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ECONOMICS AND  
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# **Early-stage entrepreneurs on LinkedIn - a tool for legitimacy?**

by

Nicholas Kelly & Jacqueline Rohde Mohr

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Supervisor: Andrea Moro  
Examiner: Claudio Fassio

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# Abstract

In line with the development of modern communication technology, computer-mediated-communication is playing a crucial role in how people interact and communicate. One forum in which such interaction can be conducted is the online professional social network LinkedIn. In this study we examine how entrepreneurs, conscious or unconsciously, make use of impression management strategies in a textual sense on LinkedIn by highlighting entrepreneurial skills in order to claim legitimate distinctiveness.

The purpose of this study is to identify the ways in which early-stage entrepreneurs use rhetoric to establish legitimacy for themselves among potential stakeholders. This is of interest since favourable legitimacy judgments by potential resource providers are critical for the survival and growth of new ventures.

This study adopts a quantitative approach by searching for specific keywords connected to entrepreneurial skills on the profile pages of early-stage entrepreneurs. The research concludes that how early-stage entrepreneurs present themselves on LinkedIn in order to create legitimacy is not influenced by factors such as gender, age, educational background or prior work experience.

However, statistical significance was found in the negative relationship between previous start-up experience and the highlighting of skills within Networking and Leadership/Management. The results to some extent indicate that entrepreneurs who have prior start-up experience to a lesser degree highlight skills related to social capital and rather focus on more tacit skills related to their expertise, than their less experienced counterparts

The research concludes that a possible explanation can be found in the logic that previous success in starting a venture speaks for itself. That is, entrepreneurs who have successfully launched a start-up have, to some extent, already proved that they have what it takes to start a business, make it successful and by extension also come off as legitimate.

**Keywords:** Early-stage Entrepreneurship, Legitimacy, Impression Management, Legitimacy as a Property, LinkedIn

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# 1. Introduction

## 1.1 Background

In general, start-ups are innovative, high-risk and high-growth business ventures that often require a significant amount of external financing (Vaznyte and Andries, 2019). Krishna, Agrawal & Choudhary (2016) estimate that on average, 9 out of 10 start-ups decide to disband as a result of different reasons such as bad management or lack of funds. Statistics from Deane (2020) show that 21.5% of start-ups cease their business in the first year, 30% in the second year, 50% in the fifth year, and 70% in their 10th year. It is therefore imperative for a start-up to be able to secure funding in order to further grow the business during the nascent stage.

Equity financing can be regarded as a method for start-up to secure funding. An entrepreneur who raises money through equity financing effectively sells shares of the company in return for outside investment (Oranburg, 2020). Professional equity investors include business angels and venture capitalists (Oranburg, 2015). According to Oranburg (2020) these equity financing investors prefer business models that can scale quickly, consequently providing a faster return on investment. Start-ups who make physical goods or require a large input of human capital may find it difficult to attract equity investors.

Forbes (2015) presents a list of *20 things entrepreneurs should know* about angel investors. While the list considers data such as market opportunity, business plans and financial projections in start-ups, it also asserts the need to assess the founder's passion, commitment and legitimacy (Forbes, 2015). As new ventures lack factual evidence, investors' and stakeholders' perception of a venture is most often based on subjective opinions determined by non-verifiable claims (Maxwell, Jeffrey & Lèvesque, 2011). Especially for early-stage entrepreneurs, it is important that potential stakeholders or investors both see a potential in the entrepreneur and find the idea interesting. This is supported by Harkins (2019), who argues that angel investors are likely to consider the source of the opportunity before investing. The use of a network enables entrepreneurs to gain insights about the entrepreneur, investors reduce the time of early-stage deal evaluation and have the network's assurance that the entrepreneur is competent. Often, the competence or legitimacy of the entrepreneur is more important to investors than the opportunity of a successful

investment, as such the investor spends much time with the entrepreneur and on vetting the entrepreneur online (Harkins, 2019). This is in accordance with Stuart & Abetti (1990) who identified that it is an entrepreneur's previous start-up experience which forms as the variable most indicative of a well performing start-up.

