

Thomas BAAKEN, Professor

Managing Director of the Science-to-Business Marketing Research Centre, Münster

e-mail: baaken@fh-muenster.de

ORCID: 0000-0002-2201-8645

Carina ALFERT, MA

Academic Researcher, Science-to-Business Marketing Research Centre, Münster, Münster
& VU Vrije Universiteit Amsterdam, The Netherlands

e-mail: alfert@fh-muenster.de

Thorsten KLIEWE, Professor

Research Director of the Science-to-Business Marketing Research Centre, Münster

e-mail: kliewe@fh-muenster.de

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CORPORATE VENTURING – A NEW WAY OF CREATING A COMPANY’S FUTURE¹

Summary

Purpose – More and more companies are embarking on an experimental journey into an unpredictable future – a future that is characterised by uncertainty and new challenges. Corporate venturing enables established companies, so-called incumbents, to deal with new markets and business models in a highly flexible and innovative way, besides their existing business and well known, successful business models. A new innovator’s dilemma has emerged: not only established companies are required to be increasingly creative and to question existing thought patterns, but it is similar for start ups and new businesses.

Research method – After conceptualising the paper and conducting literature bibliometry by VOSviewer, the research gap was identified. It is based on the three presented approaches: Causation, Effectuation and Bricolage as transformative approaches for strategic decision-making. Using a qualitative research by conducting 30 in-depth interviews, a transcription and a MaxQDA analysis, 5 identified corporate venturing tools were shown.

Originality/ value – The paper introduces a new approach of management which rapidly gains importance and which is crucial for companies in upcoming times to compete with flexible and disruptive start-up based business models.

Keywords: corporate venturing, intrapreneurship, business development, corporate initiatives, corporate entrepreneurship, innovation, new business

JEL Classification: L26, O32

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1. Introduction

Most companies are facing the challenge of innovation more and more frequently. Because tried and tested and well-known approaches in innovation management are no longer successful per se, more and more companies are alternatively embarking on an experimental, incalculable journey into the future.

Classical strategic management deals on a strategic level with far-reaching, long-term questions and decisions about future products and markets as well as with the competition topic, e.g. how products should be positioned. That is no longer enough today [Kliewe et al., 2019].

The paper will address this challenge and aim to contribute to the reduction of the existing knowledge gap. This gap has also been identified in literature [e.g. early Dew et al., 2008; late Alfert et al., 2019]; thus the topic urgently needs further research.

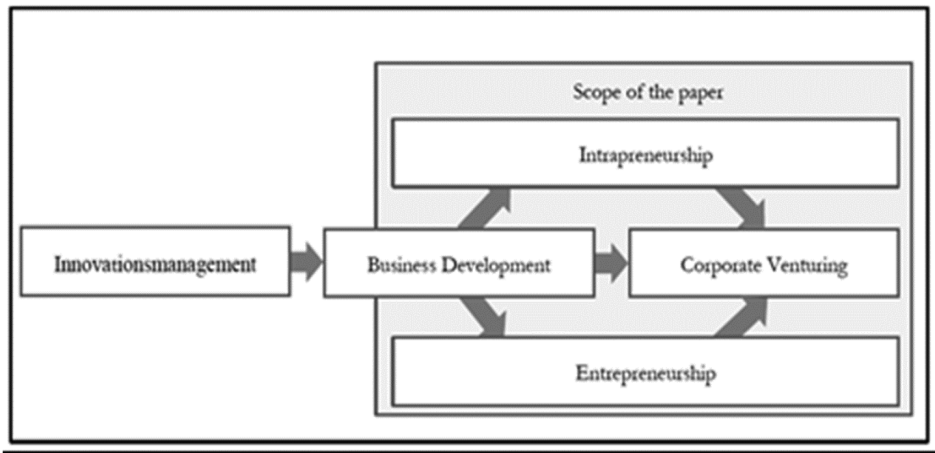
A central challenge in business development, and especially in the current periods of economic prosperity, is to manage ongoing business („exploit”) and simultaneously develop potential new business activities and innovation („explore”) [O’Reilly, Tushman, 2008]. Many companies are overwhelmed by this dual task. Therefore, a more ambidextrous (two-handed) organizational form is required, in which units are created outside the established, limiting exploiting organization in order to be able to act more successfully [Petzold et al., 2019].

