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# Uncovering goals for corporate entrepreneurship: A classification based on literature review

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***Abstract*—Corporate Entrepreneurship (CE) has now evolved into an imperative innovation practice of established companies. Despite organizational design models for CE activities and companies' frequent initiation of new activities, effectively managing them remains a challenging endeavor which results in disappointment about the outcomes of CE and its early termination. We assume specific types of goals for CE as one element of this unresolved management issue. While both practice and literature address goals in different contexts, no uniform picture has emerged so far. Although goals are commonly used to categorize CE activities, they seldomly seem to be the core subject of investigation. Based on this preliminary analysis and consolidation, we put the goals of CE in focus. In a systematic literature review, we reveal aspects of goals to unmask the different types of goals and their underlying dimensions and characteristics. Our review contributes to a better understanding of goals by (1) organizing relevant literature on goals of CE in a specific classification process, (2) describing dimensions and attributes for a systematic classification of CE goals; and (3) providing a framework showing differences of goals for the CE context. We conclude with a discussion and hints for future research paths.**

***Keywords—corporate entrepreneurship, corporate venturing, literature review, goals, classification***

## I. CORPORATE ENTREPRENEURSHIP & GOALS

Corporate entrepreneurship (CE) refers to formalized efforts of established companies to implement entrepreneurial activities within their organization [1, 2]. By starting those CE activities, companies hope to obtain innovation [3] which serves the creation of a new business or the transformation of the existing organization, or even both [4–6]. Following the general theoretically grounded understanding of CE, it manifests through (a) *corporate venturing* (building new business as part of the established organization by adding or investing [7, 8]; (b) *strategic entrepreneurship* (creating innovation at the organizational level to renew strategy, structure, capabilities, or business models [9]; and (c) *corporate nurturing* (absorbing innovation from external or harnessing ecosystems [10]).

CE continues to enjoy high interest among scholars and practitioners alike as it is one means to master the challenge of established companies associated with the ambidextrous organization [8, 11] – optimizing existing core business (*Exploitation*) [12, 12] while rejuvenating themselves (*Exploration*) [13]. The main part of established companies, the core organization, focuses on strengthening and expanding the existing resources and capabilities [14]. As a result, the structures, processes, and management of the core organization are optimized for exploitation but, at the same time, hindering exploration [15]. To nevertheless realize exploration within these companies, additional structures with an explorative character are needed. CE offers activities that allow searching, acquiring, and developing new resources and capabilities [16, 17].

Hence, many companies started different activities to establish such structures leading to a heterogeneous landscape of CE activities and respective outcomes [18]. In the meantime, certain design frameworks have been developed that describe and relate specific organizational forms (dominant designs) and outcomes of CE activities [19, 20]. CE activities can take from incubation and corporate company building to startup supplier programs or startup investment [19–21]. Their outcomes cover the areas of innovation culture, capability, ecosystem and knowhow, new business offerings, entrepreneurial empowerment, and organizational transformation [19].

Despite these design frameworks at hand and companies' frequent initiation of CE activities, effectively managing them remains a challenging endeavor [22, 23]. In practice, this challenge is visible in different places, such as the reduction of initially assigned resources [24], multiple changes between different organizational forms, or even the complete termination of those activities [25, 26]. Those consequences, drawn mainly by corporate management, might indicate that CE activities are not delivering results as expected [27], which leads to disappointment among top management about the impact and return on investment of CE.

Literature provides two arguments to explain these unfulfilled expectations. First is the neglected strategic alignment between CE and the corporate strategy [28]. CE, for most parts, is not embedded in the overall corporate strategy [29] and thus, seems to be managed more like an experiment. Second is the insufficient organizational alignment between organizational structure elements and management elements of CE and core organization [28]. One of these elements is goals. Following the second argument, it seems to be not surprising that companies are having difficulties defining desired outcomes for their CE activities that, in turn, are formulated in goals to ensure the achievement of acceptable results by these activities [30, 31]. One reason could be the uncertainty about what can and should be achieved with CE and what types of goals should be set for the CE activity that, to some extent, guarantee the delivery of desired CE result. Therefore, in the first step, we take a closer look at goals.

Generally, the availability of defined goals is a key assumption in organization and management research [32, 33]. Goals can be defined as "desired outcomes of plans and actions in an organization" [34]. From the organization and management literature, it appears that goals are the heart of corporate strategy [35]. They are formulated to guide future organizational activities and behavior towards the desired future status [36] and clarify the expectations of the activities' outcomes. If the desired results are known in advance, expectations can be managed, and disappointments prevented [33]. In this way, appropriate goals might take on a certain control function.

According to the organizational goal concept, various aspects like the goal content, attributes, outcomes, and process and context play a specific role in the understanding of appropriate goals [32, 33]. The goal-setting theory tales up the point of context and states that the type of goal depends on the respective context in which the entire company or the respective organizational unit finds itself [32]. Thereby, context can refer to both the organizational environment and structure [33]. This means that for stable environments like in the core business, very specifically defined and ambiguous goals are linked with performance [37]. Examples are specific values of profitability or units sold. In contrast, uncertain environments such as exploration activities are suggested with less specific (more loosely) goals, which leave room for interpretation because not all knowledge is already available [37]. Regarding the latter, typical goals for core organization structures like business units are sales data, market shares, turnover, and profit rates. CE activities, on the contrary, are emphasized as semi-autonomous organizational units consciously different from the core business structures, suggesting that also the goals are, to some extent, different [38]. In case of the assumption that other types of goals should be set for CE compared to the core organization, it raises the question of what those types of goals for CE are.

