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Uncovering the Characteristics of Corporate Entrepreneurs

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New Insights on Innovative Individuals: Uncovering the Characteristics of Corporate Entrepreneurs

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Abstract

Corporate entrepreneurs are one of the main drivers of innovation in organisations. Despite their importance, the research of these entrepreneurial-thinking employees – also often referred to as intrapreneurs – has been quite disparate and fragmented with no elaborate holistic concept defining their characteristics. This study rigorously examines the historical research done within this area on an individual level through a structured review approach. Eighty-seven articles were analysed, and 976 items were extracted from these. The results revealed 19 general characteristics: creative innovator, high achiever, proactive initiator, risk taker, organisational networker, self-confident, flexible open-minded, enthusiastically perseverant, opportunity recogniser, experimental problem solver, persuasive influencer, autonomous, team organiser, change agent, idea generator, business planner, visionary, customer-focused, and decision maker. The theoretical and practical implications of these findings are discussed, and future research is suggested.

Keywords: intrapreneurship, intrapreneurial characteristics, corporate entrepreneurship, entrepreneurial employees, innovation management, systematic literature review.

Introduction and Background

Innovation is found to be crucial for organisations to remain competitive in today's globalising world (Chesbrough, 2003) and continuous innovation has shown to be a not-so-secret ingredient for the most successful organisations (Kuratko, 2009). For innovation to happen, special attention may need to be put on the entrepreneurial-thinking employees who play a key role in the development of new ideas and opportunities, which ultimately increase organisational profitability and improve the competitive position. Research directed on the entrepreneurial-thinking employees is evolving, and several streams and focuses have emerged, e.g. intrapreneurship, corporate entrepreneurship, corporate innovation as well as corporate venturing. The main ones are the intrapreneurship and corporate entrepreneurship literature (Kuratko, 2017). These concepts both focus on the innovative behaviour among employees (Kanter, 1984; Pinchot, 1985a; Kuratko et al., 1990; Pinchot & Pellman, 1999). Intrapreneurship is generally associated with the independent initiatives of employees (a bottom-up and laissez-faire approach to innovation), whereas corporate entrepreneurship is associated with a top-down managerial approach to strategically stimulate this innovative behaviour to renew the organisation (Blanka, 2018).

The concepts of intrapreneurship and corporate entrepreneurship have mostly been studied at the organisational level (Lau et al., 2012; Blanka, 2018). Still, scholars have had a particular interest in the actors related to each concept. Within intrapreneurship studies, Pinchot (1985a) coined the term “intrapreneurs” to cover entrepreneurial-thinking people within incumbent firms that creates innovation. Filion (2002) suggests that an intrapreneur is “a person who plays an entrepreneurial role in an organisation” (Filion, 2002, p. 158). Both definitions underline that intrapreneurs are somewhat different from entrepreneurs as they work within an existing organisation. Even though intrapreneurs and entrepreneurs sound alike, research has found some important differences between the two (Hill, 1987; Geisler, 1993; Davies, 1999; Camelo-Ordaz et al., 2012). Some of the key distinctions seems to be that “[...] intrapreneurs are able to use the existing resources of the company, they operate within organizations and they work within organizations that already have their own policies and bureaucracy” (Blanka, 2018, p. 4), causing different opportunities, problems, and restrictions (Hayton & Kelley, 2006).

Several studies on intrapreneurs use the entrepreneurial behaviour terminology as a starting ground (e.g. Lau & Chan, 1994; Kuratko et al., 2004; Zampetakis et al., 2009; Wakkeet al., 2010; Lau et al., 2012) as intrapreneurship is somewhat implanted in the entrepreneurship discipline (Amo & Kolvereid, 2005; Molina & Callahan, 2009).

Within corporate entrepreneurship studies, the actors creating innovation within established companies are defined as “corporate entrepreneurs” (e.g. Kanter, 1984; Green et al., 1999; Hayton & Kelley, 2006). Lau *et al.* (2012) states that the corporate entrepreneur is “[...] characterised as an individual who creates innovation of any kind within an established firm” (Lau et al. 2012, p. 674). In fact, the term intrapreneur and corporate entrepreneur are used interchangeably by several authors (e.g. Pinchot 1985a; Hayton & Kelley, 2006; Ireland et al., 2009), implying some sort of consensus that at the individual level, the actors (intrapreneurs and corporate entrepreneurs) represent the same thing. Nevertheless, most studies at the individual level lack elaborate holistic definitions that entail the features or qualities belonging to these individuals, i.e. the characteristics. As a result, after more than 30 years of research about intrapreneurs and corporate entrepreneurs, it is still not clear what characterises this type of employees.

Some attempts have been made to uncover their characteristics, including studies of their behavioural characteristics (e.g. Lau et al. 2012), their personality traits (e.g. Garrett Jr. & Holland, 2015), their motivations (e.g. Carrier, 1996), their attitudes (e.g. Clargo & Tunstall, 2011), their spirit (e.g. Fayolle & Basso, 2010), their intentions (e.g. Tucker et al., 2017), their actions (e.g. Zampetakis et al., 2009), their qualities (e.g. McGinnis & Verney 1987),

their mindset (e.g. Rekha et al., 2015) as well as their competencies (e.g. Rathna & Vijaya, 2009). Yet, there is still no elaborate holistic concept defining the characteristics of intrapreneurs and corporate entrepreneurs on an individual level.

The aim of this study is to rigorously explore what characterises these actors on an individual level. The hope is that more elaborate holistic definitions of these characteristics would make it possible to study the phenomenon more in-depth. It is also the hope that it opens up for new, more systematic, perspectives on the assessment and development of intrapreneurial and corporate entrepreneurial potential. This can help managers to better identify the right people to nurture and support, which is central to increase the returns of innovation in organisations (Pinchot, 1987). A third aim is to find avenues for future research. The following sections of this study present the research design, results, conclusions as well as discussions on implications for researchers and practitioners.

For the remaining part of this study, ‘intrapreneur’ will be used as a general term encompassing both corporate entrepreneur, corporate innovator as well as intrapreneur.

