor, and patent databank	462 start-ups (Europe, USA)	Corporate venture capital	✓	✓	✓	✓	
	Dushnitsky and Shaver (2009)	Start-up databank	1,646 start-ups (Europe, USA)	Corporate venture capital		✓	✓		✓
	Kim and Park (2017)	Start-up and investor databank	501 start-ups (Europe, USA)			✓		✓	
	Lantz et al. (2011)	Investor databank	142 incumbents (Europe, USA)			✓	✓	✓	✓
	Lehmann and Schwerdtfeger (2016)	Patent databank	59 start-ups (Europe)	Mergers and acquisitions	✓	✓			✓
	Ma (2020)	Investor databank	25,976 investments (Europe, USA)	Corporate venture capital, mergers and acquisitions, venture funds		✓	✓	✓	✓
	Ozmel et al. (2017)	Start-up and investor databank	1,369 start-ups	Mergers and acquisitions	✓	✓			
	Park and Bae (2018)	Start-up and patent databank	762 start-ups (Europe, USA)	Corporate venture capital	✓				
	Park and Steensma (2013)	Start-up and investor databank	508 start-ups (Europe, USA)	Corporate venture capital, mergers and acquisitions	✓	✓		✓	✓
	Röhm et al. (2018)	Investor databank	58 incumbents	Corporate venture capital			✓	✓	✓

Source: Authors

Table 2 Overview of experts

	Expert A		*Expert B*		*Expert C*		*Expert D*		*Expert E*		*Expert F*		*Expert G*	
Gender	Male		Male		Male		Female		Female		Female		Male	
Position	Ecosystem manager		Ventures manager		Investment manager		Strategy director		Strategy development		Investment manager		General partner	
Educational background	Master in innovation and entrepreneurship		Master in biology and business		PhD in process engineering		PhD in chemical engineering		PhD in chemistry		PhD in marine microbiology		Diploma in economics	
External corporate venturing activity	Start-up program		Accelerator		Corporate venture capital		Corporate venture capital		Mergers and acquisitions		Venture fund		Venture fund	
Start-up age	Seed stage		Pre-seed and seed stage		Series A		Series A and later		Series A and B		Seed stage		Series A and later	
Equity investment	No		No		Yes		Yes		Yes		Yes		Yes	
Selection criteria: the numbers indicate the level of importance given to each criteria category by the experts on a scale from 1 to 5, where 1 represents the highest preference level (n.r. = not ranked)														
Team	✓	1	✓	1	✓	2	✓	2	✓	3	✓	1	✓	2
Product	✓	3	✓	2	✓	3	✓	1	✓	2	✓	2	✓	3
Market	✓	2	✓	3	✓	5	✓	n.r.	✓	5	✓	3	✓	4
Financial	✓	4	✓	4	✓	4	✓	n.r.	✓	4	✓	4	✓	n.r.
Strategic	✓	n.r.	✓	n.r.	✓	1	✓	n.r.	✓	1	✓	n.r.	✓	1

Notes: All external corporate venturing activities were rooted within the German chemical industry.

Source: Authors

4.3 Selection criteria

4.3.1 Team criteria identified in the systematic literature review

The track record seemed to be a key criterion in the start-up selection process: a track record including prior experience in founding start-ups (Wójcik et al., 2020), investments by other investors (Ben Mahmoud-Jouini et al., 2018; Chemmanur et al., 2014; Ozmel et al., 2017; Park and Steensma, 2013; Park and Bae, 2018), or a previous affiliation with the respective corporation (Henderson, 2009; Wójcik et al., 2020) increased a start-up's chances of being selected for external corporate venturing activities. Whereas one study found that corporates were not interested in the entrepreneur(s) business qualification (Henderson, 2009), other studies supported the view that a higher level of education both in the field of science and engineering but also from other disciplines increased the chances of being selected (Andersson and Xiao, 2016). In any case, technical expertise tended to have a positive influence on the selection decision (Andersson and Xiao, 2016; Bruno et al., 1992; Henderson, 2009; Kohler, 2016; Lehmann and Schwerdtfeger, 2016; Rigtering and Behrens, 2021). Also, an entrepreneurial mind-set had a positive influence on the selection decision as in several cases external corporate venturing activities served to rejuvenate the corporate culture (Kohler, 2016; Prashantham and Kumar, 2019; Rigtering and Behrens, 2021; Steiber and Alänge, 2020).