Answering this question poses some challenges because there seems to be no clarity about the different types of goals for CE so far. Setting goals are practiced heterogeneously up to now, which results in specific but also missing or even conflicting goals [31]. Although some studies already give an idea of possible outcomes of CE forms [19, 21], no separate set of goals for those CE forms seems to exist. Additionally, a particular discrepancy can be observed regarding the need for predefined goals for CE and, if so, which types of goals. One opposes the need for specific goals as innovation and exploration require as much freedom as possible for creativity [39], while others plead for goals and criticize missing strategic alignment with overall corporate strategy [40] and broad interpretation of results for the CE activities [39].

Although goals are mentioned at different points in the literature, they are not the core subjective of investigation within the context of CE activities. Rather goals appear as a means to an end, e.g., an element for categorizing CE forms [19, 20] or arguing why established companies engage in CE activities [4, 40]. Hereby, literature mainly only differentiates between financial, strategic, and balanced types of goals [20, 41]. A more nuanced view on what characterizes these types of goals, what content they relate to, and how they are different from the goals of the core organization is still pending - except for a first empirical study on different attributes and differences depending on the CE forms [42]. Based on the outlined assumption associated with goals - their (a) role in effective management, (b) differences for CE compared to the core organization, and (c) differences among CE itself – goals might be the focus of scientific investigations.

The extant body of literature on CE addresses goals; however, no uniform picture has emerged so far; instead, fragmented findings are to be found. This heterogeneity is already visible in the terminology used for describing the phenomenon of goals like 'the reason for corporate venturing', 'goals', 'strategic objectives', or 'vision'. These terms are ambiguous to the extent that objective overlaps with vision as both refer to encouraging and driving entrepreneurial activities [31, 39]. Vision, however, is typically more overarching and builds the basis for deriving objectives. Additionally, there seems to be a broad spectrum in the formulation associated with goals that are reaching from high-level missions to performance measures [41].

Following this, the goals of CE seem to be not sufficiently analyzed and consolidated. With goals for CE in focus to identify the goals for the specific context of CE, this study aims at investigating *what are the different types of goals for CE activities?*

The study aims to identify different types of goals for CE activities. For this purpose, we consider a literature review as one source of data. A systematic search and subsequent explorative content analysis aim to extract described goals and the associated aspects of different types of goals. Further, we will distinguish whether there are different dimensions and characteristics to describe the observed heterogeneity in types of goals clearly. Then, we will figure out a way to provide an overview or classification for CE goals in a framework. Finally, we highlight the possibilities for further research based on our findings.

The relevance of this study and the provided framework to existing literature and practice stems from three new results. First a prototypical approach to classify a heterogeneous set of goals. Second, an instrument for the classification of these goals by combining dimensions and attributes. This, on the one hand, allows for the description of goals specifically for CE in a systematically, reliable way. On the other hand, it allows for comparing the goals of CE activities with other organizational units and contexts. This comparison laid the basis for the third result, namely the confirmation of our assumption that goals for CE are different from the goals of the core organization.

## II. . Review Scope & Procedure

### *A. Research Approach*

The applied method of a systematic literature review (SLR) allowed us to find answers to our research question on the construct of types of goals for CE. A pure SLR provided the relevant insights into aspects of goals for CE and served to establish a more consolidated construct [43]. Such a construct addresses the challenge of goals for CE as a subject of investigation, which has been found fragmented so far.

Our research design followed a structured methodological approach to grant objectivity and reproducibility in the SLR [44]. For this, the review included three overarching steps:

(1) planning, (2) conducting, and (3) reporting. The planning served to ensure the need and replicability of the review (review protocol with individual steps and selection criteria for studies to be part of the search). The conducting step represents the systematic search (*data collection*), selection (*data sampling*), and extraction (*data analysis*). The reporting of the results in terms of a framework allowed to answer the research question. It included the discussion of these findings from the CE point of view, as well as the boundaries and implications for future research.

### B. Data Collecting

Search terms were appropriately selected for the research question to identify the relevant articles. As a first step, these terms were derived from own prior studies and exploratory reading of extant literature on the topic of goals for CE [41]. Together with possible goal synonyms and specifications for the CE context [40], this resulted in a first list of the following search terms: for CE 'corporate entrepreneurship', 'corporate ventur*', 'strategic entrepreneurship', and for goal 'goal*', 'objective*', 'target*', 'aim*', 'mission*', 'vision*', 'goal setting'. With these search terms, we developed the first search strings. Boolean OR was used for the synonyms and AND for the intersection of the CE context and goal topic.

Preliminary searches with variations of the search string in different databases (Web of Sciences, EBSCO, and Google Scholar) allowed us to refine the search strings and provided information on how to narrow down the number of results (initial search > 1000 hits). First, the goal synonyms of 'target', 'aim', and 'mission' were less common than the term 'goal' and 'objective'. Second, the term 'vision' added no more results. Thus, we only kept 'goal' and 'objective'. Third, referring to the problem that goal is not a stand-alone subject of investigation in CE, we found that goal is part of CE strategy and the decision-making process and thus added 'strategy', 'strategic', and 'decision-making' as search terms. This problem prompted us to adapt the search string building. For the goal-related terms, we not only searched in the title but also in keywords and abstract. With our aim to identify articles that have a strong CE focus, we were searching for CE-related terms in title and keywords only.

The search terms and search strings were discussed by the authors and with additional scientific experts to find the right balance of depth and breadth in the search. The final search was conducted with the database Web of Science for reasons of access. To avoid limiting our search to one database, we also cross-checked on EBSCOhost and Google Scholar.

