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AN APPROACH TO THE PHENOMENON OF CORPORATE ENTREPRENEURIAL CULTURE

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ABSTRACT
This paper has the objective of creating a framework for a different cultural dimension of corporate entrepreneurship leading to corporate entrepreneurial culture (CEC). The analysis of CEC is based on a review of existing concepts of organisational culture and entrepreneurship. They are combined to create a framework of CEC, including macro- and microlevels and examples of subcultures. Core ideas of the framework are validated by qualitative interviews with ten experts. The identified organisational category of the CEC framework is defined by the levels of micro-cultures or subcultures and includes the upper levels of the hierarchy, including the industry level. Geographic categories such as regional or national culture are also part of the system. The individual category of the CEC framework is characterised by competencies (including aspects such as motivation, creativity, mobilising others, coping with uncertainty, teamwork and social competencies) and entrepreneurial personalities. The results of the interviews show the importance of these individual competencies for a lively CEC. The different levels, such as national and professional cultures, as a dimension of the organisational category of the framework are also confirmed by the interviews. The findings indicate that the individual category of CEC could be used for job satisfaction or engagement and the degree of CEC of an organisation could be defined and developed by the organisational category. The identified framework contributes to an understanding of this complex topic and supports companies in the implementation of entrepreneurial ideas in different organisational contexts.

KEYWORDS: Entrepreneurship, entrepreneurial culture, organisational culture, entrepreneurial talents, entrepreneurial competencies.

JEL CLASSIFICATION: M14, M10, L26

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INTRODUCTION

The entrepreneurial or intrapreneurial behaviour of individuals and the entrepreneurial culture of organisations are seen as representing some of the success factors for coping with a VUCA environment (volatility, uncertainty, complexity, and ambiguity) (Chauhan *et al.*, 2020). However, while the entrepreneurial attitude is often analysed as a macroculture, e. g., the entrepreneurial culture is described on a national or regional level, specific descriptions of the organisational level of entrepreneurial culture are limited (Fayolle *et al.*, 2010) and do not use the full range and complexity of cultural organisational models (Schein, 2017). Furthermore, research focusing on corporate entrepreneurship and the role of corporate entrepreneurial culture is often limited by either focusing on the organisational level of entrepreneurial culture (Muriithi *et al.*, 2019) or the individual level of entrepreneurial culture (Pirhadi & Feyzbakhsh, 2021). Less attention is paid to a combined model of these different levels of corporate entrepreneurial culture. Thus, the different elements determining the designed entrepreneurial culture of an individual organisation are less accessible to further scholarly analysis or practical management processes.

Entrepreneurship is relevant for creating new business and innovations linked to the idea of individuals and organisations pursuing opportunities. Of course the usefulness of entrepreneurial structures to cope with dynamic business environments like disruptive innovations or changing social and economic conditions is quite obvious and the idea of activating a higher level of self-responsibility in large organisations is also a relevant task for entrepreneurial units (Fis & Cetindamar, 2019). "Corporate entrepreneurship (entrepreneurial actions within large organisations) and the need for entrepreneurial cultures have gained much attention during the past few years" (Kuratko *et al.*, 2015, p. 2). But there are also a number of examples where, even in the category of small and medium sized enterprises (which, according to the standards of the European Commission, have not more than 249 employees) the entrepreneurial orientation of the organisation is described as a success factor (Ključnikov *et al.*, 2019).

The purpose of this paper is to provide a more detailed approach to the different layers and dimensions of a corporate entrepreneurial culture (CEC). CEC could be seen as a success factor for many companies and industries. The entrepreneurial culture described in this paper could be a significant contribution to the ongoing cultural change of organisations because it includes a decentralised entrepreneurial attitude, which is necessary to act with more flexibility and independence. The article is structured as follows. We present in a first part an overview of the major terms entrepreneurship and culture and describe how these concepts are related to each other. We than provide an overview of the distinction between an entrepreneurial orientation and an entrepreneurial organisation. In the following section, we develop a framework on corporate entrepreneurial culture. We continue by providing an overview of our method and the results of the empirical study. Finally, we provide a conclusion and the limitations as well as the directions for future research.

1 ENTREPRENEURSHIP AND CULTURE

1.1 Entrepreneurship

Following the definition of the Harvard Business School (HBS) "entrepreneurship is a process by which individuals-either on their own or inside organisations-pursue opportunities without regard to the resources they currently control" (Stevenson *et al.*, 1989; most cited after: Stevenson & Jarillo, 1990: 23). The focus on opportunities could be combined with other theories about entrepreneurship like the new Austrian approach, which introduced two main aspects to the entrepreneurial discussion: "(1) the creation of opportunities through human imagination directed towards an envisioned future, and (2) the exploitation of opportunities through continuous resource combination and recombination" (Chiles, Bluedorn & Gupta, 2007: 486). This approach led to a new discussion about the theoretical foundation of entrepreneurship (White *et al.*, 2022).

The idea of entrepreneurship includes new ventures and startups, as well as established organisations. Peter F. Drucker analysed the need for "entrepreneurial management" by emphasising the need for innovation and management that should be useful to "existing business", "public-service institutions", "new ventures" (Drucker, 1985: 143). Besides this close connection between the ability of an organisation to innovate there is a significant difference when it comes to the actors and the cultural dimension: "innovators are thinkers (…) but (…) entrepreneurs are doers" (Clifton, 2014: 8). Entrepreneurship includes the creation of a customer for each innovation and is in this sense close to the idea of Peter Drucker, who repeatedly emphasised: "There is only one valid definition of business purpose: to create a customer." (Drucker 1974: 89). According to Drucker there is the need to integrate new ventures of existing organisations in separated organisational structures to make sure that the professional manager, who tends to optimise the efficiency of existing structures and processes, is not disturbing the entrepreneurs who are mainly focused on raising effectivity by entering new markets (Drucker, 2005).

Entrepreneurship could be combined with the different roles of managers (Mintzberg, 1971), including the differentiation between management and leadership. Especially the description of leadership with elements such as "create vision", "have unique ideas", "take risks", "think for long-term goals", "grow personally", "build relationship", "coach", "motivational style" (Smith & Chimucheka, 2014; Gupta & Jain, 2021) could be interpreted as a description of entrepreneurial roles. Entrepreneurial leadership also needs entrepreneurial management when it comes to the efficient realisation of visionary strategies and the definition of precise goals. Not every act of leadership is entrepreneurial but entrepreneurial acts are a source or a symptom of leadership (O´Connel *et al.*, 2008).