Previous research by Belleflamme, Lambert & Schwienbacher (2014) and Mollick (2014) have found that recent advances in technology have empowered entrepreneurs to pursue microfinancing through online platforms such as crowdfunding, which offer opportunities to demonstrate prototypes of their inventions, release initial business plans, and market their projects to interested investor groups. Furthermore, Ren, Raghupathi & Raghupathi (2020) find that web attention has a big importance in the (crowd)fundraising process, where web attention is an influential factor for the total funding amount. Moreover, the social connectedness of a founder was the best predictor of funds raised annually by a start-up. This implies that founders can use online platforms (e.g., social media, LinkedIn, etc.) not only to build their social connections, but to also communicate their social capital to investors (Ren, Raghupathi & Raghupathi, 2020). These results are consistent with other findings in which well-known founders with a larger amount of LinkedIn connections are also likely to raise more money (Banerji and Reimer, 2019).

For early-stage entrepreneurs, not only is it important to build legitimacy towards potential investors, but equally crucial towards other potential stakeholders. Entrepreneurs gain positive evaluations when their stakeholders are convinced that the new venture is both legitimate and distinct (Werven, Bouwmeester & Cornelissen, 2015). For entrepreneurs with less limited means or skills, typically early-stage entrepreneurs, social media networks are especially important (Schaupp & Belanger, 2014) as they can be a cost-effective way of networking with potential stakeholders. Social networks allow ventures to communicate with stakeholders and develop a company's reputation, creating a particular image (Becker, Nobre & Kanabar, 2013) and creating legitimacy. However, Taiminen & Karjaluoto (2015) find that small and medium-sized enterprises appear not to use the full potential of new digital tools and, as a result, do not derive benefits from the opportunities they may provide.

This opens the question as to exactly how early-stage entrepreneurs can use digital media to come off as legitimate in the eyes of potential stakeholders.

Given this, it is of interest to examine whether entrepreneurs make use of digital media, i.e., LinkedIn, to showcase their skills in order to build legitimacy in the eyes of potential stakeholders.

## **1.2 Research Aim & Purpose**

Previous research conducted by Parhankangas & Ehrlich (2014) examines entrepreneurs' behaviour, through Impression Management Theory and the connection to resource acquisition. Whilst Nagy, Pollack, Rutherford & Lohrke (2012) find a positive correlation between impression management behaviour and the acquisition of funding.

Becker-Blease & Sohl (2015), on the other hand, examines which aspects of a venture's activities, structures, and outcomes, as conveyed by its narrative, are associated with legitimacy judgments by potential investors. Suddaby, Bitektine & Haack (2017) present three types of legitimacy, where this study aims to examine how early-stage entrepreneurs build legitimacy in the eyes of investors or potential stakeholders, focusing on *legitimacy as property*. Further, building upon the research of Parhankangas & Ehrlich (2014), it is of interest to investigate how early-stage entrepreneurs consciously or unconsciously make use of impression management strategies in written materials, on the social network LinkedIn. Today LinkedIn has become an important platform letting individuals connect and expand their professional networks, this research therefore aims to understand how early-stage entrepreneurs strategically present their human and social capital through written material on LinkedIn to consciously or unconsciously influence potential external stakeholders' perception of entrepreneurial legitimacy.