### C. Data Sampling

The data sampling (see Figure 3) is based on a data sample of 616 articles. This sample resulted from a second search round with the most frequent and pertinent search terms specified through the data collecting process. We were applying some quality criteria, which allowed us to reduce the number of articles further to be included in the sample. For this purpose, the filter function of Web of Science was used first. All articles had to be academic journal articles in English to focus on relevant, high-level academic contributions. Other publication forms (e.g., books, chapters, conference proceedings, unpublished papers, newspaper articles) were not to be included in the sample, which reduced the selection to 526 articles. Further, we limited the research area to Business Economics.[1]. This led to 491 articles in the sample. Since goals can also be affected by the regulatory environment, only articles from economically free countries should be considered in this review. The Economic Freedom Index, which evaluates economic freedom, was used for this purpose. Only articles from the 34 most economically free countries were included to ensure greater comparability. This resulted in 347 hits that were extracted from Web of Science.

All articles for the subsequent review required a minimum of 2 citations per year with the referencing year 2022; thus, 146 articles were removed. Articles from 2022 were excluded from this criterion as it seems unlikely to be cited in a scientific article within three months after publication. The 201 articles remaining were the title and abstract screened for their relevance to the research question, applying inclusion and exclusion criteria (Table 1). By doing so, 168 articles were excluded leading to 33 articles for a full reading.

*Table 1 Inclusion and exclusion criteria*

| Criteria | Inclusion | Exclusion |
|---|---|---|
| *Company type* | Multinationals | Family, small and medium-sized firms |
| *Industry* | High tech, product, digital services | Non-governmental and public, hotels, franchise |
| *Level of analysis* | Organizational, unit | Individual |

Cross-checking with Google Scholar added nine articles, with cross-referencing 0. After a full reading, 13 articles could be excluded by applying the same criteria. Consequently, this whole process yielded a final sample of 26 articles.

### D. Data Analyzing

The data analysis aimed at getting new insights on the possible types of goals for CE activities and their characterizing aspects, which allowed for comparison and distinction. Therefore, explorative content analysis with grounded theory following open and selective coding principles was applied, and a concept-centric approach was chosen to evaluate the underlying aspects of goals for CE. The analysis was conducted by one researcher and discussed by at least two additional members of the research team to develop a reliable coding system.

All sample articles were coded for the identification of terms, characteristics, dimensions, categories, and content of CE goals which yielded a list of 216 codes (1st order). Based on that list of terms, we applied a clustering process to search for similarities (2nd order themes) and aggregate them into overarching dimensions. A subsequent sorting process strived to arrange those dimensions into a framework that allows the identification of types of goals.

## III. FINDINGS ON TYPES OF CE GOALS

The review and analysis of the 26 articles in our sample confirm that goals for CE is a diverse subject of investigation which demands a systematic investigation and classification. We gathered and systemized existing research on the goals of CE to provide a more consolidated view of the diverse content and characteristics of those goals. The first part of the results

[1] We assume goals as part of the strategic management area, which in the case of Web of Science is summarized under the Business Economics area

will show the classifying approach that we applied to examine the extracted set of goals systematically. In the second part, we focus on the dimensions and characteristics to classify the CE goals. The third part presents the framework to distinguish different types of goals.

*A. Classifying approach for goals of CE*

The initial heterogeneity of the extracted CE goals required the setup of a particular classification process. This process allows the stepwise identification, clustering, and sorting of a more extensive set of different goals into classes. The individual steps, including the respective intermediate results, are described below.

The open coding of the 26 articles contained in our sample yielded a set of 216 codes. These codes represent 1st order terms [45] for the goals of CE. They reflect the pure information extracted from the article text. At first glance, these terms cover various different aspects of CE goals: a broad spectrum of content from 'investing in ventures' [42], 'attract talents' [43], 'financial return' [28, 37] to 'new product development' [37]; different detail levels like general 'financial performance' [28] and 'increase revenue' [44] to more specific figures like 'internal rate of return' [37]; or goals with hints for the expected outcome and preferred way to achieve like 'sourcing startup technology upon completion of joint project' [45] while other goals only state the outcome like 'exploring ideas' [45]. Thus, the initial set of goals turned out to be on different levels without a recognizable systematic and seemed to hide different categories, dimensions, and attributes.

Categories that could directly be derived from literature are labeled as follows: *entrepreneurial* [31, 46], *technology* [31, 46], *exploration*, *exploitation* [47], *investing* [40], *financial* [20, 46], and *strategic* [20]. These categories are, however, not sufficient to describe goals systematically due to the following reasons: First, there is an ambiguity in some categories. Amongst others, entrepreneurial and exploration are to a certain extent congruent and are both referring to the same kind of innovation, or the overlap between investment, exploration, and exploitation, as it is possible to make investments in both. Second, definitions seem missing for some labels, as it is the case for entrepreneurial or strategic. The unclarity of strategic goals will be outlined more in detail in the following. Third, an assignment schema with criteria for clearly assigning goals to one label is missing. Thus, adding up new or rather additional goals seems to be difficult.

Literature on CE typically makes the distinction that a CE activity pursues either financial or strategic goals [21, 47, 48]. Some research points to activities pursuing both types of goals simultaneously, which are labeled as hybrid or balanced goals [41]. Thereby, it seems to be clear which goals can be assigned to the financial types like 'increasing revenue' and which not like 'attract new talents'.

The opposite is the case for strategic types of goals. Literature, on the one side, defines strategic goals as the "underlying rationale for the mandate of the CE activity" [41] or "choices the unit makes about what activities it invests in" [31]. These definitions suggest important, overarching goals with priority for the company's strategy fulfillment. On the other side, strategic seems to be used as a label for all goals that are not financial. Thus, this simplification implies that the strategic type is an obscure bunch, in which it is not apparent which goals are only non-financial and which are "strategically" important. Additionally, the importance of specific goals might be company-dependent and thus not properly comparable across different companies. Consequently, strategic alone is an inappropriate category for CE goals. This raises the question of what strategic tends to mean and how it can be used to classify goals.