1.2 Organisational Culture and Corporate Culture

Culture is a phenomenon which is hard to describe (Kluckhohn *et al.*, 1952). One of the most obvious analytical dimensions of culture in the context of organisation and business is focused on national cultural differences (Hofstede *et al.*, 2010), and this dimension is often used to succeed in marketing and leadership in globalised markets and organisations. In the context of management studies and organisations there is a sociological (organisations have cultures) and an anthropological (organisations are cultures) idea of the concept (Cameron & Quinn, 2011). The theory of social systems describes "all contacts between people", which are, according to Niklas Luhmann, "controlled by complementary behavioural expectations" which define the area of acceptable behaviour ("acceptable" or "misunderstood and rejected") (Luhmann, 1964: 272). "From this perspective, an organisational culture is comprised of expectations of the behaviour of the organisation´s members. In the case of culture those expectations have not been made through officials by management but instead emerge slowly, through repetitions and imitations." (Kühl, 2018: 8).

The approach of scholars and practitioners to defining different cultural styles (e. g., by subcategories such as caring, purpose, learning, enjoyment, results, authority, safety, and order) (Groysberg *et al.*, 2020) and delivering models to design and manage organisational cultures could also be seen as another "illusion of control held by managers and consultants" (Kühl, 2018: 9), but the different models are useful in defining the subsystems of organisational culture. Edgar H. Schein´s basic model describes three levels of organisational culture (Schein, 2017: 18): a) Artefacts, b) Espoused beliefs and values and c) Basic underlying assumptions.

In his conceptual work, Schein used the ideas of Lewin (Lewin *et al.*, 1939; Lewin, 1952) to define the "pattern of norms and attitudes" influencing "a whole social unit" (Schein, 1988). His general model could also integrate sectoral specifications (such as media business: Schein, 2003) and a differentiation between founders and managers in their cultural roles (Schein, 1983); a differentiation, which could be extended to different roles of CEOs (Giberson *et al.*, 2009). Another distinction is made between the different layers of culture. Schein uses the metaphor of a bullseye to describe the differences between the different cultures and subcultures (Schein & Schein, 2019). The level of macroculture describes the broad environment of an organisation, like different national cultures, and influences the attitude towards "the nature of truth, the nature of time and space, human nature and human relationships" (Schein & Schein, 2019). The organisational social culture reflects the beliefs and values of founders and early leaders like a common language. The organisational technical culture covers shared beliefs and values like the basic mission or strategy, work structure systems, KPIs etc. It could transform beliefs into shared assumptions in the sense of an internal technical culture. "In practice, the members of the group may experience the technical and social as a single culture" (Schein & Schein, 2019: 22). With the growth of an organisation, there is no longer one organisational culture, but there are subcultures, often associated with business functions like R&D and marketing. In large organisations there are also microcultures of subgroups which are established by the organisational design as microsystems to perform a discrete task. 'Corporate culture' is an expression which is sometimes used as a synonym for organisational culture. In most analyses of corporate culture, the concept is not clearly defined, but the effect of corporate culture on a

company´s performance is measured. We can see this effect in "Bringing Corporate Culture to the Bottom Line" (Denison, 1984), where the "measurement of something as complex and amorphous as an organisation´s culture" (Denison, 1984: 6) is the core idea without defining the topic itself. And decades later, when Eric Flamholtz refers to this basic work by describing "Corporate Culture and the Bottom Line" his definition is quite vague: "Although there are many different definitions of the concept, the central notion is that culture relates to core organisational values. In turn, values are things which are important to organisations and underpin decisions and behaviour. All organisations have cultures or sets of values which influence the way people behave in a variety of areas, such as treatment of customers, standards of performance, innovation, etc." (Flamholtz, 2001: 268f.).

Even if scholars decide to define corporate culture (Guiso *et al.*, 2015) they refer to definitions that do not differentiate between corporate and organisational culture. "The culture-performance link can be ambiguous, in part, because of the lack of agreement about the definition of the construct of organisational or corporate culture" (O'Reilly & Chatman, 1996: 159). If we refer to the segmentation of organisational cultures by Schein, we can define corporate culture as a form of organisational culture with all the different conceptional levels and – especially in large corporations – differentiated macro-, sub-, and microspheres, where the level of artefacts is usually designed and reflected, as we can see in subconcepts such as corporate identity and corporate design, which reflect beliefs and values and are part of the visible sphere of artefactual cultural representations. The modelling of organisational cultures could be used to identify factors like the reward structure (Bushardt *et al.*, 2011), which would not only help scholars to define different cultures in a more differentiated way but would also assist practitioners in working not only with their culture but also on their culture.

Table 1 **Culture and Entrepreneurship: Geographical, New Venture and Corporate Focus**

Geographical idea of cultural identity (international, national, regional, local cultural aspects)	International (Phelps, 2007; Freytag & Thurik, 2010; Hayton & Cacciotti, 2013; Dimitratos & Plakoyiannaki, 2003); International entrepreneurial orientation (Schein, 2017; Knight, 2001); National (e. g. China & Singapore: Samli, 2009); Regional (Audretsch, 2019; Capelleras *et al.*, 2019; Arrak *et al.*, 2020)
Entrepreneurial Culture as Culture of new ventures / Startups	Fritsch & Wyrwich, 2018; Röhl, 2016; „entrepreneurial environment" (Dhliwayo, 2010), Combination of Geographic and Startups like Startup culture in India (e. g., Bhagavatula *et al.*, 2019), "startup culture in corporations" (Prexl, 2019)
Entrepreneurial culture in existing organisations (corporate entrepreneurship) differentiation via size (Small Medium-sized Enterprises Family business, large corporations), or sector (IT, media, etc.).	Family Business (EL Omari *et al.*, 2017; Leal-Rodríguez *et al.*, 2017), IT (Danish *et al.*, 2019), intrapreneurship and corporate entrepreneurship (Sharma & Chrisman, 1999)

(*Source:* Own elaboration by the authors)

1.3 Culture and Entrepreneurship

Based on the different approaches to each subject, entrepreneurship, and organisational culture, it is not surprising that there are a plurality of ideas that combine both topics. There are three major clusters combining culture and entrepreneurship: the regional/geographical, the startup-focused, and the

generalist approach. In this context, the entrepreneur is often seen as the owner of a business by defining ratios of people with ownership roles in relation to labour force (Freytag & Thurik, 2010) but according to Drucker it is not necessarily helpful to follow the (as he claims) "misleading" "literal translation" of "Unternehmer" as is often done in German-speaking countries, and to focus on the type of "owner-manager" (Drucker, 1985). Tab. 1 shows three categories of combinations of culture and entrepreneurship, including some examples. These do not represent the full dimension of each category; for example, there are many papers about the international cultural dimension of entrepreneurship (Dimitratos & Plakoyiannaki, 2003).