1. Research Design

1.1 Structured Review

In recent years, Blanka (2018) systematically examined the intrapreneurship literature, including a focus on the individual level. She identified five different research streams: an individual-level perspective, an organisational-level lens, a context orientation, an outcome lens, and promoting factors, solely using the search term intrapreneur*. In order to make a more elaborate exploration of the research related to this matter, it may be relevant to use more search terms such as corporate entrepreneurs, corporate innovators and the like.

Consequently, the structured review was initially conducted using the EBSCO Business Source Premier database for academic articles containing the search terms ‘corporate entrepreneur’, ‘corporate entrepreneurs’, ‘corporate innovator’, ‘corporate innovators’, ‘intrapreneur’, ‘intrapreneurs’. These terms were used for search in titles, subjects, abstracts or keywords (Boolean phrase, English, limited to peer-reviewed work in academic journals). Quotation marks were used to exclude irrelevant mentions based on grammatical coincidence. This led to 123 unique citations. An additional search was conducted via the ProQuest search engine through the NOFT feature (anywhere except full text; English, limited to peer-review work in academic journals). This search generated 335 unique citations (initially 443 hits). Combining these resulted in a total of 374 unique citations after replicates were omitted (see figure 1).

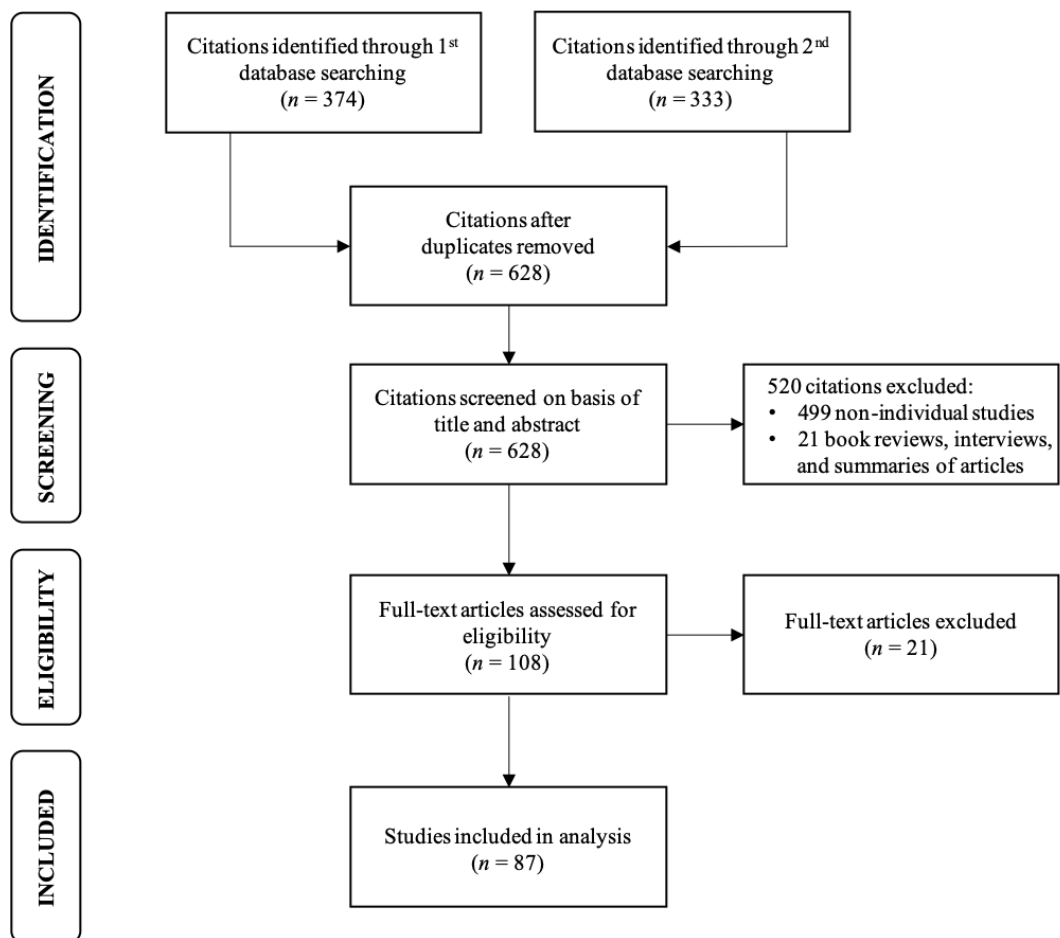


Figure 1: Data extraction path

Manual searches showed, however, that researchers frequently use different terminologies to describe intrapreneurs at the individual level, e.g. ‘individual-level perspective on intrapreneurship’ (e.g. Blanka, 2018), ‘intrapreneurship competence of employees’ (e.g. Boon et al., 2013) and ‘human-oriented corporate entrepreneurship’ (e.g. Elia et al., 2017). Therefore, a second round of searches were conducted including both “corporate entrepreneurship” OR “intrapreneurship” OR “corporate venturing” OR “corporate innovation” AND “employee-centered” OR “person-centered” OR individual OR “individual-level” OR “people-centric” or employee* OR “human-centered”. The EBSCO Business Source Premier database generated 178 hits and ProQuest search engine generated 258 hits. These search criteria yielded 254 extra citations after replicates were omitted. The total review set was 628 unique citations.

Titles and abstracts were examined to identify relevant articles. The selection criteria were that the paper should include a focus on the individual level. One hundred twenty-nine papers were selected. Furthermore, book reviews,

interviews, and summaries of articles were excluded. The total papers selected for the review set was 108.

The selected papers were reviewed for their conceptual, theoretical, empirical development and contributions. Twenty-one papers mentioned intrapreneurs but failed to define or elaborate the term further (for example their traits, behaviours or skills) and were therefore removed from the review set. The final review set selected for analysis included 87 papers.

1.2 Analysis

An analysis was conducted searching the review set for items that characterise intrapreneurs. The analysis identified 976 items, e.g. 'ability to adapt', 'act on their ideas', 'challenge the traditional paradigms'. These were categorised, grouped, and conceptualised in the following steps.