Based on these interpretations of the interim results, the first round of analysis did not reveal clearly defined types of goals. Instead, it confirmed the heterogeneity of goals for CE. This limitation demands a more systematic classification of goals that allows assigning the different goals to particular categories in a more reliable way. Therefore, we defined a specific grouping approach to stepwise sort and organize the heterogeneous set of goals of CE activities into categories by which different aspects are used to classify them reliably.

In the first step, to shed light on the aspects of CE goals, we conducted a clustering of the whole set of extracted goals (1st order terms) to 2nd order themes. For this, we iteratively were searching for similarities between the 1st order terms that then make up a group and labeling with topics coming directly and indirectly from literature. The clustering resulted in 8 different pairing groups firsthand:

| | | | | | | |
|---|---|---|---|---|---|---|
| Financial | | | vs. | | | Non-financial |
| Financial | | | vs. | | | Strategic |
| Short-term | | | vs. | | | Long-term |
| One actor | | | vs. | | | Multiple actors |
| Contractual | | | vs. | | | Non-contractual |
| Communicated | | | vs. | | | Non-communicated |
| Unclear | vs. | Broad | vs. | Clear | vs. | Measurable |

Transforming core organization, Optimizing core organization, Market innovation, Financial value, New capabilities, Intelligence on trends, Ecosystem building

Those grouped pairs seem to address different aspects of the classification. Some are more thematic, and others are more descriptive. Thus, a second step was needed. In our study, an aggregation step is to arrange categories, respective overarching dimensions and attributes clearly. Thereby, we defined dimension as an aspect for structuring the data set in a way that they allow for only an exclusive assignment of the data to those aspects. These dimensions are made up of various categories which define the position on those dimensions. Attributes are typical values that should provide additional information for the generated types and should be applicable to all categories and thus be non-exclusive.

The goal at this point was to provide an initial classification of CE goals that can be mapped into a framework. One prerequisite was to simplify the heterogeneity of CE goals with a rough classification rather than a complete picture. Therefore, the attempt was to extract two central dimensions that are characteristic of CE goals. The first sorting round results in three dimensions (goal format, goal impact, goal time frame) and three attributes (level of specificity, formality, and management). To verify the dimensions' application, we tried out whether the list of goals is assignable to the categories of these dimensions. This resulted in the two dimensions of goal format and goal impact, with each having three categories. These dimensions are orthogonal and thus create a 3x3 framework. Regarding the attributes, we only kept the level of specificity for reasons of available in-depth information.

## B. Dimensions and characteristics of CE goals

The clustering and sorting process of the initial unsorted set of goals put forth two main dimensions and their respective three sub-categories as well as one key characteristic.

The horizontal dimension, goal format, specifies the form in which the content of the goal is formulated. Here in terms of the sub-categories, financial, which is further divided into direct and indirect, and non-financial. Financial labels are monetary values that refer to optimizing the financial situation of the company. Non-financial labels are values not related to the financial situation. The format types are summarized below and complemented with a quote.

- *Direct-financial:* Financial goals that already specify the intended monetary figure that should be pursued, e.g., "increase revenue" or "deliver profit"
- *Indirect-financial*: Financial goals that do not directly state the monetary figure but which are intended to or can generate monetary values directly through their achievement like "new business" or "product innovation"
- *Non-financial*: All goals that are not referring to financial values but more culture, structure, or competence aspects

The need for the additional *indirect-financial* category has emerged because the categories of financial and non-financial derived from literature seem to be not detailed enough for the context of CE. A more nuanced view allows to capture goals that are not directly stating the monetary value but addressing goals that stress more the how with the foresight of getting financial value out of it. So, the underlying intention is monetary.

The horizontal dimension, goal impact, relates to the expected effect of the CE activity on the organization by pursuing these goals. The identified CE goals contain effects ranging from *optimizing the core organizations*, *transforming core organizations*, *creating new market innovation*, *gathering external intelligence*, *and nurturing an innovation ecosystem*. These impacts are found to be reflected in three main categories of the dynamic capabilities, namely "integrate", "gain", "reconfigure" [49]. The dynamic capability framework fits the goal impact because CE activities can be called organizational routines like dynamic capabilities that allow a company to create new value and competitive advantage [50]. Table 2 briefly describes the relationship between those impact goals and categories and their description.

*Table 2 Dimension Goal Impact*

| Goals | Categories |
|---|---|
| • Gathering external intelligence<br>• Leveraging an innovation ecosystems | *Integrate* |
| *Integrate goals* aim to bring new resources or value into the core organization by identifying, accessing, and absorbing new knowledge, technology, or partnerships from outside | |
| • Creating new market innovation<br>• Develop new capabilities<br>• Adding financial value | *Gain* |
| *Gain goals* aim to build or rather add new resources or value with already available resources of the core organization in terms of new business, more growth, or different capabilities | |
| • Optimizing the core organization<br>• Transforming the core organization | *Reconfigure* |
| *Reconfigure goals* aim to change or improve existing resources to affect the way the whole organization is working in terms of processes, products, structures, or organization. | |

The attribute serves to further characterize the goals in the individual fields of the matrix. The attribute should and can be applied along both goal dimensions. This assigns an attribute value to each sub-category or field of the matrix. The attribute that is chosen here, the level of specificity, refers to the degree of accuracy in the goal formulation in terms of the provided amount of information about the desired result to be achieved with the goal. Thereby, four levels could be identified, which are explained below:

- *Unclear:* goals are formulated in a way that they provide ambiguous information about the desired result. They, amongst others, lead to even conflicting goals.
- *Broad*: goal formulation vaguely specifies the desired results or areas to be addressed, and this provides broad latitude for interpretation of what exactly is to be achieved and how.
- *Specific:* goal formulation exactly states what results should be achieved and also how they should be achieved is already named.
- *Measurable*: goals are already formulated in terms of measurable values. With this, they provide hints for measuring performance and achievement ("KPI-level").