2 ENTREPRENEURIAL ORIENTATION OR ENTREPRENEURIAL ORGANISATIONS?

The core idea of establishing cultural elements of entrepreneurial scenarios in organisations of different ages and situations leads to the idea of describing entrepreneurial organisations or describing the entrepreneurial orientation of people and organisations. Stevenson and Jarillo (2007) describe six propositions that characterise an entrepreneurial organisation (Tab. 2).

Table 2 **Entrepreneurial Organisations: Six propositions of entrepreneurial organisations**

Proposition1: Pursuing opportunities	An entrepreneurial organisation seeks opportunities, regardless of the resources currently controlled.
Proposition 2: Level depends on individuals	The level of entrepreneurship depends on the attitude of individuals within the organisation, below the top management.
Proposition 3: Individuals as opportunity seekers	The entrepreneurial behaviour of a firm is correlated with its efforts to give individuals the chance to detect opportunities.
Proposition 4: Lessening of negative consequences of failure	Firms show a high degree of entrepreneurial behaviour by making conscious efforts to reduce the negative consequences of failure.
Proposition 5: Employees´ ability to exploit opportunities	The subjective ability to exploit opportunities of each member of the organisation counts.
Proposition 6: Networking as a core competency	Informal internal and external networks are part of entrepreneurial behaviour.

(*Source:* Stevenson & Jarillo, 2007)

The construct of entrepreneurial organisations includes aspects which could be defined in a less focused context. The idea of networks for example (proposition 6) could also be seen in general definitions of networks as part of innovation systems (Scuotto & Shukla, 2018). The concept of entrepreneurial characteristic on an institutional level, referring to the whole organisation, could be combined with the idea of an entrepreneurial orientation, which could be seen in established organisations as a more individual approach, focused on the individual actor as a single person or personality (Criado-Gomis *et al.*, 2018). According to some scholars, entrepreneurial orientation is an equivalent concept to intrapreneurship (Urbano *et al.*, 2011). An entrepreneurial orientation could be a success factor for firms to cope with changing environments and to establish successful transformation processes (Brettel & Rottenberger, 2013) and is often focused on "how the entrepreneurial intention is formed and how the action is put in place" (Scuotto *et al.*, 2020). In this context, it could be described using five different constructs (Wales, 2013; Wales *et al.*, 2019): innovativeness, proactiveness, risk taking, competitive aggressiveness, and autonomy. There is a strong link to the cultural organisational dimensions of Schein if we analyse the factors influencing entrepreneurial orientation, which include environmental and organisational factors such as cultural, regional and local factors, or organisational factors supporting

autonomy (Wales *et al.*, 2019). Tab. 3 shows examples of research approaches that define the extension and limitation of the two concepts of entrepreneurial organisation and entrepreneurial orientation.

Table 3 **Entrepreneurial Organisations and Entrepreneurial Orientation**

Entrepreneurial Organisation	Core object: organisation as an institution. Examples of subcategories: Requirements for EO (Stevenson & Jarillo-Mossi, 2007); EO and intrapreneurship (Criado-Gomis *et al.*, 2018).
Entrepreneurial Orientation	Core object: individual as actors. Examples of subcategories: Model of antecedent and dependent variables (Wales *et al.*, 2011); International aspect of EO and culture (Lee *et al.*, 2011); Family Business and EO (Cruz & Nordqvist, 2012); CEO EO (Zhang *et al.*, 2020); culture affecting EO (Ling *et al.*, 2020); EO affecting firm performance (Kim, 2018).

(*Source:* Own elaboration by the authors)

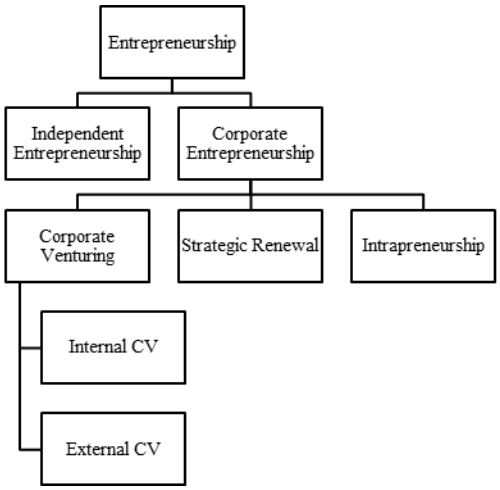
3 ENTREPRENEURIAL CULTURE

Papers about organisational culture in relation to the field of entrepreneurship and entrepreneurial elements are often focused on the different stages of organisational development by emphasising the challenges of the early days and the ideas of the founders (e. g., Sackmann, 2017) or by focusing on the roles of the actors with a specific role for the founders (e. g., Sackmann, 2017).

3.1 Entrepreneurial Culture as a Challenge for Organisations and Individuals

According to the different approaches of each subject, entrepreneurship, and organisational culture, it is not surprising that we can find a plurality of ideas combining both topics. These ideas need to be structured (Merlin-Brogniart, 2020) (Fig. 1).

Figure 1 **Segmentation of Entrepreneurship on Organisational Level**



(*Source:* Own elaboration by the authors)

The core idea of corporate entrepreneurship (Tab. 4) could be defined as "entrepreneurial actions within large organisations" (Kuratko *et al.*, 2015, p. 2).