4.3.2 Team criteria validated in the expert interviews

The experts confirmed that an established track record in the form of experience in founding businesses as well as existing investors had a positive influence on the selection decision (expert A, B, C, D, E, and F) (in the following, the experts are referred to by their assigned letter). Interdisciplinary teams were preferred to individual founders to ensure a balanced team including entrepreneurs with business and technical qualifications (A, B, C, D, F, and G). However, the experts emphasised that the technical qualification was crucial since business skills were learnable (A, B, C, D, and F). In addition to the experience, the experts stated that it was primarily the personality of the entrepreneurs that influenced their selection decision. Here, professionalism (E), commitment (A, B, and D), enthusiasm (C and F), and the ability to deal with feedback (B) played an important role. The experts agreed that trust and a gut feeling that the start-up and the incumbent fit on a personal level, were decisive for the final selection decision (B, C, E, F, and G).

Proposition 1: A fit between the incumbent and the start-up team on a personal level in terms of: trust, commitment, enthusiasm, the ability for feedback and professionalism increases a start-up's chances to be selected for external corporate venturing activities.

4.3.3 Product and technology criteria identified in the systematic literature review

Incumbents seemed to use their external corporate venturing activities as a source of innovation (Andersson and Xiao, 2016; Ben Mahmoud-Jouini et al., 2018; Benson and Ziedonis, 2009; Chemmanur et al., 2014; Enkel and Sagmeister, 2020; Ma, 2020; Park and Steensma, 2013; Steiber and Alänge, 2020; Wójcik et al., 2020). In the identified studies, incumbents selected start-ups that developed new products, innovative services,

or unique solutions with a specific value for the incumbent (Ben Mahmoud-Jouini et al., 2018; Enkel and Sagmeister, 2020; Hamilton, 2001; Henderson, 2009; Kanbach and Stubner, 2016; Lantz et al., 2011; Prashantham and Kumar, 2019; Wójcik et al., 2020). Several studies also indicated that external corporate venturing activities were especially interested in start-ups with disruptive business models and technologies (Henderson, 2009; Kanbach and Stubner, 2016; Kreusel et al., 2018; Lantz et al., 2011; Steiber and Alänge, 2020; Wójcik et al., 2020). Here, the selection was based on technological synergies between the start-up and the incumbent (Chemmanur et al., 2014; Hamilton, 2001; Ma, 2020; Ozmel et al., 2017; Park and Steensma, 2013). An increased proximity of the technical capabilities (without an overlap) thereby seemed to increase a start-up's probability to be selected for external corporate venturing activities (Ma, 2020). High technological capabilities (Andersson and Xiao, 2016; Bruno et al., 1992; Hamilton, 2001) as signalled through R&D spending (Chemmanur et al., 2014) or patents (Kim and Park, 2017) had a positive influence on the selection decision. However, Dushnitsky and Shaver (2009) and Ozmel et al. (2007), noted that these preferences were highly industry dependent. In industries where intellectual property could be well protected through patents (e.g., pharmaceutical industry), start-ups with patents were more likely to be selected, whereas these preferences were less pronounced for start-ups in industries where inventions were harder to specify, and imitation concerns were stronger (e.g., electronical industry).

4.3.4 Product and technology criteria validated in the expert interviews

The experts agreed that there had to be a promising, convincing business case that fit the incumbent's vision. The focus was both on digital and sustainable innovations (A, B, D, E, F, and G). Consistent with findings from the systematic literature review, the experts emphasised that the technological synergies between the start-up and the incumbent were the decisive criterion (C, D, and E). The experts agreed that a unique selling proposition as shown through the technology was crucial (B, C, and G). To evaluate the technology, the experts paid particular attention to the technology readiness level (A, C, D, F, and G) as well as to patents (E and F). The experts confirmed that patents had a positive influence on the selection decision but also that this was highly industry specific (B, C, and G). What seemed to be important was that the intellectual property could be defended in some way and that there was freedom to operate both for the start-up as well as for the incumbent (A, C, D, E, F, and G).