Today, successful entrepreneurs often conduct management in an unconventional way. Firstly, they concentrate on innovation and opportunities and only then on customer needs [Stokes, 2000], or the role of the entrepreneur [Franco et al., 2014]. As shown in the paper’s conceptual model (chart 1), innovation can be implemented via Innovation Management, which nowadays and in modern companies is achieved by the upcoming function of Business Development. Taking into account the outside conditions of the companies (Entrepreneurship) as well as the concepts of companies’ internal entrepreneurship activities (Intrapreneurship), new levels of innovation can be achieved. These concepts finally lead to Corporate² Venturing.

² The term „corporate” relates to business organisations and embraces business corporations / companies / firms / including medium sized business organisations.

CHART 1

Conceptual model



Source: author’s own work.

2. Concepts of Intrapreneurship, Corporate Venturing and Business Development

Intrapreneurship refers to initiatives taken by companies to carry out new business activities. Although intrapreneurship is associated with companies, these concepts differ in the following sense [Antoncic, Hisrich, 2003]. Companies are generally defined at the company level and refer to a top-down process, i.e. a management strategy to promote employee initiatives and the innovation and development efforts of new companies. Intrapreneurship refers to the individual level and concerns bottom-up and proactive initiatives related to the work of each employee. Intrapreneurship is a particular form of entrepreneurship and, therefore, shares with this overall concept many important behavioural characteristics, such as initiative, the search for opportunities and a certain element of „novelty” [Bosma et al., 2011].

At the same time, intrapreneurship is also a part of the field of employee behaviour and, therefore, faces specific restrictions that a company hierarchy and an intra-organisational context may impose on the initiative, as well as specific support measures that an existing company may offer to an intrapreneur [Lumpkin, 2007].

The main activities associated with business creation include opportunity recognition, generating ideas, designing a new product or recombining resources, creating coalitions, acquiring resources, planning and organising. Important behavioural aspects are initiative, active information seeking, ready-to-use thinking, expression, taking responsibility, finding one’s way and a certain degree of risk taking [Parker, Collins, 2010].

Corporate venturing is an increasingly important success criterion for building entrepreneurial opportunities, developing new business models and leapfrog innova-

tions [Kötting, Kuckertz, 2018; Miles, Covin, 2002] and a response to the “Innovator’s Dilemma” described by Christensen [1997]. The latter states that established successful companies that act fundamentally correctly can lose their established customer base at any time to new market players that were not noticed before [Christensen et al., 2015]. Corporate venturing initiatives and units create an organizational framework that allows fast and flexible action [Christensen, Overdorf, 2000; Kuratko, 2010; Schmidt et al., 2018] and thus ensures and sustainably aligns profitability and growth in the future [Narayanan et al., 2009; Kuratko, 2010].

In the context of business development, corporate venturing should enable established companies to use new opportunities and business models in a flexible and experimental way in addition to their existing business and, thus, to solve the innovator’s dilemma. In practice, there is often a lack of creative possibilities and methods that established companies can integrate into their business activities in order to implement corporate venturing and, thus, achieve the desired innovation goals. However, companies must also consider whether the way decisions are made sufficiently supports and inspires such creative and innovation-promoting opportunities [Sarasvathy, Berglund, 2010].

The aim of this conceptual contribution is to sensitize the management of established companies to new ways of thinking and to the manifold possibilities in corporate venturing and thus prepare them for the experimental, uncertain journey into the future. Three approaches are presented: (1) Causation, Effectuation and Bricolage as transformative approaches for strategic decision-making; then (2) 5 selected corporate venturing tools are shown.