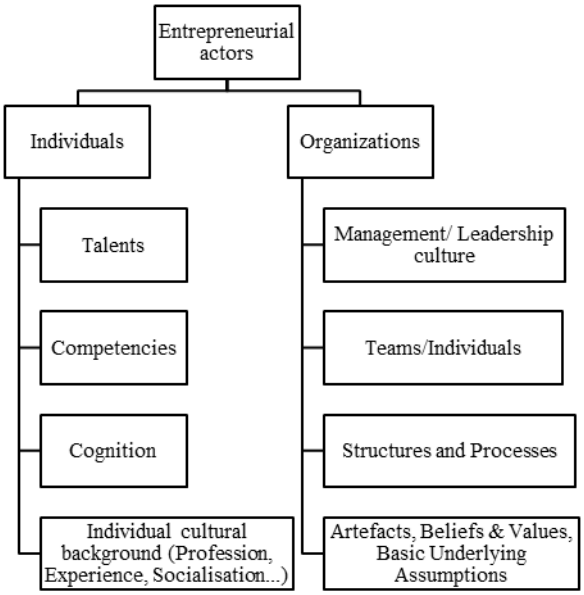
Table 4 **Aspects of Corporate Entrepreneurship**

Corporate Venturing	Typology (Reimsbach & Hauschild, 2012); Framework (Weiss & Kanbach, 2020); Segmentation in Corporate Venturing and Strategic Entrepreneurship (Kuratko & Audretsch, 2013)
Strategic Renewal	Strategic alliances (Montoro-Sánchez *et al.*, 2009); Strategic renewal, Domain redefinition, Organisational rejuvenation (Pirhadi & Feyzbakhsh, 2021); Market Orientation (Barrett & Weinstein, 1998); Comparative advantages (Dhliwayo, 2014; Dorobat & Topan, 2015); Life cycle of organisations (Al-Taie, & Cater-Steel, 2020) connected to specific financial needs (Abe *et al.*, 2012); Digital Strategies (Joshi *et al.*, 2019); Resource Based View and Institutional Economics (Urbano & Turró, 2013)
Intrapreneurship	Startup culture in corporations (Prexl, 2019), Corporate Entrepreneurship Training Programme (Kuratko & Goldsby, 2004); Company Democracy Model (Markopoulos *et al.*, 2021)

(*Source:* Own elaboration by the authors)

In each of the sections of entrepreneurialism, individual persons and organisations are the two main actors defining the entities that make up the organisational culture (Fig. 2). The interdependency of individuals and the organisation will be analysed in each dimension (Fig. 2) in the following paragraphs.

Figure 2 **Individuals and Organisations as Entrepreneurial Actors**



(*Source:* Own elaboration by the authors)

3.2 Entrepreneurial Culture and Individual Personal Disposition

Entrepreneurship does not depend on a genetic disposition, but is a discipline which can be learned and taught (Neck *et al.*, 2014). But similar to all other areas, where excellence is a goal, there is the fact that people with a talent in a certain field (e. g., sports or music) are faster in their progress if they are educated and trained in this field (e. g., Badal, 2014). This is one of the reasons universities and organisations are interested in identifying talents. The Gallup method of screening and coaching of entrepreneurial talents for example is based on the talent approach of the Clifton-Strengths finder (Buckingham & Clifton, 2004;

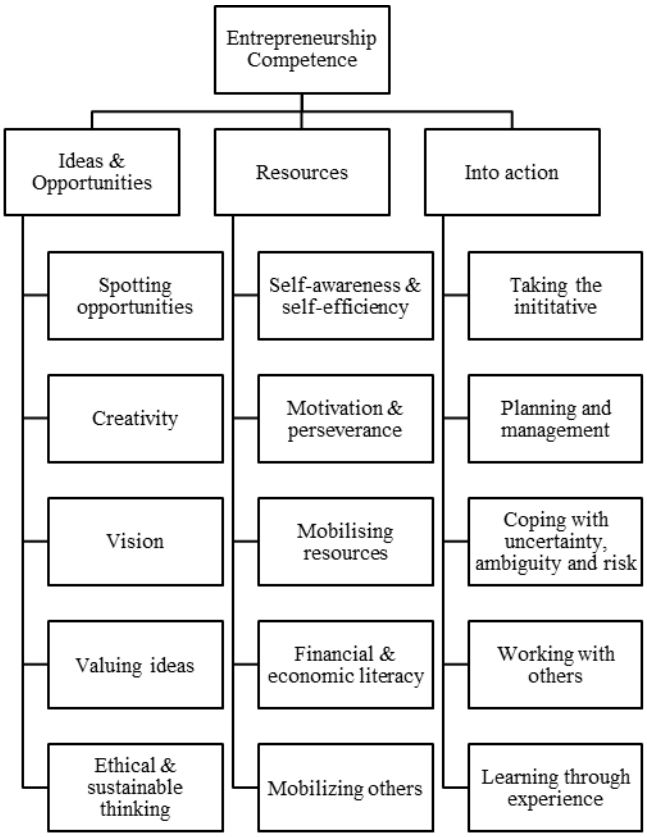
Rath & Clifton, 2007) and consists of ten different subcategories (Tab. 5), which is quite a midrange definition because the models of entrepreneurial competencies mostly offer a number of competencies that range between five and 25 (Arafeh, 2016).