Proposition 2: Products and technologies that fit the incumbent's long-term vision such as sustainable and digital technologies increase a start-up's chances of being selected for external corporate venturing activities.

4.3.5 Market criteria identified in the systematic literature review

The identified studies showed that external corporate venturing activities considered market growth (Chemmanur et al., 2014) and market volume (Steiber and Alänge, 2020) when selecting start-ups. Market acceptance in terms of existing customers also had a positive influence on the selection decision (Ben Mahmoud-Jouini et al., 2018). However, what seemed to be most important was the market focus (Enkel and Sagmeister, 2020; Kreusel et al., 2018). The identified studies indicated that there was a preference towards start-ups from high-technology industries (Andersson and Xiao, 2016;

Bruno et al., 1992; Lantz et al., 2011; Röhm et al., 2018), as these industries had high entry costs, access to finance was important, and incumbents possessed relevant capabilities and resources (Andersson and Xiao, 2016; Röhm et al., 2018).

4.3.6 Market criteria validated in the expert interviews

The experts in this study confirmed the results of the systematic literature review that market growth (A, E, and G), market volume (E, F, and G), and market acceptance in terms of existing or potential customers (A, D, E, F, and G) played a role when selecting start-ups for external corporate venturing activities. However, although expert B agreed that start-ups should work on solutions that fulfilled customer needs, he stated that market criteria were not as relevant. Incumbents usually already possessed market access (E). What seemed to be important was that start-ups worked market-oriented, whereby the transition of the market towards sustainability was mentioned (A, D, E, and G).

Proposition 3: A customer-centred business case and clear market-orientation as indicated through targeting transitions increases a startup's probability to be selected for external corporate venturing activities.

4.3.7 Financial criteria identified in the systematic literature review

Compared to the other criteria, the systematic literature review indicated that financial criteria were of less importance for external corporate venturing activities (Chemmanur et al., 2014; Henderson, 2009; Nijkamp et al., 2004; Park and Steensma, 2013; Röhm et al., 2018; Steiber and Alänge, 2020). Still, various studies showed that existing capital and returns had a positive influence on the selection decision (Ben Mahmoud-Jouini et al., 2018; Bruno et al., 1992). Even for activities without a financial focus, return on investment was a necessary condition (Enkel and Sagmeister, 2020; Henderson, 2009; Kanbach and Stubner, 2016; Lantz et al., 2011; Steiber and Alänge, 2020); if only to ensure the continuity of the start-up (Lantz et al., 2011). Regarding the risk preferences, findings were ambiguous: incumbents seemed to be more failure tolerant and tended to select riskier, less profitable start-ups with weaker financial resources as compared to institutional venture capitalists (Andersson and Xiao, 2016; Chemmanur et al., 2014). Wójcik et al. (2020) however indicated that the incumbent culture was generally risk-averse and hence were the respective external corporate venturing activities. Some external corporate venturing activities, especially in high technology industries or with unfocused objectives, tended to strive for profitable exit opportunities (Kanbach and Stubner, 2016; Kohler, 2016; Kreusel et al., 2018; Lantz et al., 2011; Röhm et al., 2018; Wójcik et al., 2020). Generally, however, exit opportunities seemed to be given low consideration in the actual selection process. On the contrary, since most external corporate venturing activities not seemed to be focused on financial characteristics, most activities were setup for a longer time frame (Chemmanur et al., 2014; Enkel and Sagmeister, 2020; Hamilton, 2001; Henderson, 2009; Kim and Park, 2017; Steiber et al., 2020).

4.3.8 Financial criteria validated in the expert interviews

The interviews indicated that financial criteria were less relevant compared to the other criteria (A, B, C, and F). Capital and revenues were not a priority but were overall

relevant to ensure the continuity of the start-up (A, C, D, and E). In contrast to literature findings, some experts explicitly discussed wanting to make money through the external corporate venturing activities (C, D, E, F, and G). Although strategic objectives were mostly in the focus, return on investment (C and G) as well as exit opportunities were considered in the selection decision (C).