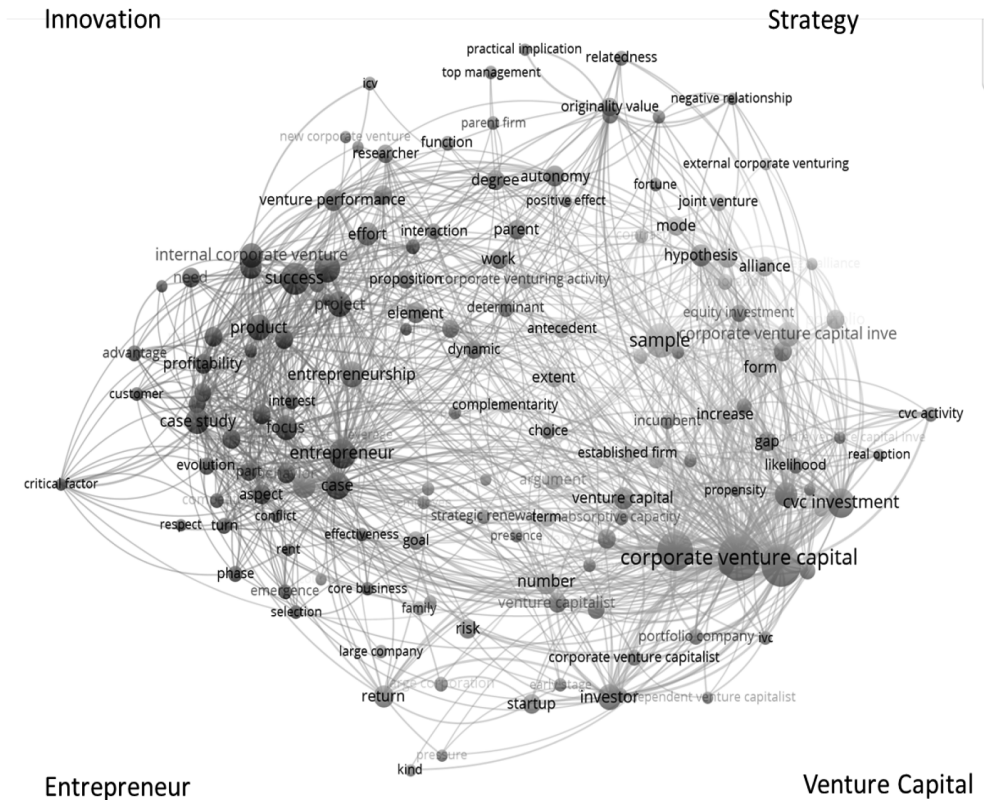
3. Comprehensive Literature Review on Corporate Venturing

A comprehensive bibliometry literature analysis has been conducted via VOSViewer Software in the Web of Science [van Eck et al., 2017].

Searched for the following key words on the topics “Corporate Ventur”, OR “Intrapreneur*” OR „entrepreneur* in compan*” OR „entrepreneur* within compan*” OR „entrepreneur* in firm*” OR „entrepreneur* within firm*” OR “Corporate Entrepreneur*”, 1461 papers have been identified.

CHART 2

Bibliometry via VOSViewer in Web of Science



Source: author's own work in accordance with: [van Eck et al., 2017].

Four trends in literature referring to corporate venturing were identified: entrepreneurship, venture capital, innovation and strategy. This points to the four different disciplines from whose point of view the corporate venturing topic has been viewed so far. There are also only a few overlapping papers; however, citation is frequently present in various trends and disciplines.

The 31 paper publications cited at least 20 times are published in the following international peer reviewed journals, to show the most relevant journals and papers in the field:

- Academy of Management Review
- Management Science
- Strategic Management Journal
- Journal of Business Venturing
- Strategic Management Journal
- Journal of Business Venturing

- Academy of Management Review
- Entrepreneurship Theory and Practice

This paper tries to overcome the different trends and disciplines and relate it to three different transformative approaches to get a better understanding of corporate venturing as an innovative management approach.

4. Transformative approaches for strategic decision-making

Three transforming approaches which are found in literature and which are applicable in reality will be discussed: Causation, Effectuation and Bricolage.

4.1. Causation

The innovator's dilemma, falling returns from the core business and smaller sales potential mean that more and more established companies are intensifying their corporate venturing efforts [Battistini et al., 2013; Futterer et al., 2018].

Corporate venturing is a discipline in corporate entrepreneurship, an active approach by established companies to increase their ability to innovate. The aim is to establish a value-oriented entrepreneurial spirit in the overall organisation with the aim of increasing financial success, securing and expanding the competitive position and the flexibility required to survive in the face of growing competition [Mes, 2011]. Corporate entrepreneurship refers to entrepreneurial thinking and acting in the environment of established companies [Scaringella, Radziwon, 2018] and is a collective term for all entrepreneurial activities on individual, team or organisational levels for the further development of the company [Kötting, Kuckertz, 2018].