Table 5 **Entrepreneurial Talents: 10 talents of successful entrepreneurs**

Business Focus	Decisions based on observed or anticipated profit
Confidence	People of initiative able to influence others
Creative Thinkers	Imaginative, exploring options, dreaming up new products
Delegator	Delegating responsibilities, recognising the abilities of others, collaboration
Determination	High work ethic, overcoming obstacles, decisive and quick to act
Independent	Sense of responsibility, high competence in managing a business
Knowledge-Seeker	Acquiring information, knowledge of competitive advantages
Promoter	Best spokesperson for the business, multiplicator and influencer
Relationship-Builder	High social competencies to build mutually beneficial relationships
Risk-Taker	Rational approach to decision-making, accepting high-risk situations

(Source: Badal, 2014)

Figure 3 **Areas and Competencies of the EntreComp Conceptual Model**



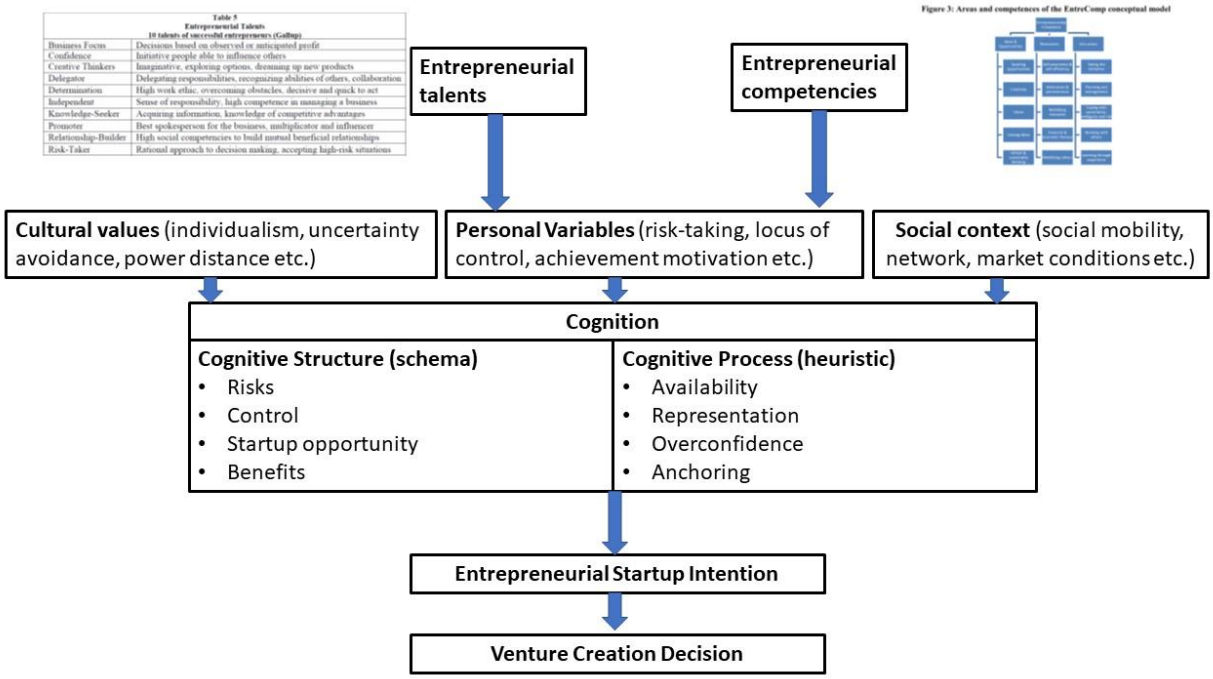
(Source: Bacigalupo *et al.*, 2016*)*

The likelihood of entrepreneurial success increases if a candidate has more of the talents on a dominant level, while each talent affects specific business outcomes. "For instance, those with dominant talent Business Focus are twice as likely to exceed their profit goals" (Badal, 2014: 52). Individual talents are

not only the basis for building social systems within established firms influencing organisational or corporate culture, but are valuable for realising personal entrepreneurial development such as the talent of relationship building, which is useful in the creation and development of an entrepreneur´s personal networks (Vissa & Bhagavatula, 2012). The individual talents are also embedded in a wider concept of the field. An example is the knowledge-seeker being part of entrepreneurial knowledge as "a multivariate of skills, ability and know-how which predominantly requires a collaborative approach to obtain a competitive advantage" (Usai *et al.*, 2018: 1639). In addition to entrepreneurial talents, the entrepreneurial competencies (Wrobel, 2018) ensure that the talent is not just a prediction with a high level of potential, but few effects in daily practice. The European Commission has promoted a research project defining the competencies of entrepreneurs (Fig. 3).

The challenge to select entrepreneurial talents in an organisation and to ensure that they have the necessary entrepreneurial competences includes the idea of handling different entrepreneurial intentions (Donaldson *et al.*, 2021). The next field of individual disposition of entrepreneurship and culture is the cognitive model of venture creation (Haynie *et al.*, 2010), which includes the talents and competences of Figures 2 and 3 (Fig. 4 including the ideas of Busenitz & Lau, 1996). Cognitive models are also useful to define categories of the mindset such as "opportunity recognising", "designing", "risk managing", "resilient", and "effectuation" (Duening, 2010).

Figure 4 **Entrepreneurial personalities**



(Source: Own elaboration by the authors*)*

This model also includes the individual cultural background, which is integrated into different cultural values. The effect of individuals and individual personalities on the entrepreneurial culture is also a question of entrepreneurial passion (Schulte-Holthaus, 2019), which is a trigger for the performance of an organisation.

The focus on defining and analysing personal characteristics and their relation to entrepreneurial success has led to various publications on different entrepreneurial mindsets (Shane & Venkataraman, 2000; Hayward *et al.*, 2005). The mindset description is often reduced to a limited number of parameters like the three Cs (Curiosity, Connection, Creating) (Bosman *et al.*, 2019). To be successful in different organisational or intrapreneurial contexts requires the necessary "emotional intelligence", which "may

also contribute to our understanding of the people who are able to successfully discover and exploit opportunities" (Rhee & White, 2007: 411). It depends on the entrepreneurial personality, where we should be aware that we have a description of the factors which are relevant for the idea of 'having a personality', including knowledge and qualification, competencies, identity, ethic/values, goals and determining the performance of an entrepreneurial leader (Faix *et al.*, 2020). The part 'being a personality' with the reputation, charisma, and authority of the field is also relevant for the success of using the full entrepreneurial potential, which could also be proved by personal and relationship competences in the entrepreneurial competence setting (Tittel & Terzidis, 2020). If we transfer the requirements and success factors of individual entrepreneurs to a corporate entrepreneurial culture it does not necessarily mean that each member of the staff should cover all talents, competencies and each cognitive positive disposition we could imagine. We could combine different types of personalities in teams and do not depend on finding a team of entrepreneurial super heroes. The challenge is to define cross-functional teams (Ferdousi, 2012) a process that includes the typical problems and stages of team building and development. "Leaders also need to resist linking together staff members in a team because of their similarities" (Bartz, 2018: 3). "Placing staff members with likenesses together (…) restricts the use of Functional Diversity (different competencies or work experience) and Cognitive Diversity (different ways of thinking or tackling problems" (Bartz, 2018: 3 referencing on Clifton & Badal, 2018: 84). But on the other hand, entrepreneurial personalities are helpful even in the context of non-entrepreneurial corporate environments due to their work values (Sinha & Srivastava, 2013) and their pure personalities, but to ensure that they keep their motivation and use their full potential, it is necessary to offer an entrepreneurial environment (D´Souza & Mulla, 2011).