Firstly, items were categorised based on their importance into two groups: a primary and a secondary group. The 'primary' group was defined to include the items that had been used in a model framework, training program, questionnaire, interview guide or had been well-defined by the original author(s) ($n = 567$). The 'secondary' group was defined to include items that were mentioned but were not used in a model framework, training program, questionnaire, interview guide or had been ill-defined by the original author(s) ($n = 409$).

Secondly, items were grouped according to synonymity; for example, 'doer', 'action-oriented', and 'proactive' were grouped and so were 'independent' and 'autonomous'. Items that were identified to be inherently related was also grouped, for instance 'originality' and 'innovative' as well as 'idea generation' and 'creative'.

Thirdly, a data-driven thematisation was conducted which resulted in 34 draft characteristics associated with an intrapreneur; for instance, 'communicator', 'ambitious' and 'open-minded'. The thematisation was iteratively tested and further developed in collaboration with researchers and practitioners within entrepreneurship psychology, creativity, and intrapreneurship. Based on a synthesis of the identified theory as well as the discussions with experts, relevant draft thematisations were merged, such as 'ambitious' and 'achievement-oriented', 'challenge seeking' and 'problem-solving', 'communicator' and 'persuasive', 'flexible' and 'open-minded', 'business visualiser' and 'visionary'. In most cases, the item mentioned most frequently within a theme was chosen as the denominator for the title, e.g. 'opportunity recognition' (17 mentions) became 'Opportunity recogniser'. For some characteristics, this approach did not result in an appropriate title. For instance, in the characteristic 'Self-confident', the item of the same name

(‘self-confidence’) was cited 8 times whereas ‘self-efficacy’ and ‘locus of control’ was quoted 16 and 17 times respectively. Nonetheless, self-confident was found to be more applicable on the individual level as it is person bound. In situations where two items had almost the same number of citations, like ‘persuasion’ and ‘influencing’, these were consolidated into one – in this case ‘Persuasive influencer’.

Fourthly, 76 items were eventually excluded from the sample as they ended up not being included in any of the 19 intrapreneurial characteristics. Some of these items were only mentioned once in the literature and found to be too controversial by the experts (e.g. ‘cynical about the corporate system’, ‘system manipulator’), some were too general to fit a characteristic (e.g. ‘subjective’, ‘informal’, ‘social skills’, ‘intelligence’), while others were too experience-based (e.g. ‘expertise in at least one field’, ‘prior business failure’) or vague (e.g. ‘industry skills’, ‘educated’).

The thematisation resulted in 19 characteristics defining an intrapreneur. In the following pages, the different characteristics are portrayed in more detail. The link between the 900 items and the final 19 characteristics can be found in table 1.

Table 1: The classification of individual intrapreneurship characteristics.

Freq. of mention s	Characte- ristic	Items from the literature [the level of frequency of each item is shown in brackets]
89	Creative innovator	Creative performance (betterment, new innovation, original, novel, pragmatic/appropriate solutions) [30]; innovative (keen to innovate, novelty, break patterns, newness, uniqueness) [17]; non-conformist (out of the box thinking, do things differently, untraditional) [8]; non-routine, enjoys working with (likes variety) [5]; innovativeness (to rejuvenate market offerings) [5]; innovative (behaviour) [5]; value generator (new combinations or arrangements of existing resources within the organization) [4]; betterment (wanting to find better ways of doing things) [3]; creative imitation (e.g. can adapt an idea to a new setting) [2]; creative urge [2]; innovative (creative) [2]; analogic reasoning (combining knowledge in new ways) [1]; synthetic thinkers [1]; lateral thinking [1]; innovator (original) [1]; innovative (ability) [1]; innovative (capital) [1]
88	High achiever	Achievement, desire for/need for [23]; ambitious [9]; high internal motivation [7]; result-oriented [6]; passion, high level of [6]; competitive [6]; entrepreneurial (attitudes, beliefs, intentions, values) [5]; hard working [5]; goal-oriented [4]; drive, personal [4]; high growth expectations [3]; determined/addicted to winning [3]; innovative (drive and spirit) [3]; desire to succeed [2]; aggressiveness [1]; recognition, responds to [1]
78	Proactive initiator	Proactive (forward-looking, open to new ideas and to support them, take actions/initiative) [29]; initiative (lead in introducing and implementing innovations, leads the implementation) [15]; doer (dreamers who do, turns ideas into reality, exploits) [14]; action-oriented (gets hands dirty) [8]; acts (in