The aim is not least to use the existing strategic resources [Garrett, Neubaum, 2013; Kuratko et al., 2009] to create added value for the company [Narayanan et al., 2009; Futterer et al., 2018]. The new business units will be created as part of the company without affecting existing business units [Sharma, Chrisman, 1999]. In line with Chesbrough [2010], Futterer et al. [2018], therefore, propose to establish new business models in the commercialisation of corporate venturing activities and units in order to be able to operate beyond internal and external company boundaries.

In practice, corporate venturing is still often equated with fiscal participation in young companies, start-ups, in the form of corporate venture capital, which is why it is not always clear which forms and activities are actually understood as corporate venturing.

Research distinguishes between internal and external forms of corporate venturing [Miles, Covin, 2002; Ewald, Senderovitz, 2013]. Corporate venture capital (CVC), spin-offs and joint ventures established by the incumbent are among the most common external forms.

Internal corporate venturing rarely differentiates between defined concepts. For example, venture teams or agile teams are introduced. In the international literature on internal corporate venturing, however, generally accepted definitions, such as

those of Evald and Senderovitz [2013], are often used, following Sharma and Chrismann [1999]. Accordingly, „internal corporate venturing describes entrepreneurial activities that lead to the establishment of new, innovative units”.

However, companies do not have to decide to implement one of the two orientations (internal or external), but can remain open to both forms, since both, even complementary, can lead to success [Miles, Covin, 2002].

Established companies have many opportunities to identify and pursue new, forward-looking entrepreneurial opportunities through corporate venturing. However, it has so far been shown that many large and small companies have not yet achieved any success due to these activities that can be measured in terms of earnings or are not even in a position to operate corporate venturing [Miles, Covin, 2002; Birkinshaw, Hill, 2005; Covin et al., 2018].

The question, therefore, remains as to how established companies can achieve the effect of engaging in new activities, such as the corporate venturing activities described above, in addition to their traditional business activities, in order to remain orientated towards the future. What challenges do they have to overcome and what instruments do they have at their disposal?

4.2. Effectuation

For successful corporate venture management, it is not enough for established companies to imitate superficial, outwardly radiating behaviour patterns of young companies in order to benefit from the adaptability to changing environmental factors. Rather, in addition to focusing on previous strategies and processes, they have to change the fundamental ways of thinking and action logic in order to select and establish promising corporate venturing activities and to secure the future of the company with the corporate ventures possibly founded on them.

As it is well known, the actions initiated by classical management are based on a high planning affinity. But companies with classic management approaches reach their limits, especially when it comes to really creating something new and, among other things, countering the innovator's dilemma and securing the future of the company in turbulent times [Faschingbauer et al., 2013; Evald, Senderovitz, 2013].

MacMillan, Block and Narasimha [1986] point out that corporate venturing activities differ from current business in terms of their novelty and the greater uncertainty associated with it. The term „corporate venturing”, with „venturing” as a word for “daring”, also implies a situation marked by uncertainty. In such a situation, decisions cannot be made on the basis of the calculation of possible probabilities for future scenarios, as it is usual in risk management. In situations of true uncertainty, which exceed even situations of uncertainty, possible future scenarios and their probabilities are completely unknown due to the uniqueness of the situation [Sarasvathy, Berglund, 2010].

Dew and Sarasvathy [2001] stress that it is not enough to design better prognostic models for the future. Entrepreneurs and companies must use approaches and instruments that help them to actively shape their environment.

Approaches to situations of uncertainty are therefore necessary – approaches based on the principles of entrepreneurial thinking and action.

Research on the behaviour of multiple founders shows that in the situations of uncertainty, the linear way of thinking of classical management is proving more and more effective. Successful multiple founders follow a flexible approach that is characterized by experiments and improvisation [Hmieleski, Corbett, 2006; Futterer et al., 2018]. More often than not, they succeed in adapting to changing market conditions and creating really new things. What distinguishes multiple founders is the subject of numerous studies, in particular on the personality of multiple founders.