From a practical viewpoint, the research aims to bring clarity of whether an early-stage entrepreneur's use of impression management online can be linked to previous researchers' suggestions of how legitimacy is built among potential investors or stakeholders (Chandler & Jansen, 1992; Pavett & Lau, 1983; Wheelen & Hunger, 1989; Herron & Robinson, 1993; Lorrain, Belley & Dussault (1998 cited in Loué & Baronet, 2012); Cadieux (2007 cited in Loué & Baronet, 2012); Loué & Baronet, 2012; Kaur, 2013; Warnick, Murnieks, McMullen

& Brooks, 2018; Radu-Lefebvre, Loue & Redien-Collot, 2019; Wheelen & Hunger, 1989; Pavett & Lau, 1983). The proposed research question is therefore formulated as follows:

*How are early-stage entrepreneurs highlighting their skills to create legitimacy among existing and potentially new stakeholders on LinkedIn?*

The aim of this research is to examine how entrepreneurs showcase their skills on LinkedIn and if the skills match the skills deemed most important by previous researchers such as e.g., Chandler & Jansen (1992), Herron & Robinson (1993) & Loué & Baronet (2012).

## **2. Literature/Theoretical Review**

### **2.1 Legitimacy**

Legitimacy, defined by Suchman (1995, pp. 571-574) as the “generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs and definitions” has, become an “anchorpoint of a vastly expanded theoretical apparatus”. This, if highlighted by the fact that legitimacy, as an indeterminate concept, has been widely used in previous research in different fields e.g., political science (Lipset, 1959), philosophy (Habermas, 1973), law (Stryker, 1994), mobilization (Walker & McCarthy, 2010) and psychology (Tyler, 2006).

However, despite its central importance and wide use in various fields, legitimacy as a concept must be seen as empirically unclear, characterised by “fragile conceptual moorings” (Suchman, 1995, p. 572). It is therefore no wonder that legitimacy has emerged as a confusing construct in management theory following its widespread application in various fields of science (Suddaby, Bitektine & Haack, 2017). This is because no construct clarity exists when researchers employ the term *legitimacy* and therefore, there is an inability to define it (Suddaby, 2010).

Clear constructs are essential for effective theorisation, so to properly understand the concept of legitimacy its meanings as used in this paper must first be defined (Suddaby, 2014). Suddaby, Bitektine & Haack (2017, p. 453) bring some constructive clarity and

theoretical discipline to the concept of legitimacy by asking three key questions; “*What is legitimacy?*”, “*Where does it occur?*” and “*How does it occur?*” when reviewing and structuring previous research done in the field of legitimacy.

Suddaby, Bitektine & Haack (2017) found that some researchers (Rao, 1994; Barron, 1998; Suddaby & Greenwood, 2005; Barnett, 2006; Johnson, Dowd & Ridgeway, 2006; Sine, David & Mitsuhashi, 2007; Golant & Silence, 2007) view legitimacy as an interactive process, rather than a tangible item. Suddaby, Bitektine & Haack (2017, p. 453) call this perspective *legitimacy as a process*, in which legitimacy is described as an “interactive process of social construction between multiple social actors”, i.e., “legitimacy is the product of an ongoing process of social negotiation involving multiple participants” (Suddaby, Bitektine & Haack, 2017, p. 459). Legitimacy as a process, has been identified as persuasion and influence “grounded in language” (Nielsen & Rao, 1987, p. 523) where legitimacy occurs as a result of the language (Zilber, 2006), communication (Suddaby, 2010), and translation of texts (Czarniawski & Joerges, 1996) adopted by social actors when interacting with others. Legitimacy as a process can therefore be characterised by an implicit assumption of equifinality, as there seems to be no best practice for gaining legitimacy, “...but rather a relatively infinite range of processes” (Suddaby, Bitektine & Haack, 2017, p. 462).