		crisis, on ideas, without limiting to resources) [8]; opportunism [2]; self-selection (advantageousness, initiative) [2]
76	Risk taker	Risk taker (as a promotor of innovative action, to accomplish task-related problems) [47]; calculated risk taker (assume calculated risks from experimentation) [10]; moderate risk taker (some degree of risk taking) [6]; financial risk averse (reputational and career risk instead of their own financial risks, not financial as entrepreneurs) [5]; courageous [3]; risk tolerant [3]; bold [1]; fearless [1]
61	Organisational networker	Networking (brokerage/gatekeeper to outside knowledge, internally and externally) [10]; coalition builder (get support) [6]; networker (knows how to co-ordinate and make connections, use formal networks to gain assistance, use of network and resource arrangement) [6]; resource allocation (acquire resources whenever needed, pulling together/securing resources) [5]; overcome organisational barriers (and resistance) [4]; negotiate, ability to (with management) [3]; relationship builder (to circumnavigate bureaucracy roadblocks, to resource allocators) [3]; non-system-bound (to accomplish his or her vision) [2]; network (personal) [2]; sponsor, finds (mentor/protector) [2]; network builder (mobilize social capital internally, builds networks to circumnavigate bureaucracy) [2]; organisational knowledge (internal and external environment) [2]; corporate politics skills [2]; boundary crossers [1]; brokering [1]; external relationship [1]; integrates (across organisational barriers) [1]; stakeholder communication [1]; help and guidance from certain seniors, seek [1]; interaction builder [1]; interpersonal relations, effective [1]; organisational skills (internal and external environment) [1]; organisational navigator (navigates corporate politics to bring an innovation to the forefront) [1]; knowledge about (organisational) environment [1]; innovative (communicate to upper management) [1]
58	Self-confident	Locus of control [17]; self-efficacy (creative, entrepreneurial, intrapreneurial) [16]; self-confidence [8]; self-motivated [6]; self-esteem, high [5]; confidence [2]; assertive [2]; self-awareness [1]; self-reliant [1]
57	Flexible open-minded	Flexible (against change, can pivot strategically, reactivity) [23]; open-minded (to new ideas, to learning, experience, improvement, to try new activities, to participate in community activities) [22]; ambiguity tolerance, high [7]; adaptable [2]; mental versatility/flexible [1]; complexity comfort (in a dynamic work environment) [1]; learning-rich work, available for [1]
48	Enthusiastically perseverant	Persistent [12]; optimistic [7]; perseverance (in spite of obstacles) [5]; enthusiastic (about the product and business, new skills) [5]; tenacity [5]; determination [4]; resilient (deal with setbacks and rejection) [3]; energy [3]; energetic [2]; positive [2]
42	Opportunity recogniser	Opportunity recognition [17]; opportunity seeking [8]; opportunity spotting (focus on customers and the corporation) [6]; opportunity identification/discovery [5]; business opportunities, identifies [2]; curious [2]; idea search (spotting) [1]; opportunity creation [1]
41	Experimental problem solver	Problem solver (finds a way, resolve dilemmas, is motivated/driven by problems) [13]; challenge seeking, eager for challenges (change status quo, the system, traditional paradigms) [7]; experimentation and discovery (feedback of results) [5]; information seeking/searching (questioning, observing, experimenting and networking) [5]; learning from failure/mistakes [3]; systematically learning (experimentation, experiences) [2]; questioning

		(status quo) [2]; innovative (experimentation) [1]; inquiring [1]; cognitive ability [1]; overcome challenges, enjoys [1]
37	Persuasive influencer	Persuasion (of ideas, sponsor) [10]; influencing, positive (rally individuals round their idea/innovation and obtain commitment) [7]; communication, good (of idea, verbal skills) [5]; cast enactment (influence and inspire people to accomplish their vision of the future, agree to a private vision) [3]; salesmanship [3]; acceptance (get other to agree to a private vision, of a new idea) [2]; convincing [2]; inspiring [2]; presentation skills [2]; integrates (vision) [1]
35	Autonomous	Autonomous (want flexibility and freedom to pursue novel and interesting ideas, go beyond norms) [29]; self-employment, desire for/sense of [4]; independent [2]
34	Team organiser	Responsible [6]; team development (building/mobilize/recruit capacities and lead these) [5]; team worker/-player [5]; extraversion [5]; team-oriented [3]; conscientiousness [3]; cooperative/collaborative [3]; interpersonal skills (to work effectively with others) [2]; integrity (trustworthiness) [1]; reliable [1]
34	Change agent	Agent of change (push for change, want to change the environment, push for a button-up process) [16]; idea implementation (promotor of, initiator, from idea to profitable reality) [7]; encourage others (to do innovation and entrepreneurship, in teamwork) [3]; support others (to act entrepreneurial) [2]; idea champion (advocacy) [1]; championing [1]; innovative (champions) [1]; innovative (change) [1]; opportunity promotor [1]; advocacy [1]
30	Idea generator	Idea generation (generates and present novel/new/original/powerful and useful/valuable/company specific ideas) [27]; idea identification (be innovative) [1]; idea development [1]; divergent thinking [1]
29	Business planner	Opportunity exploitation/seizing [10]; business planner [8]; planning organisational activities (elaborate planners) [3]; opportunity evaluation/assessment [3]; develop and enact detailed processes and strategic plans [1]; business creation training in [1]; business aspects understanding of [1]; business skills [1]; business evaluation [1]
27	Visionary	Visionary (who dream of taking the company in new directions) [17]; imagination (to explore all possible problems, to juggle potential plans) [7]; visualization (conceptualize beyond status quo, scenario enactment, and forward-looking) [3]
14	Customer-focused	Market research, do their own market research (scan the environment and is evidence-based) [4]; customer-driven/centric [3]; customer empathy/knowledge/understanding [3]; observation skills (customers) [2]; market understanding (can predict the market) [2]
13	Decision-maker	Decision-making, desire to participate in (intuitive when data or time don't permit analytical solutions, objective otherwise, takes sophisticated decision based on evidence) [11]; intuitive (pattern matching) [2]

2. Results

The analysis revealed 19 characteristics of intrapreneurs as shown in figure 2. The 19 characteristics are elaborately defined in the following.



Figure 2: The 19 intrapreneurial characteristics.

Creative innovator: Intrapreneurs are creative and innovative people (Davis, 1999; Lizote et al., 2014) They are innovative in the sense that they are out of the box (lateral) thinkers (Moriano et al., 2014) that do things differently (Boon et al., 2013) or even untraditionally (Rodriguez-Pomeda et al., 2003). As a result, they come up with original and novel ideas that are appropriate to the employing organisation (Molina & Callahan, 2009). Another way they generate value to the organisation is through rejuvenation of market offerings (Jain & Ali, 2012), e.g. though new combinations or arrangements of existing resources (Lizote et al., 2014). Intrapreneurs are creative in the sense that are able to combine knowledge in new ways through anagoric reasoning (Hayton & Kelley, 2006) and can adapt an idea to new settings (Duncan et al., 1988), but also combine ideas into a complex whole as synthetic thinkers (Molina & Callahan 2009). They have a creative urge to find better ways of doing things and some enjoys variety (Davis, 1999) and non-routine work (Bager et al., 2010).