But in the latest since Sarasvathy's work, „What makes entrepreneurs entrepreneurial? [2001], the focus of many practitioners and researchers is on the effectuation approach: in certain situations it is not about „how successful companies are, but how they think and act successfully under uncertainty” [Faschingbauer et al., 2013].

Effectuation offers this pragmatic and creative approach – a decision-making logic that uses coincidences instead of avoiding them [Sarasvathy, Berglund, 2010]. Effectuation is seen as a transformative approach to strategic decision-making. In a situation that cannot be planned due to uncertainty, principles of effectuation help to make decisions. Effectuation is a logic of structured improvisation for an uncertain, unplannable future [Perry et al., 2012; Evald, Senderovitz, 2013; Sarasvathy, 2001].

The classical decision logic – called causation – describes a linear-causal, goal-oriented planning, which is mainly applied in the known, not always new situations, e.g. in the context of the core business [Harms, Schiede, 2012]. Goals are set and the necessary means and resources are allocated for implementation [Sarasvathy, 2001].

Due to changing environmental factors, a clear objective is not always attainable even for established companies [Sarasvathy, 2001; Mainela, Puhakka, 2009]. Especially for established companies, the relevance of an open problem-solving space with processes whose goals can be adapted over time is pointed out [Mainela, Puhakka, 2009]. Effectuation is recommended as the logic of action that supports precisely those open problem-solving spaces [e.g. Perry et al., 2012; Dew et al., 2008]; a process of finding and shaping entrepreneurial opportunities to achieve a goal that still has to be defined during the process [Mainela, Puhakka, 2009].

Effectuation, however, is not the only solution. In addition to situations characterized by uncertainty, a company will at the same time continue to operate in, predictable situations. Therefore, there is no pure causation or effectuation company [Faschingbauer et al., 2013]. Also, Bricolage is a concept worth addressing [Fisher, 2012].

Similarly, despite the initial dominance of the efficiency approach, young companies, start-ups, will sooner or later deal with processes and structures in order to ensure a certain degree of stability.

4.3. Bricolage

The term „bricolage”, introduced in anthropology by Lévi-Strauss [1966], stands for a behaviour in which the actor (bricoleur) solves problems by means of the available resources instead of procuring special means specifically designed for the problem.

In a study of the improvisation of companies in the knowledge society, Baker et al. [2003] differentiate between improvisation and bricolage, whereby bricolage is often, but not always, accompanied by improvisation. Bricolage as an activity where, contrary to the resource-creating mentality, only the resources of the repertoire are used (working with the means or resources at hand) [Duymedjian, RÜling, 2010].

According to Baker et al. [2005], improvisation implies bricolage but bricolage does not imply improvisation, since bricolage can also be included in DPE (diagnosis, prescription, evaluation) approaches. The concepts differ.

Bricolage deals with the question of how start-ups succeed in outperforming and even outgrowing their competitors despite limited resources and limited scope for action. Why only some start-ups succeed in this respect is hardly comprehensible so far. The explanation Bricolage leads to is the creative combining of the existing resource [Bouette, 2004; Kliewe et al., 2009].

CHART 3

Effectuation, Causation and Bricolage

	<u>Causation</u> : Classic decision logic for known situations	<u>Effectuation</u> : Approach to strategic decision making in dealing with uncertainties	<u>Bricolage</u> : Create something from nothing
future assessment	The future tries to be predicted	The future can be shaped	Hands on, here and now „Creative Coupling“
basis for action	Goals are based on budgets & calculated resources	Goals are based on resources that can be generated	Goals are based on resources at hand now, resource recombination
decision making	Decisions based on expected returns	Decisions based on affordable loss	Decisions based on short terms success
Adjustment against unforeseeable circumstances	Unexpected conditions are seen as a risk	Unexpected conditions are seen as an opportunity	Unexpected conditions are the setting itself
Adjustment against market players	Other market participants are perceived as competitors	Other market participants are possible partners	Other market participants are clients

Source: author's own work; for some contente also see: [Fisher, 2012].

A fundamental challenge for established companies is to provide the necessary freedom of management and to develop an understanding of how situations are to be assessed. This is the only way for management to select the appropriate approach to decision making and to act flexibly accordingly.