A second group of researchers (Walker, Thomas & Zelditch, 1986; Elsbach, 1994; Zelditch, 2001; Tyler, 2006; Bitektine, 2011; Tost, 2011; Lamin & Zaheer, 2012; Bitektine & Haack, 2015) understand legitimacy as a form of sociocognitive perception or evaluation. Suddaby, Bitektine & Haack (2017) therefore term this perspective *legitimacy as perception*. The concept of legitimacy as a perception builds upon the notion of legitimacy being a property in the form of a taste, assessment or judgement of the appropriateness of an organizational product, practice or characteristic (Suddaby, Bitektine & Haack, 2017). Whilst legitimacy as a process focuses on the interactions on an organisational field level, legitimacy as a perception rather focuses on the individual and their role in the ongoing process of social constructing legitimacy. That is, research on legitimacy as a perception draws its primary attention to what happens at the individual microlevel (Suddaby, Bitektine & Haack, 2017) and the view that legitimacy is an inherent judgement found within an individual's psyche (Zimmerman & Zeitz, 2002) where legitimacy ultimately “resides in the eye of the beholder” (Ashforth & Gibbs, 1990, p.177).

Lastly, Suddaby, Bitektine & Haack (2017) found that previous research (Dowling & Pfeffer, 1975; Singh, Tucker & House, 1986; Suchman, 1995; Reuf & Scott, 1998; Zimmerman & Zeitz, 2002) tend to theorise legitimacy as a thing - i.e., a property, a resource, or a capacity of an entity. Suddaby, Bitektine & Haack (2017) term this perspective *legitimacy as property*. The notion of legitimacy as a property that occurs between the legitimacy object, e.g., the business or person, and its external environment is, arguably, one of the most frequently prevalent phenomena (Suddaby, Bitektine & Haack, 2017). Suchman (1995, p. 576) refers to legitimacy as an “operational resource” of a firm. Gardberg & Fombrun (2006, p.329) defines legitimacy as an “intangible asset”, undiscovered in organisations during the nascent stage (Zimmerman & Zeitz, 2002; Henisz & Zelner, 2005) but can rather be acquired (George, Chattopadhyay, Sitkin, & Barden, 2006), further accumulated (D’Aunno, Sutton, & Price, 1991), lost (Chen, Griffith, & Hu, 2006), restored (Pfarrer, Decelles, Smith, & Taylor, 2008), or spread to other organisations (Certo, 2003). The legitimacy between an object and its environment occurs when there is a conformity between the attributes of said object and the external environment's expectations which in turn may lead to the object of legitimacy adapting to external environmental pressures in order to maintain conformity and thus enhance its survivability (Suddaby, Bitektine & Haack, 2017).

This research aims to gain an understanding of how entrepreneurs can build legitimacy online towards existing or potential new stakeholders through online impression management, using definitions of legitimacy. Following the theory about legitimacy as stated by Suddaby, Bitektine and Haack (2017), legitimacy is built when conformity exists between an object’s attributes and the external environment’s expectations. Thus, the research aims to understand how the early-stage entrepreneur (the object) can build legitimacy that is aligned with potential stakeholders (the external environment) expectations through an online presence on LinkedIn.

### **2.1.1 Building Legitimacy**

Suddaby, Bitektine & Haack (2017) presents three different organisational strategies in order to achieve “fit” with the aforementioned environmental pressures, and by doing so gain legitimacy. First, there is the strategy of *conforming* in which organisations adopt characteristics, forms and/or practices instituted by regulations, standards and norms within an organisational field. An example of this was demonstrated by Singh et al. (1986) who

found that the chance of survival for social service agencies was significantly higher among agencies certified by the Canadian government. Further research on the matter has found that organisations, when seeking to gain legitimacy, adopt the characteristics of industry leading organisations (Haveman, 1993) or industry wide recipes for success (Phillips, 1994).

Next, Suddaby, Bitektine & Haack (2017) present *decoupling* as the second strategy organisations may rely on in order to seek legitimacy. The notion of decoupling lies upon the idea that organisations respond to social pressures by superficially conforming in an attempt to gain legitimacy in front of external audiences, thus building a buffer and protection of their main economic and technical activities (Suddaby, Bitektine & Haack, 2017). The use of decoupling enables organisations to build a gap between formal policies, as set by external pressures, and actual practices used, thus gaining legitimacy, whilst at the same time maintaining flexibility to address practical considerations (Meyer & Rowan, 1977).