High achiever: Intrapreneurs have a big desire for achievement (McGinnis & Verney 1987; Kuratko et al., 2004; Amo & Kolvereid, 2005; Jain & Ali, 2012). They are ambitious about their entrepreneurial endeavour with high growth expectations: even higher than entrepreneurs (Matthews et al., 2009; Blanka, 2018). They are intrinsically motivated (e.g. Hayton & Kelley, 2006) and have a high internal motivation for results and reaching their goals of turning a new idea into a profitable reality and not just doing what the shareholders would appreciate (Duncan et al., 1988; Rathna & Vijaya, 2009). They are passionate and hardworking individuals determined to win (Vandermerwe & Birley, 1997; Koen, 2000; Seshadri & Tripathy, 2006; Elia et al., 2017). They can be competitive (Kierulff, 1979) and sometimes come off as aggressive to succeed (Holt et al., 2007; Smitha et al., 2016) and some will respond to organisational recognition (Oliver et al., 1991).

Proactive initiator: Intrapreneurs are “dreamers who do” (Pinchot, 1987). ‘Doing’ is in the very core of intrapreneurs (Pinchot, 1985b; Byrne et al., 2016); they do not only come up with ideas, they proactively take the initiative to lead in introducing and implementing innovations (Seshadri & Tripathy 2006; Heinonen & Toivonen, 2008; Wakkee et al., 2010; Rigtering & Weitzel, 2013). Intrapreneurs are not always the inventor, but they are the main implementor of new ideas (Camelo-Ordaz et al., 2012). They are not afraid to get their hands dirty (e.g. Kolchin & Hyclak, 1987) and are self-selecting when an advantage appears (Abetti, 2004; Delin & Dyer, 1983). They do not wait for someone to put them in charge, they act in an opportunistic way on ideas without limiting to resources currently available (Fayolle & Basso, 2010).

Risk taker: Intrapreneurs are risk tolerant (Hayton & Kelley 2006; Matthews et al., 2009). On one hand, they are courageous (e.g. Pinchot, 1987) and not afraid of taking risks to change the status quo (Rigtering & Weitzel, 2013), pursue innovations or accomplish task-related problems (Osman et al., 2017), even if it can result in alienation from upper management (Pinchot, 1985b). They do not fear the risk of failure (Smitha et al., 2016); they are opportunistic and willing to act boldly to capture opportunities even if there is no assurance of success (Chen et al., 2015). However, on the other hand, they seek to reduce risks from diversification and experimentation (Lau et al., 2012; Elia et al., 2017; Vandermerwe & Birley, 1997). They accept calculated risks (Kuratko & Goldsby, 2004; Rodriguez-Pomeda et al., 2003; Cox & Jennings, 1995) as a result of their rapid learning abilities and from undergoing frequent iterations of learning through trial and error (Vargas-Halabí et al., 2017). When it comes to financial uncertainties, they are more risk averse than their entrepreneurial counterparts (e.g. Matthews et al. 2009; Boon et al., 2013). They boldly take repetitional and career risk instead of their own financial risks (Martiarena, 2013; Nikolov & Urban, 2013).

Organisational networker: Intrapreneurs are networkers, in particular inside their organisation (Menzel et al., 2007; Moriano et al., 2014; Fayolle & Basso, 2010; Hayton & Kelley, 2006). They have effective interpersonal and brokerage skills (Hayton & Kelley, 2006; Blanka, 2018; Rathna & Vijaya, 2009; Byrne et al., 2016) and knows how to coordinate and make connections – both internally and externally – to get support and build coalitions (Abetti, 2004; Belousova & Gailly, 2013; Lau et al., 2012; Matthews et al., 2009). Their organisational wisdom and brokerage skills help them in making effective relationships and to navigate corporate politics, overcome bureaucracy roadblocks as well as other organisational barriers in a diplomatic way (Ross, 1987; Hornsby et al., 1993; Rigtering & Weitzel, 2013). They use their interpersonal skills to build trusting relationships to corporate sponsors to gain support and protection to increase their chances for success (Abetti, 2004; Oliver et al., 1991; Cox & Jennings, 1995). As such, they mobilise and secure internal resources when needed (Chen et al., 2015; Jones, 2005; Miller & Bauer, 2017; Smitha et al., 2016) and are not afraid to cross organisational boundaries and use innovative ways of communication to achieve their vision (Pinchot, 1985b; Amo, 2006; Lau et al., 2012).

Self-confident: Intrapreneurs have creative, intrapreneurial and entrepreneurial self-efficacy (Schenkel et al., 2009; Douglas & Fitzsimmons, 2013; Nicholson et al., 2016; Nikolov & Urban 2013; Thornberry, 2003; Urbano et al, 2013). They believe in their own capabilities to successfully launch a new product, service, solution or business model (Tucker et al., 2017). They have the confidence to engage in creative activities which also impacts their embodied opportunity exploitation behaviour (Heinonen & Toivonen, 2008; Schenkel et al., 2009). Intrapreneurs believe that they have control over the outcome of events in their lives, i.e. inner locus of control (Smitha et al., 2016; Bahrami et al., 2016; Camelo-Ordaz et al., 2012; Elia et al., 2017; Herron, 1992; Hornsby et al., 1993; Jain & Ali, 2012). Furthermore, they have a high self-esteem (Tucker et al., 2017; Nikolov & Urban, 2013; Pinchot, 1987; Shetty, 2004) and yet they still have a high level of assertiveness (Davis, 1999; Woo, 2018). Even though intrapreneurs believe that they can organise and perform the needed actions to manage prospective situations, the level of self-efficacy might be higher for their entrepreneurial counterparts (Garrett Jr. & Holland, 2015).

Flexible open-minded: Intrapreneurs have a flexible, open mind (Herron, 1992; Matthews et al., 2009; Fayolle & Basso, 2010). They can quickly change course of action when results are not being achieved (Zampetakis et al., 2009). They are listening and learning from what they hear and can pivot strategically (Vandermerwe & Birley, 1997; Miller & Bauer, 2017). They are mentally versatile (Boon et al., 2013); they tolerate the simultaneous presence of diverging approaches, expectations and needs (ambiguity tolerance) and thrive

in dynamic work environments that are complex (Elia & Margherita 2018). They are highly adaptable and deficient to schemas and rigid procedures (Vargas-Halabí et al., 2017). Intrapreneurs are open to new ideas, new experiences, new directions and to try or participate in new (community) activities (Hayton & Kelley 2006; Rathna & Vijaya 2009). They enjoy learning a new skill and are thriving for continuous learning for improvement (Boon et al., 2013). They seek new knowledge from diverse sources through open discussions and does not play their cards closely (Kierulff, 1979). Furthermore, they are available for learning-rich work (Carrier, 1996).