In the context of corporate venturing discussed here, these are usually situations characterized by uncertainty. Therefore, the efficiency approach applies. In the following chart, different action-oriented and creative approaches of corporate venturing tools are presented.

Chart 3 shows the differentiation using five criteria of the three approaches (Causation, Effectuation and Bricolage) to give evidence on their disparities and diverse characters.

5. Methodology and Empirical Identification of Tools

The research designs that have been applied to this study are qualitative cross-sectional design. As outlined by [Bryman, Bell, 2015] cross-sectional research is concerned with data collection from more than one case at a single point in time to discover variation and patterns between variables. Cross-sectional research is a fairly typical option when the researcher employs semi-structured interviews with a number of people.

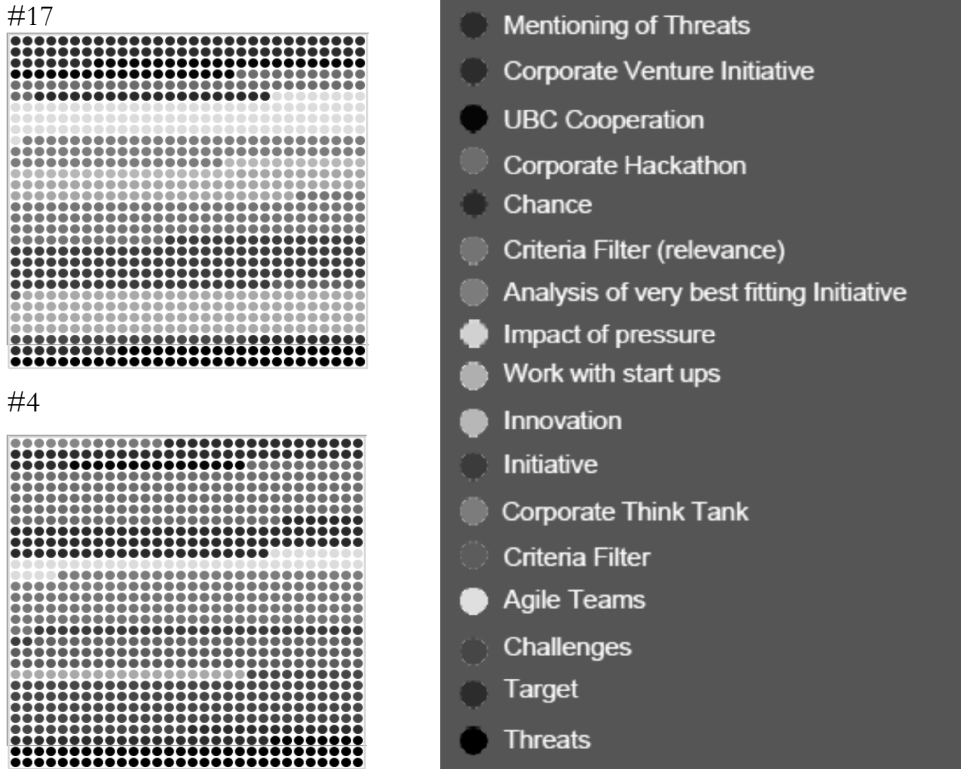
The study analyses the corporate venturing tools and initiatives of 30 representatives from different industry sector each. 30 qualitative interviews have been conducted in different industries using a semi structured interview guide. Target interviewees have been the decision makers on management level; either CEOs in smaller or Business Development Managers and Strategists in medium sized companies.

To analyse the interviews based on transcripts, the pre-defined ordering criteria and resulting categories are related to the stages of the corporate venturing. Thus, the category system for content analysis has been developed: while the pre-defined deductive categories are derived from theory, inductive categories are developed directly from the source material. Hence, this paper defines categories deductively based on the stages of corporate venturing. Additionally, inductive category development is applied to take into account individual perceptions in the interviews.

After the deductive setup of the category system, all text passages that can be assigned to one corresponding category are extracted from the source material and structured.

CHART 4

Example of coded tools in qualitative interviews (#17 and #4)



Source: author's own work.³

Throughout this process, the pre-defined categories are further differentiated into a more sophisticated category system including sub-categories. Once the categories are edited, text passages from the source material are again assigned accordingly. This has been an iterative process, until the most precise category system has been developed. To ensure replicability of this process, category definitions, coding rules and anchor examples are to be defined for each single category [Mayring, 2010, p. 93]. The qualitative content analysis of this thesis has been realised with the software MAXQDA.