Proposition 4: The potential return on investment and exit opportunities increases a start-up's probability to be selected for external corporate venturing activities.

4.3.9 Strategic criteria in the systematic literature review

Most of the studies examined in this systematic literature review conveyed that the crucial criteria for the start-up selection for external corporate venturing activities were connected to the incumbent's venturing strategy (Hamilton, 2001; Lantz et al., 2011; Nijkamp et al., 2004; Röhm et al., 2018). Although, Henderson (2009) found that there was an 'occasional disconnect' between a stated strategic focus but actual financial motivations, most of the activities encompassed both exploitative and explorative strategies, although usually one or the other dominated (Kanbach and Stubner, 2016). Some external corporate venturing activities selected start-ups that helped to strengthen the incumbent's core business (Henderson, 2009; Lantz et al., 2011). The focus was on exploiting existing technological knowledge and competencies (Enkel and Sagmeister, 2020; Wójcik et al., 2020) to fix weaknesses, mitigate threats (Enkel and Sagmeister, 2020; Kohler, 2016; Ma, 2020), or solve specific business problems (Ben Mahmoud-Jouini et al., 2018; Rigtering and Behrens, 2021). Most of the identified studies stated that external corporate venturing activities intended to complement the incumbent's assets. Here, start-ups with adjacent activities (Ben Mahmoud-Jouini et al., 2018; Kanbach and Stubner, 2016) were selected to find complementary technologies, products, or services (Andersson and Xiao, 2016; Dushnitsky and Shaver, 2009; Enkel and Sagmeister, 2020; Henderson, 2009; Lantz et al., 2011; Lehmann and Schwerdtfeger, 2016; Ma, 2020; Park and Steensma, 2013). Start-ups were also selected to support and develop the incumbent's ecosystem (Henderson, 2009; Kohler, 2016; Park and Steensma, 2013; Prashantham and Kumar, 2019; Röhm et al., 2018; Steiber and Alänge, 2020), for instance by selecting start-ups as new suppliers or customers (Enkel and Sagmeister, 2020; Henderson, 2009; Kanbach and Stubner, 2016; Kohler, 2016; Lantz et al., 2011; Prashantham and Kumar, 2019; Steiber and Alänge, 2020). For another, external corporate venturing activities had expanding objectives. Thereby, start-ups served to explore new technologies and emerging markets (Enkel and Sagmeister, 2020; Henderson, 2009; Kanbach and Stubner, 2016; Kohler, 2016; Rigtering and Behrens, 2021). In this way, incumbents used start-ups as windows for new opportunities and understanding of radical and potentially disruptive innovations (Enkel and Sagmeister, 2020; Henderson, 2009; Kanbach and Stubner, 2016; Prashantham and Kumar, 2019; Steiber and Alänge, 2020).

4.3.10 Strategic criteria validated in the expert interviews

The expert interviews confirmed that the decisive criteria for the selection of start-ups for external corporate venturing activities were related to the strategic fit between the start-up and the incumbent (C, D, E, and G). Managers looked at whether the markets, products, or technologies could be integrated into the incumbent's value chain and fit the

incumbent's strategy (E). In doing so, external corporate venturing activities served to strengthen their core competencies and to compensate their weaknesses (D). Start-ups were selected that complemented and improved the incumbent's capabilities (C and D) and built an ecosystem (E). The experts also addressed expanding objectives such as selecting start-ups with new and potentially disruptive business models. Through the venturing activities, incumbents could learn and explore new opportunities that would be too distant and costly to explore for the incumbent itself (B and C).

Table 3 Selection criteria identified and validated in the expert interviews

Criteria categories	*Selection criteria*	*Expert interviews*		
		Confirm	*Conflict*	*Add to*
Team criteria	Commitment of the entrepreneur(s)	•		
	Professionalism of the entrepreneur(s)	•		
	Entrepreneurial mindset of the entrepreneur(s)		•	
	Track record of the entrepreneur(s)		•	
	Business qualification		•	
	Technical qualification (including inventor capabilities)	•		
	Solo founders vs. teams	•		
	Age of the start-up		•	
	Personal fit between incumbent and start-up (including trust)			•
	Openness for feedback			•
	Diversity strategy			•
	Existing network			•
Product and technology criteria	Innovativeness of the idea	•		
	Unique selling proposition of the idea	•		
	Intellectual property rights	•		
	Technological capabilities	•		
	Technological synergies	•		
	Technology readiness level			•
	Bio-based technologies			•
	Circular technologies			•
	Digital technologies			•
	Future potential for the incumbent			•