The third strategy in order to gain legitimacy, according to Suddaby, Bitektine & Haack (2017, p. 458), is *performing* in which organizations “demonstrate their technical superiority of their innovative practice, characteristic or form over extant alternatives”. Such pragmatic legitimacy (Suddaby, Bitektine & Haack, 2017) is an exchange-related form of legitimacy which is based upon an organisation's ability to persuade key stakeholders of its usefulness (Elms & Phillips, 2009).

## **2.2 Liability of Newness**

This study focuses on new ventures that are transitioning from the *start-up stage* towards the *early-growth-stage* (Cooper, 1981). In this stage, the entrepreneur has already decided to commit major resources to start a new venture, with a clear competitive strategy and well-defined business model. The strategy and business model of the new venture are primarily built upon the skills and knowledge of the entrepreneur and/or the funding team (Cooper, 1981). When the business model has been decided, the new venture moves towards a more stabilised stage, where the founder remains in charge of all activities and decisions. When launching the venture, the entrepreneur receives feedback from the market, either supporting that the underlying assumptions of the venture's business model have been correct or have been proven to be incorrect. This leads many start-ups to reconsider their strategies and/or

re-test assumptions, which can result in running out of cash before reaching the break-even point (Cooper, 1981).

Stinchcombe (1965) argues that early-stage ventures are more likely to fail than older organisations. The reasoning behind this can be found in the liability of newness. Liability of newness implies that early-stage ventures need to be adaptable both inside the organisation but also externally in order to compete with established firms, all whilst still having low levels of legitimacy (Singh, Tucker & House, 1986). Liability of newness has two important aspects: the first being *external processes* relating to the venture's low level of legitimacy and inability of creating strong exchange relationships with key external constituencies. The second being *internal processes* in which team members have to adapt to mutual role coordination in the organization (Singh, Tucker & House, 1986).

This research relates to the *external processes* as it investigates how entrepreneurs build legitimacy towards external stakeholders or potential investors. Hannan & Freeman (1984) argue that companies with high reliability, stable performance and high accountability tend to be favoured in selection processes in external exchange relationships. To achieve high reliability and accountability, organisations must be stable over time, which also allows the company to grow older (Hannan & Freeman, 1984). In the growth-stage, most ventures become part of a *power hierarchy*, where they develop strong exchange relationships or even have their actions endorsed by powerful external actors (Stinchcombe, 1968). Thus, the external environment views stable organisation as more legitimate, and thus raising the liability of newness for new ventures (Singh, Tucker & House, 1986).

In their research (Singh, Tucker & House, 1968) found that acquiring external legitimacy corresponds with a higher chance of survival in a new venture, whilst internal organisational changes do not lead to an increased failure rate. Thus, it is clear that legitimacy and the survival of new ventures relies heavily on external support relationships with other organisations. These findings support the research aim for highlighting the importance of building legitimacy among external stakeholders in the early stages of a new venture.

## 2.3 Impression Management Theory

The term *impression management* can be traced back to the work “mind, self and society” by Mead (1934). In his work, Mead (1934) argues that the identity of an individual or a group is a social construction, and that communication relies on a shared use of symbols and mutual understanding. Hence, human characteristics are important in regard to peoples’ creation and adoption of predictable roles, making their social interplay manageable.

From the perspective of symbolic interactionism, the identity is perceived as twofold: *the real self* that exists without relying on others’ perception and the *me* that reflects on others’ perception and therefore adapts to a social role in the given circumstances (Mead, 1934). This theory was later developed through the social cognitive tradition, where it was argued that the individual both consciously and unconsciously works on shaping the *me* in relation to the perceptions from others (Gilbert, 1998). From this perception, impression management theory declares that behaviour observed is used to draw conclusions on a person's unknown characteristics and personality traits.