³ The number of colored dots represents the number of mentions in an interview. The colors represent the entries themselves (right side). The two examples indicated show two interviews (left side).

6. Selection of Corporate Venturing Tools

Companies are currently embarking on an experimental journey [Alfert et al., 2019]. They apply tools and approaches and do not really know where this journey is taking them. They only have the feeling and the need to do something; their experience and knowledge about the tools is lacking.

The following section deals explicitly with the approaches to the successful and sustainable corporate venturing management for the selection and implementation of relevant corporate venturing forms for established companies. The search for tools leads to identifying 5 different tools which are used in at least two cases.

6.1. Agile Teams

An agile organization is an organization which becomes able to act quickly, anticipatively, flexibly and proactively to implement necessary changes. Agile teams and companies are customer- and benefit-oriented. They work in network structures instead of linear and hierarchical ones [Moe et al., 2010]. Teams think entrepreneurially, are usually cross-functional and often make decisions independently. The principles of agile teams are consistency, high transparency, trust, team self-organisation, effective feedback mechanisms, and motivation through meaningful work [Moe et al., 2010].

Efficiency thinking inhibits agility in teams. If a value creation process is based on efficiency criteria, resources can be used optimally. However, there is a lack of flexibility and fast, customer-oriented action. It is, therefore, advisable to teach employees in the company the basics of Effectuation and to give them space to manoeuvre. It is important that this is supported by the top management and that the efforts of the team are not inhibited by traditional structures.

6.2. Corporate Think Tank

For some years now, the term „think tank” has also been used in a business context. This term refers to special forms of organisation used to deal with forward-looking issues. Corporate think tanks are forums, project groups or corporate units in which interdisciplinary teams of employees and/or external parties (e.g. experts, cooperation partners, customers) deal with forward-looking topics. Corporate think tanks should support the management’s decision-making process to achieve the company’s goals, e.g. through prospective analyses (trends, future facts), strategy development or innovative ideas [Poguntke, 2016].

Corporate think tanks are based on a special approach that aims to activate creativity and dynamism. They unfold their full effect through the combination of a theme-oriented format, creative thinkers, an inspiring location and a range of suitable methods. Corporate think tanks aim to promote the creative spirit of start-ups within established companies [Poguntke, 2016].

6.3. Corporate incubator

A corporate incubator, an internal start-up centre for the promotion and development of innovation, begins even before the idea is born and is intended to give established companies access to new technologies or ideas. This includes mentoring and multi-dimensional services to support incubator participants – e.g. start-up teams, start-ups or their own employees – in the development of sustainable, marketable ideas.

Internal incubators are usually not exclusively linked to the R&D department and should be open to employees of all departments and levels or to external founders and start-ups in order to ensure a wider interdisciplinary field and diversity.

Not every promising idea can be implemented. Failure is a part of reasoning and only a few ideas create a breakthrough. For the established company that runs the Corporate Incubator, this means they should not have too high expectations, they should support the participants in a variety of ways, but at the same time give them the necessary freedom for creative and experimental actions.

6.4. Corporate University Partnerships

As innovation partners with a long-term perspective, the universities offer great benefits for industry in terms of research and the ability to put research into practice and to achieve innovations in new dimensions. Conversely, industry offers universities insights, opportunities and data for high-quality research. Universities are more and more frequently becoming a part of a regional innovation system that functions as a basis and source for the next generation of knowledge. Cooperation offers opportunities for improved regional and institutional impulses, the joint use of facilities, equipment and resources in order to make better use of strategic potential [Davey et al., 2018].

University-business cooperation has the potential to significantly improve the capacity of businesses and universities to keep pace with the extreme rate of changes.

6.5. Corporate Hackathon

A hackathon is originally a focused workshop in which software developers come together to find technological solutions for the company-wide innovation promotion [Irani, 2015].

Nowadays, this event format is also becoming increasingly important for established companies as the means to promote and accelerate innovation. In addition to the possibility of generating ideas and solutions, it offers companies a test field for new, experimental ideas, a place for interdisciplinary cooperation and an important tool for employer branding and employee recruitment.