Notes: *Confirm* means that the criterion found in the systematic literature review was confirmed by the expert interviews. Criteria categorised as *conflict* were found in the systematic literature review but either not mentioned in the expert interviews or the importance of the criterion was contradictory. *Add to* includes criteria that were not found in the systematic literature review but were mentioned in the expert interviews.

Source: Authors

Table 3 Selection criteria identified and validated in the expert interviews (continued)

Criteria categories	*Selection criteria*	*Expert interviews*		
		Confirm	*Conflict*	*Add to*
Market criteria	Market growth	•		
	Market volume		•	
	Market acceptance	•		
	Market focus	•		
	Industry focus (including high-technology contexts)		•	
	Geographical focus		•	
	Market orientation			•
Financial criteria	Financial considerations of the corporate		•	
	Equity investment of the corporate		•	
	Risk preferences of the corporate		•	
	Financial resources of the start-up	•		
	Return on investment of the start-up		•	
	Exit possibilities of the start-up		•	
Strategic criteria	Strengthening objectives of the corporate	•		
	Complementing objectives of the corporate (including joint projects)	•		
	Expanding objectives of the corporate	•		

Notes: *Confirm* means that the criterion found in the systematic literature review was confirmed by the expert interviews. Criteria categorised as *conflict* were found in the systematic literature review but either not mentioned in the expert interviews or the importance of the criterion was contradictory. *Add to* includes criteria that were not found in the systematic literature review but were mentioned in the expert interviews.

Source: Authors

Proposition 5: The strategic fit between the incumbent and the start-up determines the start-up selection. Thereby, mostly the complementarity between the start-up's and the incumbent's competencies increases a start-up's probability to be selected for external corporate venturing activities.

5 Discussion

Taking an incumbent's perspective, this study has examined the start-up selection criteria and preferences for external corporate venturing activities. In what follows, we discuss our findings in view of literature on start-up selection and strategic renewal of incumbents.

Regarding the research question as to what selection criteria incumbents apply within their external corporate venturing activities, the systematic literature review as well as the expert interviews reveal five criteria categories relevant for the start-up selection:

1 *Team criteria* include criteria related to the entrepreneur(s) experience and personality such as commitment and professionalism. In line with Wessendorf et al. (2019), our findings confirm that education and expertise and here, particularly the technical qualification (Kollmann and Kuckertz, 2010) of the team members are decisive for the selection decision.

2 For *product and technology criteria* our results suggest that incumbents select start-ups based on the innovativeness of the idea and a unique selling proposition (Kollmann and Kuckertz, 2010; Wessendorf et al., 2019). Although patents (Kollmann and Kuckertz, 2010; Wessendorf et al., 2019) are considered in the selection, it seems that incumbents are rather interested in their freedom to operate. Here, the focus is on the start-up's technological capabilities and technological synergies between the start-up and the incumbent (Weber et al., 2016).

3 In their selection decision incumbents pay attention to *market criteria* such as market growth and market acceptance (Wessendorf et al., 2019), but additionally look for the start-up's market orientation.

4 *Financial criteria* in terms of financial resources of the start-up either through public funds or existing investors (Wessendorf et al., 2019) are also considered in the selection if only to ensure the existence of the start-up.

5 Moreover, incumbents select start-ups based on *strategic criteria*. The strategic criteria are discussed in literature by referring to strengthening, complementing, and expanding objectives (Pinkow and Iversen, 2020). Our findings are in line with literature on start-up selection criteria (see criteria 1 to 4) (Kollmann and Kuckertz, 2010; Wessendorf et al., 2019) but extend the list by specifically including strategic criteria.