Previous literature contributions are aligned with the mid-twentieth-century formulation of impression management theory, which is still applicable today (Mead, 1934). Impression Management Theory is described as an individual’s conscious use of communication and behaviour in public in order to influence the perception of others (Harlow, 2018). This implies that impression management can be related to any behaviour a person has with the purpose of controlling or manipulating others’ attributions and impressions (Tedeschi, 1981).

In his work, Tedeschi (1981) argues that people engage in impression management for several reasons where strategic *self-presentation* is applicable for this research. There are several strategies for *strategic self-presentation* e.g., Jones & Pittman (1982) argue that strategic self-presentation is used to gain pre-planned and immediate outcomes from a target through different strategies. Whilst Tedeschi, Schlenker & Bonoma (1971) emphasise that strategic self-presentation is used to achieve power resources that may be used in a later unplanned encounter.

### 2.3.1 Impression Management in an Online Environment

To understand how *impression management* is connected to this research it is relevant to examine how it relates to people's online behaviour on social networks.

Self-presentation or impression management is described as a complex process, where an individual has to select what personal attributes should be disclosed, hidden or put falsely in order to create a positive image for oneself (ed. Cunningham, 2013). The act of self-presentation on social networks towards others can be linked to the work of Goffman (1959), where human interactions are compared to a stage performance. On the *backstage*, individuals can be themselves and drop their guard, whilst on the *front stage* individuals have to *perform* their identity both verbally and non-verbally for the ones present to observe (Goffman, 1959). On the *front stage*, individuals tend to *perform* depending on their motives which can be linked to the work of Tedeschi (1981) defining *strategic self-presentation*. This research focuses on the *front stage* by investigating individuals' online identities in a professional context.

With the development of modern communication technology there has been a change in the way people interact with each other and computer-mediated-communication plays a crucial role in self-presentation (ed. Cunningham, 2013). Attendance on social media and online communities has not only become an important part of people's social lives, but also professionally, as it opens up new opportunities for expanding the business network and reaching out to potential stakeholders (Burkell, Fortier, Wong & Simpson, 2014). Many stakeholders have a highly subjective perception of the viability of a new venture, as starting a new company is often related to high risk (Aldrich & Fiol, 1994). Thus, stakeholders have to explicitly or implicitly rely on online and offline cues in order to assess the legitimacy of a new venture and the founder (Suchman, 1995; Zimmerman & Zeitz, 2002).

Previous research analysing stakeholders' assessment of new ventures has shown a correlation between the entrepreneur's employment of impression management and the perception of the new venture's legitimacy (Baron & Markman, 2003; Bowey & Easton, 2007, Hayton & Kelley, 2006). This is supported by the research of Nagy, Pollack, Rutherford & Lohrke (2012), which concludes that early-stage entrepreneurs have the ability to influence the perceptions from stakeholders, leading to positive organisational outcomes.

## 2.4 Entrepreneurial Skills

Entrepreneurs can be defined as creative and innovative individuals who recognise opportunities, for example, in the establishment of new ventures (Gartner, 1985).

This research is following the Neoclassical Resource-Based Theory where a venture's success is dependent on human, social and financial capital as argued by Wasserman (2013). *Human capital* refers to the explicit knowledge or tacit skills that derive from an individual's prior education or experience. Early-stage entrepreneurs often lack the skills and knowledge needed to establish a new venture, therefore end up seeking to cover this knowledge or skills within their network, by finding a co-founder or seek help externally (Wasserman, 2013, p. 79).