During a hackathon, interdisciplinary teams are often formed which work intensively ad hoc over a short period of time on a solution to a problem defined in advance by the client [Nolte et al., 2018].

7. Findings

The tools and initiatives shown here offer only a fraction of the opportunities that established companies can potentially use to further develop entrepreneurial tasks.

The decisive factor for the implementation of these initiatives, however, is the appropriate approach to decision-making. When implementing new ideas, a context screening must be carried out. If this indicates a situation characterized by uncertainty, it is recommended to make further decisions according to the principles of efficiency. However, if the situation relates to known markets, products, processes, etc., it is advisable to proceed according to the classical, linear-causal approach, the causation.

Another success factor for target-oriented corporate venturing are improvisation-oriented approaches such as cross-company initiatives (provincial insurance), cooperation with start-ups or with universities. Many of the initiatives deliberately do not take place at the company's location, but are outsourced to „lively locations“.

8. Conclusions

If corporate venture management takes into account the fact that, in addition to the classic decision-making and action logic, there is also another approach – one for situations characterized by uncertainty – new rules of thumb designed for improvisation and experimentation provide the basis for the next steps. Steps that do not follow the classical strategic management approach (causation) and, therefore, do not pursue a clear objective. Steps that allow you to adapt dynamically to changing environmental factors and to omit steps that are calculated with the means that the company can afford; steps that make it possible to control the risk involved in corporate venturing – instead of predicting the unpredictable.

Initial studies are already using the concepts of Effectuation and Causation in the context of corporate venturing [Evald, Senderovitz, 2013; Harms, Schiele, 2012; Mainela, Puhakka, 2009; Futterer et al., 2018] and recommend that Effectuation should be increasingly applied in innovation management and in opening up new markets. Evald and Senderovitz [2013] refer to the question in the corporate venturing literature, which has been acknowledged but not widely researched so far, as to how internal corporate venturing activities can be fanned spontaneously and without concrete strategic intentions.

Established companies have to rethink their patterns of action, which have been consolidated over the years in processes and structures, depending on the situation. They are required to be „ambidextrous“, enabling them to embark on this experimental journey alongside their core business. Effectuation as decision and action logic, and the knowledge of practical approaches of corporate venture management are indispensable tools in the suitcase of every business development manager who wants to serve the potential of corporate venturing and thus strives to establish new

innovative units or organizational forms with the goal of opening up new business fields in existing or new markets.

In addition, the bricolage approach is proving to be viable and potentially successful, especially for companies in problem situations, developing countries and under financial bottlenecks.

There are some limitations attached to the paper, which are mainly related to the selection criterion of only including peer-reviewed articles in English from the WoS database. Consequently, further research needs to investigate additional databases and to consider non-English papers.

Also only 5 tools have been covered, as these are the most mentioned ones. However, the investigation has identified another 21 that appear in literature, reports and practise.

Additionally, the tools have not been shown in the environmental setting; thus the likelihood that there are different tools performing differently in various settings.

Additionally, the following research agenda for further studies should be elaborated. While establishing links with other research communities in addition to developing new competing trends in literature, there is a need to stabilise the field of research, cultivate a common understanding, plan the next steps, and develop a research agenda on corporate venturing. That is why the competition between trends in literature or in the territorial approach hinders the progress of the overall literature. Therefore, it is even more important to make sure that new taxonomies and conceptualizations are not developed to accommodate a temporary need but are well-grounded in the established literature trends and base on other well-developed theories.

While conducting the systematic literature review via VOSviewer, other related taxonomies and lenseshave also been identified, through which ecosystems can be viewed and analysed. Further research should also focus on a framework that can organise the application of different tools in different situations. Not every tool is suitable for every company and every situation. Therefore, this framework needs to be operational by means of quantitative measurements.

Further research, on one hand, would still need to be conducted using quantitative methods and, on the other hand, could focus on the implementation and validation of the framework in empirical studies. Both qualitative exploratory research and early quantitative studies would help to further develop this framework and offer recommendations to acting entities. It would be beneficial to consider not only different regions or industries, but also different levels of analysis [e.g., inter-organizational aspects], seeing that a multilevel perspective could provide more insights into various acting entities' perceptions.

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