## C. Framework for differentiating types of CE goals

The two dimensions of goal format and goal impact appear in combination and are orthogonal to each other. With this, we propose a 3 x 3 framework (see Figure 1). Each field reflects a specific combination of goal format and impact. For the specific combinations, the distribution of the assignment of the goals from the initial list to those fields is presented in each field of Figure 1. Each field could be assigned at least one goal, which means that CE goals are defined by format and impact. By distributing the goals along these two dimensions, we see differences in the types of goals for CE.

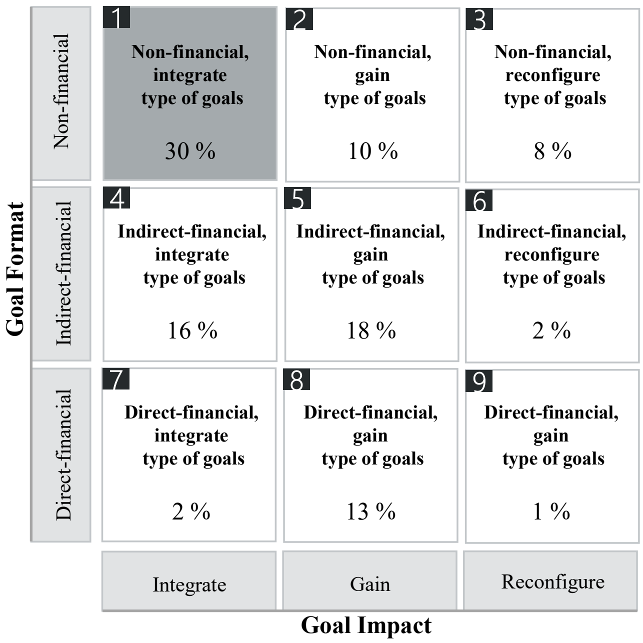


*Figure 1 Framework for Goal Classification*

It becomes clear that the highest occurrence is in field 1, meaning that goals of CE are, for most parts (30%), non-financial integrate goals. The lowest occurrence shows nearly equally in the fields 6, 7, and 9, meaning that financial reconfigure (1%, 2%) and direct-financial integrate (2%) goals are the least. Further, the matrix highlights that those goals are mainly addressing integrate content (48%) and are mostly non-financially formulated (53%). The ratio between financial and non-financial is divided in half. Non-financial ones are third times the direct-financial ones. The categories of integrate and reconfigure together makeup 20% more than the gain one.

To fulfill our study purpose – to identify types of goals – we tried to map attributes on the matrix. The mapping would allow describing the fields and potential differences among these fields in more detail. The level of specificity, which resulted from our literature content analysis and an extant empirical work [38], seemed to be a relevant aspect of CE goals to be considered. Thus, laying it over the matrix revealed certain field-specific dominances of specificity. Those dominances indicate that the fields might represent a kind of goal type which can be shown by their characterizing and differentiating specificity in formulating them.

Generally, most of the goals are formulated rather vaguely, followed by specifically formulated, and the least is formulated specifically measurable. Reconfigure goals are vaguely formulated independently of their format. Integrate goals are somehow in-between by being, for most parts, formulated vaguely. In contrast, gain goals are formulated more specifically but surprisingly seldomly specifically measured. From the goal format perspective, direct-financial goals are mostly specifically defined, whereas non-financial goals are more vaguely defined. Consequently, gain goals can be defined as typically financial and specifically formulated, while integrate and reconfigure goals are found to be typically non-financial and more vaguely formulated.

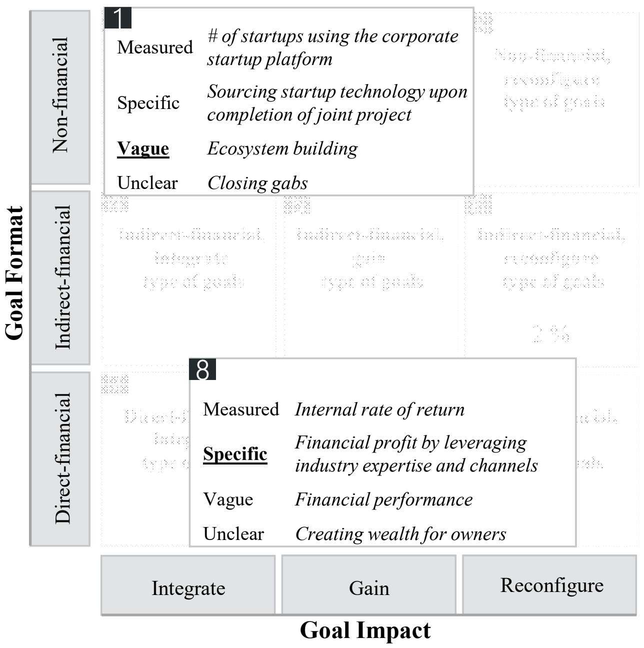


*Figure 2: Examples to Characterize Goal Types (for the whole matrix, contact the authors)*

For two fields, we have exemplarily shown the mapping with the attribute level of specificity in figure 2 to illustrate the characterization. The non-financial, integrate type of goals that contain most goals are typically formulated vaguely. As it presents the highest occurrence of vaguely in the whole matrix, it might be typical compared to other fields. The direct-financial gain type of goals has the highest variance with mostly specifically defined but same amount vague and unclear. The tendency is to be specifically defined.

## IV. Discussion & Conclusion

In this study, we present a classification for the goals of CE. With this, we add to the understanding of how goals can be described and differentiated in the context of CE. The findings of this study enhance the existing body of literature on the goals of CE by using two dimensions for differentiating types of goals.