From the expert interviews we have developed five novel propositions regarding preferences incumbents have in selecting start-ups (see Subsection 4.3). Incumbents seem to put a great emphasis on the fit between the start-up team and the incumbent on a personal level. This personal fit is reflected by a level of trust between the start-up and the incumbent but also shown through the start-up team's commitment, enthusiasm, ability for feedback and professionalism (Wessendorf et al., 2019). Incumbents stress the importance of products and technologies that fit the incumbent's long-term vision. Here, mention of digital and sustainable technologies suggests that external corporate venturing is indeed used for strategic renewal in eras of transition. This is also reflected through market preferences, where incumbents seem to prefer customer-centred business cases and a clear market-orientation that target transitions (Agarwal and Helfat, 2009; Rigtering and Behrens, 2021; Weiblen and Chesbrough, 2015). We identify several financial preferences including a preference for potential return on investment and exit opportunities. However, our findings suggest that compared to the other criteria categories, financial criteria might not be as crucial for the incumbent's selection decision. In contrast, incumbents tend to focus on the strategic fit between the incumbent and the start-up and select start-ups that strengthen, complement, and expand the incumbent's core competencies (Pinkow and Iversen, 2020). Following entrepreneurial ambidexterity literature, we thus highlight the importance of external corporate venturing activities to exploit and explore opportunities (March, 1991; Pinkow and Iversen, 2020; Weiss and Kanbach, 2023). The expert interviews confirm the systematic literature

review findings that strategic motivations dominate external corporate venturing. However, the interviews indicate that complementing objectives are more pronounced compared to strengthening and expanding objectives (Pinkow and Iversen, 2020).

5.1 Theoretical contribution

Our study has three theoretical contributions. First, we contribute to literature on external corporate venturing by providing an integrative overview of distinct start-up selection criteria. Missing scientific definitions and diffuse boundaries between the different external corporate venturing activities [for instance incubators vs. accelerators (Guijarro-García et al., 2019; Veit et al., 2021)] have led to a scattered and fragmented body of literature. Since the landscape on external corporate venturing activities is growing and becoming even more diverse, an integrative overview is vital. Through taking a holistic perspective on external corporate venturing, we systemise, enrich, and conceptualise existing research through a theoretical framework. Specifically, we expand the work of Gutmann (2019) by taking a holistic perspective with a focus on the selection criteria. As the selection phase is crucial in mitigating risks, the five start-up selection categories identified in this study contribute to further align corporate venturing activities, thereby contribute to foster their performance (Benson and Ziedonis, 2009). Second, we expand current understanding with respect to preferences of start-up collaboration and investment partners. Our findings indicate that incumbents seem to have distinct preferences when selecting start-ups that are different from other start-up collaboration and investment partners such as independent venture capitalists or business angels (Gompers et al., 2020; Kollmann and Kuckertz, 2010; Wessendorf et al., 2019). More precisely, the strategic fit between the incumbent and the start-up determines the incumbents' start-up selection. The five deducted propositions are based on novel findings on the incumbent's preferences, reflecting the specifics of the incumbent start-up relationship. As a third contribution, our findings advance theorising on ambidexterity. Through a distinct category for strategic criteria, we highlight the variety of strategic objectives within external corporate venturing. In line with prior research (Gutmann, 2019; Pinkow and Iversen, 2020), findings support that incumbents select start-ups that strengthen, complement, and expand their core competencies. The strategic fit seems to be an important criterion for start-up selection, where ambidexterity is a decisive element of this strategy (Weiss et al., 2023). Our results hint towards the relevance of start-ups as partners for an incumbent's strategic renewal, especially regarding transitions. Surprisingly, sustainability aspects have been mentioned in our interviews but do not appear in existing scientific literature on incumbents' start-up selection yet. This highlights the urgent need for more empirical research on the influence of sustainability on external corporate venturing.

5.2 Managerial contribution

One of the main reasons for less successful corporate venturing activities is a missing venturing strategy and unclear objectives. Our results support how managers can enhance their external corporate venturing activities by applying a well-defined set of objectives and criteria. Thus, the criteria support incumbents to make more informed selection decisions and find the best fitting start-ups. The selected start-ups offer much potential to explore and exploit opportunities that accelerate the incumbent's strategic renewal.