Enthusiastically perseverant: Intrapreneurs are enthusiastic and tenacious by nature (Davis, 1999; Maxon, 1986; Herron, 1992). They show great enthusiasm about the idea and the employing organisation (Kierulff, 1979). They have a high energy level (Kuratko et al., 2004; Shatzer & Schwartz, 1991; Vandermerwe & Birley, 1997), are positive (Rekha et al., 2015; Rutherford & Holt, 2007) and will positively affect others (Elia & Margherita, 2018). Intrapreneurs are not afraid of being the last man standing and do not give up at the first sign of difficulty (Seshadri & Tripathy, 2006; Smitha et al., 2016). They have a strong determination (Jain & Ali, 2012; Miller & Bauer, 2017), are willing to do whatever it takes to succeed (Pinchot, 1985b) and are resilient when dealing with obstacles and rejections (Vandermerwe & Birley, 1997; Davis, 1999).

Opportunity recogniser: Intrapreneurs are opportunity spotters (Belousova & Gailly 2013; Blanka, 2018; Clargo & Tunstall, 2011; Garrett & Holland, 2015; Molina & Callahan, 2009; Urbano et al., 2013). They are able to identify business opportunities with a focus on customers and the corporation (Abetti, 2004). They are able to see patterns in technological, demographic, and market trends and connect the dots into suggestions for new products, services or business models (Bjornali & Støren, 2012; Hayton & Kelley, 2006). They are curious by heart and consistently look for new opportunities to arise (Ahmed et al., 2013; Farrukh et al., 2016). When they discover a market opportunity worth pursuing, they will promote it as they can interpret these at ease (Vargas-Halabí et al., 2017; Vandermerwe & Birley, 1997).

Experimental problem solver: Intrapreneurs are problem solvers (O'Neill, 2014). They are driven by problems, overcoming challenges and resolving dilemmas (Rathna & Vijaya, 2009; Luchsinger & Bagby, 1987; Kuratko et al., 2004). They solve problems by experimentation and discovery, learning in a systematic way from experiences (Corbett & Hmieleski, 2007; Davis, 1999). They acknowledge that learning through failure (trail-and-error) is valuable (Elia et al., 2017). Intrapreneurs employ a hypothesis-testing mindset, are curious and focus their attention on information to get a good understanding of what they want to learn from experiments (Vandermerwe & Birley, 1997).

Furthermore, they are inquiring, questioning and observing in their search for solving problems (Elia et al., 2017).

Persuasive influencer: Intrapreneurs are persuasive (Herron, 1992; Koen, 2000; Kenney & Mujtaba, 2007; Miller & Bauer, 2017). They can influence and inspire others to agree on a new idea or private vision for the future very convincingly (Kolchin & Hyclak, 1987; Rodriguez-Pomeda et al., 2003; Amo, 2006). They are cast enactors (Boon et al., 2013) that, in a positive way, are able to gather individuals around their ideas and gain commitment (Byrne et al., 2016; Elia & Margherita, 2018); not only from fellow co-workers, but also from certain corporate sponsors (e.g. Abetti, 2004). They master the art of salesmanship (investigating and satisfying customer needs) with great verbal, communication and presentation skills (Wood, 1988; Rathna & Vijaya, 2009).

Autonomous: Intrapreneurs have a desire for autonomy (Pinchot, 1985b; Allali, 2010; Bahrami et al., 2016). They enjoy organisational elasticity to pursue novel and interesting ideas (Nikolov & Urban, 2013). They seek freedom to create and are willing to go beyond norms autonomously to get empowerment (Bendickson & Liguori, 2014). They are independent individuals with a sense of self-employment within the organisation (Lau & Chan, 1994; Carrier, 1996).

Team organiser: Intrapreneurs are team-oriented (Smitha et al., 2016; Jones, 2005; Kuratko et al., 2004). They enjoy being around people and know intrapreneurship is a team sport. They are collaborative by nature (Rodriguez-Pomeda et al., 2003), are seen as team players (Zampetakis et al., 2009) and have great interpersonal skills to work effectively with others (McGinnis & Verney, 1987). Intrapreneurs are also team developers; they are self-appointed leaders with the abilities to build effective teams of volunteers and recruit capacities (Pinchot, 1985b; Jones, 2005). They manage to do this as they are responsible, conscientious, reliable with high integrity and trustworthiness, even though they do not have the experience per se (Vandermerwe & Birley, 1997; Miller & Bauer, 2017; Woo, 2018).

Change agent: Intrapreneurs are agents of change (Lau & Chan, 1994; Carrier, 1996; Kuratko & & Goldsby, 2004; Lizote et al., 2014). They are individuals who support and enables novel ideas or technologies as they have a thriving desire to change their environment for the better (Amo, 2006; Herron ,1992) and they push for this change sometimes through a button-up process (Vargas-Halabí et al., 2017). Because of their strong belief in change and advocacy for new technologies, procedures and business models, they can sometimes be seen as the idea champion that implements an idea to a profitable reality for the organisation, even though the original idea might have come from elsewhere (Rigtering & Weitzel, 2013). They encourage others to innovate and supports them to act intrapreneurial (Ross, 1987).