The classification is based on two dimensions: the first dimension focuses on the impact of the goals, while the second dimension focuses on the format of the goals. The former distinguishes between three impact categories referring to as ‘integrate’, ‘gain’, and ‘reconfigure’. Those categories describe the effect the desired results formulated in the goals have on the organization. Goals within integrate address the inflow of new resources and innovation for the core organization, gain addresses the building of new resources or value with the existing core organization and reconfigure the change of resources for the whole core organization. The latter dimension describes the size-technical extent, here ‘financial’, ‘indirect financial’, and ‘non-financial’. Financial are all goals stating a concrete monetary value to be achieved, indirect financial covers those goals in which financial value could be generated, and non-financial goals are the ones not related to the financial situation of the company.

Using these two dimensions spans a matrix with nine fields. This matrix basically represents the grouping for CE goals. In addition to the categories of the goals on the two dimensions, and hence the position in a field of the matrix, goals within a field can be further described using specific attributes. We suggest, for example, based on previous research [38], to look at the attribute 'level of specificity for the goal formulation'. Some goals are formulated highly specifically ("# of startups on the platform"), whereas other goals are formulated in general terms ("building an ecosystem"). By using this framework, other types of attributes can be added when needed.

The quality of the classification can be assessed in terms of different requirements. Firstly, can the goals that we found in our systematic search, selection, and content analysis all be classified? So, is the classification complete, meaning that it can classify all the goal formulations that we found in the extant literature regarding CE? Secondly, can all the goals be assigned to just one field? So, is the classification providing mutual exclusivity between different fields, meaning that it provides contrasts to differentiate between goals? Thirdly, can the classification be used to compare the type of goals for CE with the goals that are formulated for other organizations or business units within larger companies? So, can the classification classify not only goals for CE activities but also goals for other types of organizational units, meaning that the two sets of goals can be compared or contrasted?

We found a heterogeneous set of goals for CE in a content analysis of articles that result from a systematic search and selection process. Each of these goals could be positioned somewhere in the matrix; hence the classification seems to compete, and the first requirement is met. Each of the goals could also be assigned to one unique field in the matrix; hence the classification provides mutual exclusivity, and the second requirement is also met. The classification can classify the goals that are usually formulated for CE or other types of organizational units. However, the classification is particularly designed for classifying goals of CE activities, and we will describe below how that can help to distinguish between the common types of goals and the goals of CE.

Larger companies are usually made up of several organizational units, sometimes referred to as business units (BUs), each of which deals with specific product/market combinations. The goals for such BUs usually fall in the 'gain' category. Goals can be formulated in terms of profit, turnover, costs, market share, and expansion to a new geographic region. The first three 'gain' types of goals have a financial format, and the last two 'gain' types of goals are formulated in non-financial terms. CE activities, however, are meant to foster new types of units, new competencies, and knowledge or bring culture changes or even a transformation in the company. Such activities can hardly be captured with the standard type of goals formulated in the ‘gain’ category. Within our classification, goals for CE activities – as expected – fall relatively more often in the impact categories of 'integrate' and 'reconfigure'. Furthermore, those goals are relatively more often formulated in non-financial terms. Finally, goals for CE were found to be formulated less specifically [42]. Our classification is thus formed in a way that it can most probably contrast between goals for CE activities and goals for other organizational units.

Why is classifying goals for CE and contrasting them with goals generally formulated for other types of organizational units such a relevant thing to do? In the introduction, we described how established companies struggle with their CE activities. On the one hand, companies often decide to start CE activities because their existing organization is unable to obtain results or bring about changes that the company needs. On the other hand, these CE activities are different from the other organizational units, and hence companies struggle a bit with how to manage or coordinate them. The results of CE activities are often perceived as disappointing, and hence many of such activities are stopped after a short time.

We believe that CE activities are confronted with implicit and maybe unrealistic expectations. Companies traditionally do not reconfigure, transform, or start small entrepreneurial initiatives, and hence they lack the experience to create realistic expectations regarding such activities. Such expectations are formulated in terms of realistic goals for CE activities. If our belief is correct, then it is important to provide a list of possible goals for CE activities. Such goals are probably different from the traditional goals set for other types of organizational units. So, our classification is an important step in indicating how goals for CE activities may have to be different from the goals that we used to set for other units. Moreover, that difference, in turn, may contribute to more realistic goal formulation and hence the prevention of disappointment and closure of CE activities.

The initial intention of this study was to identify the goals of CE activities and group them into different types based on previous findings. The content analysis, however, resulted in a high variety of different goals. The heterogeneous nature of CE goals and the absence of a reliable grouping schema has not allowed us to derive types of goals for CE directly. The exploratory approach then followed, with stepwise clustering and sorting, made it possible to identify dimensions that allowed for a classification of all different goals in the initial heterogeneous set of goals.

### *A. Limitations*

The findings of this study have several limitations. Some are related to the method applied, while others refer to the generalization of these findings.

Regarding the method, one limitation results from the data collection and data sample. It could be that relevant literature was not analyzed due to the narrowing time frame, database, and search terms. Additionally, the bias of researchers in sampling – even with predefined inclusion and exclusion criteria for reading through – and coding cannot be eliminated completely. Thus, contradictions in building up the framework could arise as other scholars might find different logic and coding schemes more useful.

Regarding the findings, the two dimensions may not necessarily be mutually exclusive, although we believe these dimensions represent the key aspects of CE goals. The resulting matrix should not be seen as a new truth but rather as a first contribution to the existing literature that describes specific characteristics and differences of the examined phenomena. In that sense, the proposed framework can explain contradictions in the management of CE activities – disappointment about expected results. Based on this initial classification attempt, itself may suffer from inconstancies or incompleteness, which can be addressed by future research.