Therefore, managers should carefully consider the balance between strengthening and expanding objectives to ensure the long-term success of their venturing activities (Pinkow and Iversen, 2020). Different corporate venturing activities need to be aligned and follow the principles of ambidexterity to increase the outcome and performance of the activities (Gasda and Fueglistaller, 2016; Gutmann, 2019; March, 1991; Weiss and Kanbach, 2023). As the landscape of corporate venturing activities is growing, managers should question how the chosen activities contribute to the incumbent's strategy, particularly concerning the strategic renewal towards a more sustainable economy. The shift from fossil-based raw materials to bio-based raw materials affects all industries, especially raw material focused industries such as the chemical industry. Managers must anticipate more sustainable opportunities that are accompanied by potentially disruptive and innovative products and technologies (Cohen and Winn, 2007; Hockerts and Wüstenhagen, 2010). The generally more path dependent incumbents can benefit from collaborations with the more agile start-ups, which are often the actors behind creating opportunities from the global challenges (Bohnsack et al., 2014; Cohen and Winn, 2007; Hockerts and Wüstenhagen, 2010). Notwithstanding, the criteria and preferences may be interesting for start-ups looking for investors. Indeed, our results help start-ups applying for corporate venturing activities (Simon et al., 2019).

5.3 Limitations and future research

Our study has several limitations. Only a fraction of the initial sample was relevant for further analysis. This can be mainly attributed to some terms in the search string having different meanings depending on the applied definition (e.g., start-up not referring to an external, independently founded company but to an internal, corporate spin-off). Nevertheless, in a systematic literature review priority is given to identifying all relevant studies, even if this involves an initially longer screening process. Also, although we conducted an extensive systematic analysis, our findings are rather descriptive. The existing body of literature is scarce and fragmented and hence, the identified studies cannot be compared easily (Guijarro-García et al., 2019). Many criteria are mentioned but not examined (see for instance Dushnitsky and Shaver, 2009). Often criteria are used as control variables, which does not allow for conclusions about their significance (see for instance Rigtering and Behrens, 2021). Future research could therefore draw upon research approaches such as means-end chains analyses (Grunert et al., 2001) or fuzzy set quantitative comparative analyses (Fischer et al., 2019; Ragin, 2008) for a more complete perspective on selection criteria.

The formulation of five novel propositions enables us to guide further research focusing on the start-up selection from an incumbent's perspective (Cornelissen, 2017). However, the expert interviews have been conducted within the chemical industry. Although this industry focus has been chosen to ensure a potential relevancy of strategic renewal, the selection preferences might differ for incumbents in other industries. Also, the propositions build on a rather small sample of seven interviews. This limits the generalisability of the propositions. Testing the propositions for a larger sample including quantitative approaches would enhance our findings. Particularly for eliciting preferences, conjoint approaches such as discrete choice experiments might be helpful (Hensher et al., 2015). Applying discrete choice experiments to the start-up selection of incumbents could advance literature on external corporate venturing. Furthermore, this

would advance research on choice experiments in the entrepreneurial context (Block et al., 2019; Hoenig and Henkel, 2015).

Another limitation is that we exclusively look at external corporate venturing as a means to strategic renewal. However, external corporate venturing activities represent only one mode to engage in exploring and exploiting opportunities. Strategic renewal encompasses a broad portfolio of possible modes, such as the incumbent's internal research and development or international diversification (Agarwal and Helfat, 2009). It must be clear to the incumbent which objectives should be pursued with which mode of strategic renewal so that the different modes complement each other. Future research could extend the suggested framework and its strategic objectives by examining more closely which forms of external corporate venturing to be best suited for achieving the respective objectives and to contribute the most to strategic renewal. As sustainability aspects are not reflected in scientific literature, our study highlights the urgent need for empirical studies that examine the relationship between corporate venturing and sustainability more closely.