Looking into *human capital*, previous research states that individual-specific human capital refers to knowledge that is relevant for firms or industries and includes entrepreneurial and managerial experience (Pennings & Witteloostuijn, 1999). Previous research suggests that human capital impacts economic success, both on a macro-level and the business level for ventures (Kilkenny, Nalbarte & Besser, 1999). Likewise, Fried & Hisrich (1994) argue that social capital plays an equally important role when investors determine how to allocate capital, as they tend to rely on the opinions of their networks. Investors experience uncertainties and information asymmetry due to the lack of track records when evaluating a new venture. Therefore, social capital becomes an important aspect of the evaluation process (Fried & Hisrich, 1994). Previous research has even suggested that new ventures in which the founders already have industry experience tend to perform better as they may have important contacts in their existing network (Gimeno, Folta, Cooper & Woo, 1997; Bruderl, Preisendorfer & Ziegler, 1999). Additionally, founders with previous entrepreneurial experience have an advantage compared to inexperienced founders as they have an understanding of "how to staff and lead early-stage organizations, to develop new products, and to manage relationships with investors, employees, suppliers, and customers" (Shane & Stuart, 2002, p. 161).

*Social capital* is described as the benefits that derive from an individuals' communication or information network. For a new venture, there are several ways of strengthening their social capital by working on their social competence through e.g., social networks (Lans, Blok & Gulikers, 2015). *Financial Capital* refers to tangible resources such as money, which is an

important part of starting a new venture. It is natural that start-ups consider or seek outside investments to cover budget posts (Wasserman, 2013, p. 79).

Objectively identifying the core skills typically found among entrepreneurs has been the aim of many researchers. Chandler & Jansen (1992) find that entrepreneurs scan their environment, selecting promising opportunities and formulate strategies requiring two distinct competencies. The first competency consists of having an ability to “recognize and envision taking advantage of opportunity” (Chandler & Jansen, 1992, p. 225). This is further supported by McGee, Peterson, Mueller & Sequeira (2009), who find innovation and inventiveness of products or services to be important entrepreneurial skills. The second competence involves having the “drive to see firm creation through to fruition” (Chandler & Jansen, 1992, p.225) which is in accordance with Herron & Robinson (1993) who find entrepreneurs being “result focused”. Furthermore, Lorrain et al. (1998 cited in Loué & Baronet, 2012) present a list of skills typically found among entrepreneurs. Later research such as Cadieux (2007 cited in Loué & Baronet, 2012, pp. 458) find that “strategic and general corporate management”, “problem-solving and decision-making”, “interpersonal relations and influence”, as well as “self-management” are important categories of skills essential to entrepreneurs, which Loué & Baronet (2012) label as entrepreneurs focusing on network development.

Technical skills or technical competency refers to the entrepreneur’s ability to adopt techniques and tools relevant for the new venture. These skills include the possession of knowledge of tools or models that are key to the start-up process (Kaur, 2013).

Investors and successful entrepreneurs, when asked to identify the most important determinant of new venture performance, will undoubtedly answer “the entrepreneur” (Chandler & Jansen, 1992, p. 223). In their research, Chandler & Jansen (1992) found that founders of successful ventures value technical skills just as important as being an expert in a field. This implies that an ability to use specialised tools and procedures is key for the development of high-quality services or products.

Following previous research, behavioural skills are defined as the sense of challenge, behaviour towards competition, risk and creativity (Radu-Lefebvre, Loue & Redien-Collot, 2019), negotiation, communication and networking (McGee, Peterson, Mueller & Sequeira, 2009). Thus, the behavioural skills of an entrepreneur can be connected with the social

capital, which can improve through an entrepreneur's communication competency and acting in an external network.

Based on previous research, a list of skills typically found in entrepreneurs, seen in Table 1, has been created. This will be used to identify how an entrepreneur communicates their entrepreneurial skills in an online environment.