3.3 Entrepreneurial Culture and Organisational Challenges

If we use the cultural layers in organisations as promoted by Schein (Schein, 2017; Schein & Schein, 2019) to describe entrepreneurial culture there is no surprise that on each of these levels there are significant cultural elements that fit into the needs of an entrepreneurial culture. But first we need to integrate the levels of organisational culture into the segmentation of the "bull´s eye" to get a precise description (Tab. 6).

An example how these entrepreneurial cultural aspects could influence daily business in firms can be seen in agile development processes and the lean startup principle according to the ideas of Eric Ries (Ries, 2011). Based on the idea of disruptive technologies and innovations (Christensen, 1997) and the need for radical changes in business models, there has been a movement towards the agile development principle, the integration of customer feedback, and a model of business model generation using a canvas (Osterwalder & Pigneur, 2010). The business model is dedicated to describing the attractiveness of opportunities (cf. the basic definition of entrepreneurship by Stevenson as shown above) or the viability of proposed new ventures (Morris & Schindehutte, 2003). In the context of corporate entrepreneurship, the orientation on business models can be regarded as a cultural element where the operational and strategic definition of business models (Morris *et al.*, 2005) offers the perspective to create secondary business models (Mehrotra & Verlamuri, 2021) in the sense of continuous improvement by organisational learning (Sosna *et al.*, 2010). The 'build', 'measure', 'learn' cycle of Eric Ries is an example of an entrepreneurial culture that changes attitudes towards innovation, risk, and the ongoing continuous improvement process.

Entrepreneurial cultures in organisations not only require the self-responsibility of employees but are based on a change of cultural attitude towards different degrees of novelty. Starting from error management culture, there is a learning culture (Gnizy *et al.*, 2014) which could be transferred to an experimental culture, as part of a corporate entrepreneurial culture. The existing cultural models of corporate entrepreneurship mainly focus on the differentiation on a macrolevel, like national culture, industry culture and corporate culture (Fayolle *et al.*, 2010).

Table 6 **Layers of corporate entrepreneurial cultures**

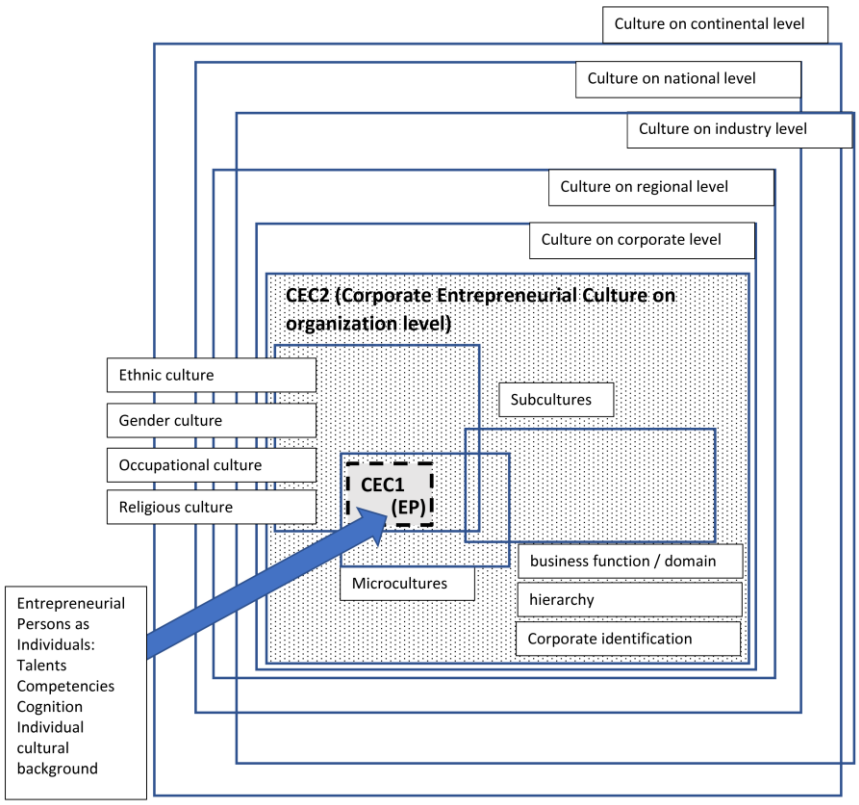
	Artefacts	**Espoused beliefs & values**	**Tacit (underlying) assumptions**
Macroculture	National funding programme to support Proof-of-Concept and other early stage financing.	e. g. Protestant Work Ethics (Max Weber), national culture and their relation to entrepreneurs.	Do you think new ventures (also in existing companies) are necessary for the growth of national wealth?
Technical Culture	Entrepreneurial mission and strategy. Decentralised structures, with entrepreneurial responsibilities. Measurement and correction system for further development of entrepreneurial system.	Value of entrepreneurial behaviour in different organisational contexts.	Self-responsibility and flexibility are more valuable than randomised and optimised reliable processes.
Social Culture	Common language (e. g. Startup culture, agile culture, MVPs etc.) Relationship system (code of collaboration).	Modernity, dynamic, flat hierarchies for more dynamics.	Group distinction for innovators, collaboration as core value of socio-technical systems.
Subculture	Separate socialisation in the corporate context (for example, the business function "business development".	New business is creating future.	Small and clearly defined units are more flexible.
Microculture	Subgroups with a discrete task (entrepreneurial units; cross-functional teams; Ferdousi, 2012).	e. g. we are dedicated to our new company, product, customers.	e. g. agile methods are state of the art and should be implemented.