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Appendix A

Coding structure

Table A1 Coding structure for the systematic literature review and the expert interviews

Criteria inductively identified in the systematic literature review	*Criteria categories derived from the inductively identified criteria*	*Criteria deductively derived from the expert interviews*
Commitment of the entrepreneur(s)	Team criteria	Commitment of the entrepreneur(s)
Professionalism of the entrepreneur(s)		Professionalism of the entrepreneur(s)
Entrepreneurial mindset of the entrepreneur(s)		Entrepreneurial mindset of the entrepreneur(s)
Track record of the entrepreneur(s)		Track record of the entrepreneur(s)
Business qualification		Business qualification
Technical qualification (including inventor capabilities)		Technical qualification (including inventor capabilities)
Solo founders vs. teams		Solo founders vs. teams
Age of the start-up		Age of the start-up
		Personal fit between incumbent and start-up (including trust) (*new*)
		Openness for feedback (*new*)
		Diversity strategy (*new*)
		Existing network (*new*)
Innovativeness of the idea	Product and technology criteria	Innovativeness of the idea
Unique selling proposition		Unique selling proposition
Intellectual property rights		Intellectual property rights
Technological capabilities		Technological capabilities
Technological synergies		Technological synergies
		Technology readiness level (*new*)
		Bio-based technologies (*new*)
		Circular technologies (*new*)
		Digital technologies (*new*)
		Future potential for the incumbent (*new*)
Market growth	Market criteria	Market growth
Market volume		Market volume
Market acceptance		Market acceptance
Market focus		Market focus

Source: Authors

Table A1 Coding structure for the systematic literature review and the expert interviews (continued)

Criteria inductively identified in the systematic literature review	*Criteria categories derived from the inductively identified criteria*	*Criteria deductively derived from the expert interviews*
Industry focus (including high-technology contexts)	Market criteria	Industry focus (including high-technology contexts)
Geographical focus		Geographical focus
		Market orientation (*new*)
Financial considerations of the corporate	Financial criteria	Financial considerations of the corporate
Equity investment of the corporate		Equity investment of the corporate
Risk preferences of the corporate		Risk preferences of the corporate
Financial resources of the start-up		Financial resources of the start-up
Return on investment of the start-up		Return on investment of the start-up
Exit possibilities of the start-up		Exit possibilities of the start-up
Strengthening objectives of the corporate	Strategic criteria	Strengthening objectives of the corporate
Complementing objectives of the corporate (including joint projects)		Complementing objectives of the corporate (including joint projects)
Expanding objectives of the corporate		Expanding objectives of the corporate

Source: Authors

Appendix B

Interview guideline

Table B1 Interview guideline

Analytical dimension	*Question complex*	*Interview questions*
1 Personal and professional information of the respondent	Personal questions	1.1 Aim of the interview
		1.2 Consent for recording
		1.3 Title/position/focus
		1.4 For how long have you been working in this position?
	Professional questions	1.5 Typically, what does your day-to-day job routine look like?

Source: Authors

Table B1 Interview guideline (continued)

Analytical dimension		*Question complex*		*Interview questions*
1	Personal and professional information of the respondent	Professional questions	1.6	To what extent are you involved in external corporate venturing activities?
			1.7	To what extent are you involved in the selection of start-ups?
2	Strategy	Venturing type	2.1	How is the corporate venturing activity setup?
			2.2	What is the aim of the corporate venturing activity?
			2.3	Which start-ups are targeted with the corporate venturing activity?
		Selection	2.4	What does the sourcing of start-ups look like?
			2.5	How are the start-ups selected?
			2.6	Is there an additional due-diligence process involved?
3	Criteria	Criteria found in the systematic literature review	3.1	Which criteria do you consider when selecting start-ups?
			3.2	What role does the team play in the selection process?
			3.3	What role does the product or technology play in the selection process?
			3.4	What role do market characteristics play in the selection process?
			3.5	What role do financial characteristics play in the selection process?
			3.6	What role do strategic characteristics play in the selection process?
			3.7	Are there any other criteria you consider relevant in the selection process?
4	Preferences	Weighing of the criteria named during the interview	4.1	What criteria do you find most important when selecting start-ups?
			4.2	What criteria do you find least important when selecting start-ups?
			4.3	What criteria do you find most important for rejecting start-ups?
			4.4	What criteria do you find least important for rejecting start-ups?
			4.5	What criteria have the biggest influence on your selection decision?
			4.6	What criteria have the smallest influence on your selection decision?

Source: Authors