Idea generator: Intrapreneurs are idea generators (Rigtering & Weitzel, 2013; Osman et al., 2017; Agor, 1988). They have the ability to generate novel, new, and original ideas (Elia et al., 2017; Elia & Margherita, 2018; Lukes & Stephan, 2017; Molina & Callahan, 2009; Mustafa et al., 2016; Rekha et al., 2015; Allali, 2010; Bager et al., 2010; Blanka, 2018) that often reflect a broad shift in perspective (Chen et al., 2015; Zhu et al., 2014). They are good at making connections through an open - and not dominant - creative mindset (Brenton & Levin, 2012; Woo, 2018). Intrapreneurs are natural ideators and get ideas for products for their companies (Chen et al., 2015; Pinchot, 1985b). They are not afraid of proposing innovative ideas or solutions (Elia & Margherita, 2018) but they also have a pragmatic imagination to develop workable, company specific ideas that are both powerful and valuable (McGinnis & Verney, 1987; Brenton & Levin, 2012).

Business planner: Intrapreneurs are elaborate business planners (Matthews et al., 2009; Wood, 1988; Hornsby et al., 1993; Delin & Dyer, 1983; Kuratko & Goldsby, 2004; Thornberry, 2003). They have strong business acumen (Herron, 1992) and understands the business aspects of the project (or new venture within the company) they are involved in (Koen, 2000). When compared to their entrepreneurial counterparts, they might be even better to foster and enact comprehensive processes and complex strategic plans (Corbett & Hmieleski, 2007). Intrapreneurs have an analytical eye to decide what steps are needed for success and can differentiate between good ideas and good opportunities (Byrne et al., 2016). They are able to, objectively, evaluate and assess (business) opportunities through analytical skills, which they base on evidence from the market (Belousova & Gailly, 2013; Shatzer & Schwartz, 1991).

Visionary: Intrapreneurs are visionaries (Carrier, 1996; Davis, 1999; Duncan et al., 1988; Matthews et al., 2009; Menzel et al., 2007; Rathna & Vijaya, 2009; Delin & Dyer, 1983). They wish to take the company in new directions and have a forward-looking approach (Kuratko & Goldsby, 2004). They have the ability to envision and conceptualise beyond the existing conditions using their imagination (Ahmed et al., 2013; Miller & Bauer, 2017). Intrapreneur have explored all thinkable problems in their mind and can manage potential plans as they visualise future business scenarios (Pinchot, 1987). They foresee the future and how to fulfil their vision of turning a prototype into a success in the market (Pinchot, 1987; Boon et al., 2013).

Customer-focused: Intrapreneurs are customer-centric (Koen, 2000; Kolchin & Hyclak, 1987). They have a clear passion for putting the customers first (Brenton & Levin, 2012). They authentically understand and can translate customer issues as well as see patterns in the market and in general (Vandermerwe & Birley, 1997). They have a high level of customer empathy

and can walk in the shoes of the customers (Brenton & Levin, 2012). Through observation of customer behaviour and market trends, they hold great knowledge about customers, their needs and can predict the market (Elia & Margherita, 2018; Menzel et al., 2007). Intrapreneurs carefully do their own market research and because of their personal investment, they do a very comprehensive and systematic job compared to traditional marketing people (Pinchot, 1985b; 1987).

Decision maker: Intrapreneurs are decision-makers (Cox & Jennings, 1995; Garrett Jr. & Holland, 2015; Schenkel et al., 2009). They wish to participate in making decisions and seek power to be part of the process (Nikolov & Urban, 2013; Clargo & Tunstall, 2011). Intrapreneurs are better than most in collecting information and engage in more complex, evidence-based decision-making (Garrett Jr. & Holland, 2015). If a project turns unsuccessful, they manage to be objective even if it means closing it down (Shatzer & Schwartz, 1991). However, when data or time do not permit analytical resolutions, they make decisions based on intuition and pattern matching skills (Agor, 1988; Pinchot, 1987).

3. Conclusion and Discussion

This study used a structured review approach focused on the individual level of studies on intrapreneurs. The results identified 19 characteristics of intrapreneurs: creative innovator, high achiever, proactive initiator, risk taker, organisational networker, self-confident, flexible open-minded, enthusiastically perseverant, opportunity recogniser, experimental problem solver, persuasive influencer, autonomous, team organiser, change agent, idea generator, business planner, visionary, customer-focused, and decision maker.

In the initial work of Pinchot (1985a) the intrapreneur was depicted as a person with the qualities of being a visionary and action-oriented corporate hybrid with a high level of dedication and self-confidence as well as an appetite for risk. Quite surprisingly, the results in this study show that much of the subsequent research has supported the original work of Pinchot (1985a). Still, the 19 characteristics (and their description) might provide a more varied picture that can open up for new ways to assess intrapreneurial potential scientifically.

Vargas-Halabí et al. (2017) proposed a model of intrapreneurial competencies consisting of five sub-dimensions of employee attributes, i.e., opportunity promoter, proactivity, flexibility, drive, and risk taking. The 19 characteristics from this study confirms that these attributes are along the most mentioned characteristics of intrapreneurs as they are found to be somewhat inherent in the intrapreneurial characteristics. Yet, this study points to additional factors being substantial when looking at the individual level of intrapreneurship.

Similar to this study, Hero et al. (2017) did a review to uncover individual innovation competencies. The scholars identified 17 sub-categories: flexibility, motivation and engagement, achievement orientation, self-esteem, self-management, future thinking, alertness to new opportunities, creativity skills, cognitive skills, collaboration skills, networking skills, communication skills, process management skills, management skills, content knowledge, making skills and technical skills. Only 28 papers were reviewed in Hero et al. (2017) compared to 87 in this study. Furthermore, the Hero et al. (2017) paper only used search terms related to innovation such as innovation competenc*, innovativeness, and innovation capability/ies, while this study used terms from both disciplines like corporate entrepreneur/s and corporate innovator/s. Still, the 17 categories identified in Hero et al. (2017) are quite related to the 19 characteristics found in this study; for instance, achievement orientation and high achiever, self-esteem and self-confident as well as future thinking and visionary. Maybe the characteristics of an innovator and an intrapreneur have key similarities. As a result, the studies of innovators could prove useful to understand intrapreneurs better. Further research could look into this matter.