### *B. Future research*

Based on the discussion above, we encourage future researchers to build on these insights in the following ways:

- The level of specificity of the formulation is one attribute derived and properly defined by literature. There might be further attributes to describe types of CE goals better. For example, ‘strategic’ and ‘operative’ goals indicate that the level of management might be an interesting attribute to investigate for its underlying categories and assignment schema.
- The classification at hand indicates clear differences among the fields of the matrix and thus suggests the presence of typical goals. Future research should work on identifying and describing those archetypes of goals.
- Additionally, our insights into the differences between goals for CE activities and the core organization demand a better understanding of how to handle this difference.
- By focusing on the dimensions of goal format and impact, this study excluded the different ways of formulating goals or different audiences receiving goals. Future research should therefore take a process perspective on goals to understand how goals are formulated and set.
- Taking the classification framework as a basis for empirical work to validate and enhance its generalization.

## V. REFERENCES


[1] D. F. Kuratko, J. S. Hornsby, and J. Hayton, “Corporate entrepreneurship: the innovative challenge for a new global economic reality,” *Small Bus Econ*, vol. 45, no. 2, pp. 245–253, 2015.

[2] M. Glinyanova, R. B. Bouncken, V. Tiberius, and A. C. Cuenca Ballester, “Five decades of corporate entrepreneurship research: measuring and mapping the field,” *Int Entrep Manag J*, 2021.

[3] R. D. Ireland, D. F. Kuratko, and M. H. Morris, “A health audit for corporate entrepreneurship: innovation at all levels: part I,” *Journal of Business Strategy*, 2006.

[4] D. J. Kuratko and D. Audretsch, “Clarifying the domains of corporate entrepreneurship,” *International Entrepreneurship and Management*, vol. 9, no. 3, pp. 323–335, 2013.

[5] S. A. Zahra, “Corporate entrepreneurship as knowledge creation and conversion: The role of entrepreneurial hubs,” *Small Bus Econ*, vol. 44, no. 4, pp. 727–735, 2015.

[6] J. Karimi and Z. Walter, “Corporate entrepreneurship, disruptive business model innovation adoption, and its performance: The case of the newspaper industry,” *Long range planning*, vol. 49, no. 3, pp. 342–360, 2016.

[7] S. A. Hill and S. Georgoulas, “Internal corporate venturing: A review of (almost) five decades of literature,” in *Handbook of Research on Corporate Entrepreneurship*, S. Zahra, D. Neubaum, and J. Hayton, Eds.: Edward Elgar Publishing, 2016, pp. 13–63.

[8] L. Weiss and D. K. Kanbach, “Toward an integrated framework of corporate venturing for organizational ambidexterity as a dynamic capability,” (in En;en), *Manag Rev Q*, pp. 1–42, 2021.

[9] M. J. Mazzei, “Strategic entrepreneurship: Content, process, context, and outcomes,” *Int Entrep Manag J*, vol. 14, no. 3, pp. 657–670, 2018.

[10] R. K. Shankar and D. A. Shepherd, “Accelerating strategic fit or venture emergence: Different paths adopted by corporate accelerators,” *Journal of Business Venturing*, vol. 34, no. 5, p. 105886, 2019.

[11] C. J. Selig and G. H. Baltes, “Strengthening Organizational Ambidexterity through Corporate Entrepreneurship Activities,” *2020 IEEE International Conference on Engineering, Technology and Innovation (ICE/ITMC). IEEE, 202*, 2020, pp. 1–9, 2020.

[12] W. Liu, “Knowledge exploitation, knowledge exploration, and competency trap,” *Knowl. Process Mgmt.*, vol. 13, no. 3, pp. 144–161, 2006.

[13] C. A. O'Reilly and M. L. Tushman, “Organizational Ambidexterity: Past, Present, and Future,” *AMP*, vol. 27, no. 4, pp. 324–338, 2013.

[14] B. Forés and C. Camisón, “Does incremental and radical innovation performance depend on different types of knowledge accumulation capabilities and organizational size?,” *Journal of Business Research*, vol. 69, no. 2, pp. 831–848, 2016.

[15] M. J. Benner and M. L. Tushman, “Exploitation, Exploration, and Process Management: The Productivity Dilemma Revisited,” *AMR*, vol. 28, no. 2, pp. 238–256, 2003.

[16] V. Titus, J. M. House, and J. G. Covin, “The Influence of Exploration on External Corporate Venturing Activity,” *Journal of Management*, vol. 43, no. 5, pp. 1609–1630, 2017.

[17] D. F. Kuratko, “Corporate Entrepreneurship 2.0: Research Development and Future Directions,” *FNT in Entrepreneurship*, vol. 13, no. 6, pp. 441–490, 2017.

[18] C. J. Selig, T. Gasser, and G. H. Baltes, “How Corporate Accelerators foster Organizational Transformation: An internal Perspective,” *2018 IEEE International Conference on Engineering, Technology and Innovation (ICE/ITMC)*, pp. 1–9, 2018.

[19] C. J. Selig, *Understanding the heterogeneity of corporate entrepreneurship programs*: Leiden University, 2021.

[20] T. Gutmann, “Harmonizing corporate venturing modes: an integrative review and research agenda,” *Manag Rev Q*, vol. 69, no. 2, pp. 121–157, 2019.

[21] V. K. Narayanan, Y. Yang, and S. A. Zahra, “Corporate venturing and value creation: A review and proposed framework,” *Research Policy*, vol. 38, no. 1, pp. 58–76, 2009.

[22] P. M. Kreiser, D. F. Kuratko, J. G. Covin, R. D. Ireland, and J. S. Hornsby, “Corporate entrepreneurship strategy: extending our knowledge boundaries through configuration theory,” *Small Bus Econ*, vol. 56, no. 2, pp. 739–758, 2021.

[23] D. F. Kuratko, J. G. Covin, and J. S. Hornsby, “Why implementing corporate innovation is so difficult,” *Business Horizons*, vol. 57, no. 5, pp. 647–655, 2014.