(Source: Own elaboration by the authors*)*

If we integrate the different variations of corporate entrepreneurial culture (CEC) into an already modified version of the macroframework of organisational cultures (Sackmann, 2017; Fig. 5) we can see that different influences of the macrocultural-like national attitude towards entrepreneurial behaviour are affecting the CEC. To demonstrate the continuum of possible approaches, we integrated two different basic concepts of entrepreneurial culture in an organisation: Entrepreneurial culture on the corporate level in general (CEC1) or the entrepreneurial culture in a microculture, like the entrepreneurial spirit in a team responsible for new ventures (CEC2). Of course, there are many variations possible, like a specific entrepreneurial culture in a specific business unit, etc.

A CEC is part of a broad context in two dimensions as an element of the corporate culture and as a piece of the entrepreneurial architecture of a firm, which includes cultural dimension aspects such as structure, strategies, and leadership (Arshi & Burns, 2018). To achieve an entrepreneurial version of a corporate culture, the core idea is to first create an entrepreneurial culture, which affects different business functions in daily practice before it is transformed into a corporate version in the sense of a corporate entrepreneurial culture. The different business functions are important for the entrepreneurial culture.

Figure 5 **Context View on Corporate Entrepreneurial Culture as a Concept Framework**



(Source: Own elaboration by the authors*)*

4 METHOD

In order to test the framework developed in terms of its practicality, a qualitative study was conducted. Qualitative research is often used in the context of organisational and entrepreneurial studies, as it provides valuable insights by considering the opinion and experience of experts (Javadian *et al.*, 2020). Javadian *et al.* (2020) point out that qualitative research has many advantages in entrepreneurship research. It allows researchers to activate cognitive processes and, therefore, foster the development of ideas, which is especially useful in new research areas. Furthermore, qualitative data often capture details that are difficult to find in quantitative data.

The qualitative research is conducted following mainly the process proposed by Hill *et al.* (1997). We collected data by conducting ten semi-structured interviews of professionals with different academic backgrounds, like engineering, life sciences, or management, and a minimum affinity to corporate entrepreneurship, which has been secured by their participation in corporate talent programmes or open courses dedicated to corporate entrepreneurship. The experts have at least five years of professional experience, and the companies range from famous global software companies to automotive suppliers (Tab. 7). The recruitment of the experts for the interviews was done by contacting participants of three different corporate talent programmes and two professional training programs on corporate entrepreneurship. Participants were approached using an email invitation, which resulted in ten confirmed interview appointments.

The questions for the interviews were structured according to the main areas of the framework. In the introduction phase of the interview the aim and background of the research was introduced. Furthermore, we asked some questions about the job tasks, function and experience of the expert. We also asked the expert to briefly introduce the company (e.g., major products, company size) and describe how important entrepreneurship and innovations are in the company. The main part of the interview dealt with the different aspects of the framework. A first set of questions was related to characteristics of entrepreneurial personalities and the influence of cultural aspects on the development of these personal traits. Questions included for example: "Which cultural characteristics, such as previous professional stations, training/studies, colleagues, etc., do you think most strongly shape your own aspirations towards the tasks of entrepreneurship at your current workplace?" or "How do you evaluate your entrepreneurial talents, competencies, skills?"

Table 7 **Overview of study participants**

#	Industry // company size	Experience (years//Academic Background)
1	Adhesive solutions //4.800	6 // Engineering
2	Interim Management/Consulting//25	9 // Engineering
3	Life Sciences//1.400	26 // Life Sciences
4	Petroleum Industry//220	6 // Engineering
5	Global Software Company//180.000	5 // Computer Science
6	Automotive Supplier // 3.000	6 // Business/Management
7	Sensor Technology // 11.000	5 // Engineering
8	Coaster and Ride Manufacturer // 190	6 // Engineering
9	Automotive Supplier // 3.000	8 // Business/Management
10	Automotive Supplier // 3.000	10 // Business/Management

(Source: Own elaboration by the authors*)*

A second set of questions addressed the different layers of entrepreneurial culture within the organisation (i.e. department and the company in general). It also addressed the organisational conditions and opportunities. We asked for example: "How would you characterise the conditions for independent entrepreneurial decisions at your current workplace?" or "How would you describe your scope for entrepreneurial work in your current work environment?" Each interview was scheduled for one hour. All interviews were conducted via the online meeting platform Zoom. The interviews were recorded and later transcribed. After the interviews, the transcribed material was condensed, structured and analysed. To ensure validation, reliability, and generalisation of the research several appropriate concepts were used (Sousa, 2014). For example, we used investigator triangulation as a technique to promote the validity of our qualitative research or used the same structured protocol to ensure consistency (Sousa, 2014; Hill *et al.*, 2017).

5 RESULTS

The aim of the qualitative study was to get feedback and confirmation on the proposed framework. The framework of corporate entrepreneurship culture with its different levels and categories (Fig. 5) was in general confirmed by the interviews. The presentation of the results is structured into two main categories: the organisational level and the individual level. However, as described in the framework, those two categories are related to each other. The organisational level obviously influences the individual level. The results demonstrate for example that trust and freedom influence individuals' motivation and

create an atmosphere where individuals enjoy communicating ideas. On the other hand, with their behaviour and background, individuals influence the organisational level (e.g., company culture).

Organisational level: Cultural influence and organisational factors

The reflection of cultural influences on the attitude towards corporate entrepreneurship starts usually on the level of microcultures or subcultures and is then climbing up the hierarchy of levels to the industry level. Geographic categories with the levels of regional or national culture are less dominant. The aspect of geographical identity is confirmed in the interview with a Solution Assessment Specialist of a global Software Company: In his opinion the entrepreneurial culture is the result of "flat hierarchies which are outside of the German norm". But there is also an interesting result of the interview if it comes to the most important requirements: The transcription shows that there are two main aspects which seem to be most relevant for corporate activities, namely freedom and trust. Freedom of choice, for example, how to spend working hours and trust in the performance orientation of working activities of the empowered employees who are not forced to report in detail in short periods of time what they are working on. "I am allowed to work completely free without many restrictions. It´s nearly spooky." says a woman, working as a project engineer at hidden champions in the field of sensor technology. The consequence of this 'freedom' is the intrinsic motivation to behave in an entrepreneurial way. "I want to treat my employing company as if it is my own company" is the statement of a sales expert of an international automotive supplier. 'I am dealing with the money of my employer as if it is my own money." As additional information the answers show a similarity of priorities of cultural levels. However, besides these two aspects some of our experts mentioned that guidance and clear goal setting are also important. One expert said: "Currently, I have the feeling that the initiatives are a bit mixed up. In some departments there is an entrepreneurial orientation, in others not. Some are able to think independently, others not. There are no clear guidelines that are communicated by the management."