Furthermore, it is interesting to see that creativity seems to play a substantial role at the individual level. At least there are overlaps between the 19 characteristics and several creative qualities; for instance, creative innovator (originality), self-confidence (creative self-efficacy), flexible open-minded (flexibility), idea generation (ideation), and visionary (visualisation of future scenarios). The role of creativity in innovation, corporate entrepreneurship and intrapreneurship literature is often focused on the ideation phase. However, the results from this study suggests that creativity may be a critical ingredient across a wide range of innovative and entrepreneurial activities.

This study advocate for a comprehensible understanding of individual intrapreneurial characteristics on its own. It is one of the first studies to rigorously and structurally examine the historical research done within this area on an individual level. Previous studies have looked into diverse aspects about the corporate entrepreneur or intrapreneur, but they have been disparate and fragmented, mainly due to varying definitions. Furthermore, prior research has mostly been based on the organisational level (Blanka, 2018).

The 19 identified characteristics presented in this study are treated as somewhat equally important. Yet, table 1 shows a clear difference in the frequency of citations in the literature; some items are mentioned significantly more than others. This might be an indicator of what the most important qualities of an intrapreneur are and opens up interesting follow-up questions like: is it necessary for an intrapreneur to possess all 19 characteristics and are

some more vital than others? It would be interesting to investigate this even further; either by interviewing intrapreneurs and their managers and have them rank the 19 characteristics in terms of relevance or merely by engaging in rather open discussions to determine what qualities (out of the 19) they mention the most. Davies (1999) already did something similar in her study of decision criteria in the evaluation of potential intrapreneurs, but with the newly gained knowledge and advanced understanding, new insights might be revealed.

Due to the more elaborate definitions of intrapreneurs characteristics, managers and researchers might be better prepared to identify employees with intrapreneurial potential. This is important, as a key variable to increase the returns of innovation in organisations is to be better at identifying the right people to support, nurture and empower (Pinchot, 1987). If managers gain better insights about their employee's intrapreneurial potential, it will make it easier to refocus the innovation strategy by selecting for the right people instead of the right ideas. A possible approach would be to qualitatively assess each person in a division (or team) on a binary scale in terms of the 19 characteristics; a zero should be given when a person does not possess a specific quality at all, whereas one should be given when an individual clearly possess the quality in question. It may also be possible to develop far more advanced measurements for this. Some obvious biases must be expected, though, especially the leniency bias, which describes situations where a manager tends to be more indulgent than his or her peers (Podsakoff et al., 2003). A possible workaround would be to have more than one rater or a developed scoring guide based on these 19 characteristics. The approach might also be influential in terms of putting together intrapreneurial teams based on members characteristics. Further research is needed to assess potential intrapreneurs for their characteristics.

Due to the more varied picture of the different qualities of an intrapreneur, the 19 characteristics identified in this study could be used as a compass to design more customised training programmes to stimulate innovative and (corporate) entrepreneurial behaviour. Organisations, educators as well as consultants should, however, be aware of the fact that some characteristics might need different approaches to train than others and might take longer to cultivate; for instance, self-efficacy compared to business planner. All 19 characteristics seem to be trainable; however, further research is needed to better understand how these characteristics may be trained.

The 19 intrapreneurial characteristics might also be usable for HR managers in their search for talents that can drive innovation and play an entrepreneurial role in the organisation. A possible approach would be to cross-check the 19 characteristics with results from the favourite mean in recruitment processes:

the personality test. This approach should only be used as an indicator, as the research on the relationship between personality and intrapreneurship is relatively limited (Woo, 2018). Based on the findings in this study, a valid hypothesis could be that an open, flexible and inventive mind might be the very core of being an intrapreneur. You need to be open-minded to take risks, to take action, to see opportunities (when no one else does), to include others, to have empathy for others etc. You need a flexible mind to be persistent (when something goes wrong), see different perspectives when solving problems, to be experimental, to trust and believe in yourself etc. And you need to be inventive to come up with new ideas, to persuade others (in new ways), break the patterns etc. Maybe that is why some scholars have found a connection between intrapreneurs and especially the 'openness' trait from the Big Five personality dimensions (e.g. de Vries et al., 2016). Potential new research could look into this avenue. Further research is, however, needed to better understand the relationship between these 19 characteristics and standard personality tests.

In an academic and educational context, intrapreneurship has also gained in importance over the years. The 19 characteristics could again be used as an indicator to identify talents to support through the system – both to foster more academic intrapreneurs (the ones that drive new strategic directions) as well as the intrapreneurs of tomorrow: the students. One could imagine that the 19 characteristics of this study could lead to stronger and more focused curriculums in entrepreneurship education and incubator programs.

4. Guidelines for Applying Research to Practice

The results of this study can be applied using different perspectives (individual, team-, and organisational level).

At the individual level, the 19 characteristics could be used as a checklist for personal development and contribute to a more detailed psychological understanding of oneself. Which of the 19 characteristics are you particularly strong in and where are your Achilles heel(s)? The latter is maybe of most interest, as this represents the potential areas for further development and training. Also, if you are aware of these 19 characteristics and your strength and weaknesses, it becomes easier for you to figure out which individuals you should try to persuade to get onboard to enhance the chances for success on making your next big thing a reality.

At the team level, the 19 characteristics can be used in several ways. One would be to go through each of them and discuss which characteristics that are highly represented in the team and which characteristics you might lack. Again, underrepresented characteristics could be brought into a team by either developing these through customised training – or by recruiting new team

members from the other parts of the organisation or the outside. Another way would be to assemble innovative and (corporate) entrepreneurial teams based on the 19 characteristics, making sure that all of them are represented in a team from the beginning. Involving HR in this exercise might be of great value, as results from personality tests could be cross-checked with clear connections between these and the 19 characteristics, e.g. the 'openness' personality trait from the Big Five test.

At the organisational level, the 19 characteristics would be a good starting point for the top management to reflect on the current intrapreneurial and innovative human capital in the organisation. It should give a clear picture of which areas to focus on in terms of recruitment, training programs etc. to support innovative and (corporate) entrepreneurial activities in the organisation.

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