[24] M. Gamber, T. Kruft, and A. Kock, “Balanced Give and Take - An Empirical Study on the Survival of Corporate Incubators,” *International Journal of Innovation Management*, 2020.

[25] R. A. Burgelman and L. Välikangas, “Managing Internal Corporate Venturing Cycles,” *MIT Sloan Management Review*, 2005.

[26] S. Ma, “The Life Cycle of Corporate Venture Capital,” *The Review of Financial Studies*, vol. 33, no. 1, pp. 358–394, 2020.

[27] S. A. Hill and J. Birkinshaw, “Ambidexterity and survival in corporate venture units,” *Journal of Management*, vol. 40, no. 7, pp. 1899–1931, 2014.

[28] P. M. Kreiser, D. F. Kuratko, J. G. Covin, R. D. Ireland, and J. S. Hornsby, “Corporate entrepreneurship strategy: extending our knowledge boundaries through configuration theory,” *Small Bus Econ*, vol. 56, no. 2, pp. 739–758, 2021.

[29] R. D. Ireland, J. G. Covin, and D. F. Kuratko, “Conceptualizing Corporate Entrepreneurship Strategy,” *Entrepreneurship Theory and Practice*, vol. 33, no. 1, pp. 19–46, 2009.

[30] J. G. Covin and M. P. Miles, “Strategic Use of Corporate Venturing,”

[31] S. A. Hill and J. Birkinshaw, “Strategy–organization configurations in corporate venture units: Impact on performance and survival,” *Journal of Business Venturing*, vol. 23, no. 4, pp. 423–444, 2008.

[32] J. Kotlar, A. de Massis, M. Wright, and F. Frattini, “Organizational Goals: Antecedents, Formation Processes and Implications for Firm Behavior and Performance,” *International Journal of Management Reviews*, vol. 20, S3-S18, 2018.

[33] S. Linder and N. J. Foss, “Microfoundations of Organizational Goals: A Review and New Directions for Future Research,” *International Journal of Management Reviews*, vol. 20, S39-S62, 2018.

[34] L. B. Mohr, “The concept of organizational goal,” *The American Political Science Review*, vol. 67, no. 2, pp. 470–481, 1973.

[35] T. J. Andersen, “Strategic planning, autonomous actions and corporate performance,” *Long range planning*, vol. 33, no. 2, pp. 184–200, 2000.

[36] A. V. Fiegenbaum, S. Hart, and D. A. Schendel, “Strategic reference point theory,” *Strat. Mgmt. J.*, vol. 17, no. 3, pp. 219–235, 1996.

[37] E. A. Locke, D.-O. Chah, S. Harrison, and N. Lustgarten, “Separating the effects of goal specificity from goal level,” *Organizational Behavior and Human Decision Processes*, vol. 43, no. 2, pp. 270–287, 1989.

[38] S. Raisch, J. Birkinshaw, G. Probst, and M. L. Tushman, “Organizational Ambidexterity: Balancing Exploitation and Exploration for Sustained Performance,” *Organization Science*, vol. 20, no. 4, pp. 685–695, 2009.

[39] D. Kelley, “Sustainable corporate entrepreneurship: Evolving and connecting with the organization,” *Business Horizons*, vol. 54, no. 1, pp. 73–83, 2011.

[40] S. Markham, S. Gentry, and D. Hume, “Strategies and Tactics for External Corporate Venturing,” *Research Technology Management*, vol. 48, no. 2, pp. 49–59, 2005.

[41] B. Battistini, F. Hacklin, and P. Baschera, “The State of Corporate Venturing: Insights from a Global Study,” *Research-Technology Management*, vol. 56, no. 1, pp. 31–39, 2013.

[42] C. Lang, C. J. Selig, T. Gutmann, J. R. Ortt, and G. H. Baltes, “Guiding through the Fog: Understanding Differences in the Goal Setting of Corporate Entrepreneurship Programs,” in *2021 IEEE International Conference on Engineering, Technology and Innovation (ICE/ITMC)*, 2021.

[43] C. Post, R. Sarala, C. Gatrell, and J. E. Prescott, “Advancing Theory with Review Articles,” *J. Manage. Stud.*, vol. 57, no. 2, pp. 351–376, 2020.

[44] S. Kraus, M. Breier, and S. Dasí-Rodríguez, “The art of crafting a systematic literature review in entrepreneurship research,” *Int Entrep Manag J*, vol. 16, no. 3, pp. 1023–1042, 2020.

[45] D. A. Gioia, K. G. Corley, and A. L. Hamilton, “Seeking Qualitative Rigor in Inductive Research,” *Organizational Research Methods*, vol. 16, no. 1, pp. 15–31, 2013.

[46] V. Gaba and S. Bhattacharya, “Aspirations, innovation, and corporate venture capital: A behavioral perspective,” *Strat.Entrepreneurship J.*, vol. 6, no. 2, pp. 178–199, 2012.

[47] D. Reimsbach and B. Hauschild, “Corporate venturing: an extended typology,” (in En;en), *J Manag Control*, vol. 23, no. 1, pp. 71–80, 2012.

[48] J. Birkinshaw and S. Hill, “Corporate Venturing Units:: Vehicles for Strategic Success in the New Europe,” *Organizational Dynamics*, vol. 34, no. 3, pp. 247–257, 2005. [Online]. Available: http://faculty.london.edu/jbirkinshaw/assets/documents/62corporateventuring_units.pdf

[49] D. J. Teece, G. Pisano, and A. Shuen, “Dynamic capabilities and strategic management,” *Strat. Mgmt. J.*, vol. 18, no. 7, pp. 509–533, 1997.

[50] Z. Simsek, “Towards a relational view of corporate entrepreneurship,” pp. 119–144, 2016.