Individual level: Entrepreneurial personalities and competencies

The focus of the second category is individual competencies and entrepreneurial personalities. We identified these aspects as a major component of our framework (Fig. 5). Individual competencies and entrepreneurial personalities include aspects such as motivation, creativity, mobilising others, coping with uncertainty, teamwork and social competencies (Badal, 2014; Bacigalupo *et al.*, 2016). The results of the interviews clearly show the importance of these individual competencies for corporate entrepreneurial culture. A necessary prerequisite for individual entrepreneurial behaviour is, in the opinion of the experts, a suitable education. Besides some intrinsic motivation to create new ideas individuals need specific skills and knowledge about the fundamentals of entrepreneurship. It is important to create awareness of entrepreneurship in the early stages of the education process and to provide specific knowledge. An experts point out: "In my opinion, entrepreneurial knowledge and the awareness of entrepreneurial opportunities is provided way too late. Maybe you are a lucky and you get some courses on master´s level." The expert continues: "It would be great if universities would provide already at bachelor´s level an understanding of entrepreneurship. And most important, not only for business students."

Bacigalupo *et al.* (2016) identified self awareness and self-confidence as important entrepreneurial competencies. Individuals need to have some degree of self awareness and self-confidence to create ideas and to communicate those ideas. One expert said for example: "I'm not sure if I would call myself an entrepreneur. I still lack a bit of self-confidence." To support self awareness and self-confidence it is therefore fundamental to "…allow mistakes without directly punishing the employee and to give valuable feedback. It is necessary to have a culture which allows people to make mistakes." says one of our experts from an industrial company.

Ideas and innovations are often developed in teams. A major competency therefore is the ability to work in teams (Bacigalupo *et al.*, 2016). This is even more challenging and important when ideas are created in interdisciplinary teams. An expert from a consulting company said: "To develop new concepts, we always had to work together in interdisciplinary teams. We had to support each other and were able to achieve great success."

CONCLUSIONS, LIMITATIONS AND FUTURE RESEARCH

Corporate entrepreneurial cultures are a success factor for many industries and firms. Like all topics concerning the cultural design of an organisation, it is not easy to describe, analyse or manage CECs. There is no single monolithic corporate entrepreneurial culture. Still, there are a number of organisational cultures in an existing firm that include entrepreneurial cultures on different levels, influenced by macro-, micro-, and subcultures. Corporate entrepreneurial culture is a major aspect of research on corporate entrepreneurship. For example, Fis and Cetindamar (2019) described cultural values as a fundamental building block of entrepreneurial orientation and corporate entrepreneurship. In an extensive literature review, Pirhadi and Feyzbaksh (2021) identified and structured the main research directions in CE literature. The framework impressively shows the many different aspects related to this research area, including many factors addressed in this paper. At the same time, the overview visualises how difficult it is to structure the different constructs and to relate them to each other. The overview of the various approaches in our paper underscores this problem. In this context, Pirhadi and Feyzbaksh (2021:216) said: "Still, there is a need for further research to understand variables which lead to stronger entrepreneurial orientation, (EO antecedents)…". Considering the mentioned importance of corporate entrepreneurial culture, our framework provides an interesting new angle to look at the different constructs of corporate entrepreneurial culture and how these constructs are related to each other. The relationship between individual factors, organisational factors, and the different cultural dimensions are particularly important contributions to the existing research. In our research, we confirmed the important role of organisational factors for EO, which was identified in the study of Fis and Cetindamar (2019). For example, Fis and Cetindamar (2019) used the question: "A worker with a good idea is often given free time to develop that idea." to measure management support for entrepreneurial orientation. As described in the results section, several experts mentioned freedom and trust as important factors for entrepreneurial orientation. Furthermore, the results of the interviews confirm the importance of cultural aspects and their influence on different factors affecting entrepreneurial behaviour (Hayton *et al.*, 2002). Additionally, the experts confirmed the main aspects of entrepreneurial competencies identified in the study of Bacigalupo *et al.* (2016).

From a managerial point of view, the review of frameworks shows that there are different ways to implement a corporate entrepreneurial culture. For instance, one could implement a basic version of an entrepreneurial culture within the corporate culture of the whole company, which would lead to a general entrepreneurial behaviour and understanding. Another option is concentrating on a few parts of the firm, e. g. with a highly specialised version of entrepreneurial culture, which is focused on a few micro- or subcultures of a firm. A typical example is a concentration on new business ventures or business development such as entrepreneurial islands or lighthouses. The ability to analyse the cultural options on different levels and to focus the business function on supporting the common goal, e. g., by using HR to recruit only new staff with the necessary entrepreneurial talents, competencies, and cognitive structures, will make this cultural change accessible to managerial tasks. To establish a corporate entrepreneurial culture, one needs self-responsibility in the field of business performance, which requires the competencies of entrepreneurs, who can affect revenues and cost structure in their field of action.

Although the development and evaluation of the framework are done through an extensive literature review and an appropriate study, there are some limitations that can be addressed in future research. One

limitation is that in our study, just ten experts with a similar (national) cultural background participated. Although selecting the experts and their respective knowledge seems suitable, a larger number of experts could provide some further insights. Since culture is a major aspect of the framework, the second limitation regarding the cultural background of the study participants could be addressed by future research and the use of different samples with participants that have different (national) cultural backgrounds. In this context, a comparison could also be of interest. Furthermore, although the qualitative approach seems very suitable for our research, future research could investigate the topic by using a quantitative approach. An additional interesting venue for future research would be an empirical investigation on the different aspects of our frameworks and their impact on important business goals (i.e. how the different aspects influence organisations innovation strengths). Another limitation of the research is the focus on corporate entrepreneurial culture. Aspects such as entrepreneurial culture in non-profit organisations and entrepreneurial culture in small and medium-sized companies are not directly addressed.

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