**Table 1: Overview of Previous Studies Conducted on Entrepreneurial Skills**

<i>Author(s) (year)</i>	<i>Skills proposed</i>
Chandler & Jansen (1992)	<ul style="list-style-type: none"> <li>• Human/conceptual competence</li> <li>• Opportunity recognition</li> <li>• Technical/functional competence</li> <li>• Political competence (networking)</li> <li>• Industry Specific Expertise</li> <li>• Competence and achievements from previous experience</li> </ul>
Herron & Robinson (1993)	<ul style="list-style-type: none"> <li>• Understand branch of industry and tendencies</li> <li>• Motivating the human resources of the firm</li> <li>• Business network management</li> <li>• Managing the activity of the firm</li> <li>• Establish opportunities</li> </ul>
Lorrain et al. (1998 cited in Loué & Baronet, 2012)	<ul style="list-style-type: none"> <li>• Staff management</li> <li>• Financial Management</li> <li>• Opportunity identification</li> <li>• Strategic vision</li> <li>• Marketing management</li> <li>• Managing workload</li> <li>• Negotiation</li> <li>• Decision making</li> <li>• Time management</li> <li>• Network management</li> </ul>
Cadieux (2007 cited in Loué & Baronet, 2012)	<ul style="list-style-type: none"> <li>• Problem-solving &amp; decision-making</li> <li>• Interpersonal relations &amp; influence</li> <li>• Self-management</li> </ul>
Loué & Baronet (2012)	<ul style="list-style-type: none"> <li>• Opportunity recognition &amp; exploitation</li> <li>• Financial management</li> <li>• HR management</li> <li>• Marketing-commercial activities</li> <li>• Leadership</li> <li>• Self-discipline</li> <li>• Market-monitoring activities</li> </ul>

	<ul style="list-style-type: none"> <li>• Intuition &amp; Vision</li> </ul>
Kaur (2013)	<ul style="list-style-type: none"> <li>• Strategy competence (the ability to develop a mission and strategy, set goals and sell ideas)</li> <li>• Commitment competency (motivation to compete, make impact and dedication)</li> <li>• Conceptual competence (decision-making skills, weight risks, analytical thinking, innovation and creativity)</li> <li>• Opportunity competence (ability to recognise opportunities and identify customer needs)</li> <li>• Relationship competence (interpersonal and communication skills)</li> <li>• Organizing competency (directing, leading, motivating, planning and scheduling internal and external resources)</li> <li>• Learning competency (ability to direct and utilizing skills to adapt to changing entrepreneurial roles)</li> <li>• Technical competency (the use and adoption of technical skills relevant to the venture)</li> <li>• Social Responsibility Competency (showing responsibility towards customers, employees and the public)</li> <li>• Ethical competency (ethical awareness and the ability to understand ethical problems)</li> </ul>
Warnick, Murnieks, McMullen & Brooks (2018)	<ul style="list-style-type: none"> <li>• Passion for the product</li> <li>• Passion for new venture</li> </ul>
Radu-Lefebvre, Loue & Redien-Collot (2019)	<ul style="list-style-type: none"> <li>• Risk taking</li> <li>• Having a sense of Responsibility</li> </ul>
Wheelen & Hunger (1989)	<ul style="list-style-type: none"> <li>• Budgeting</li> <li>• Manage procedures</li> <li>• Evaluate performance</li> </ul>
Pavett & Lau (1983)	<ul style="list-style-type: none"> <li>• Human competence to be able to work with, understand and motivate others</li> </ul>

## 2.5 Chapter Summary

This research aims to gain an understanding of how early-stage entrepreneurs can build legitimacy in the eyes of existing and potential new stakeholders, therefore the definition of “*legitimacy as a property*” applies. Using the theory as stated by Suddaby, Bitektine and Haack (2017), legitimacy is built when there is conformity between an object’s (the

entrepreneur) attributes and the external environment's expectations. Hannan & Freeman (1984) argue that companies with high reliability, stable performance and high accountability tend to be favoured in selection processes during the external exchange of relationships. Singh, Tucker & House (1968) find that the acquisition of external legitimacy corresponds with a higher survival-chance for new ventures. Therefore, when the object suffers from liability of newness the creation of legitimacy is of utmost importance. Building legitimacy can be done using techniques such as *conforming*, *decoupling* and *performing* (Suddaby, Bitektine & Haack, 2017). These techniques can be utilised in an online environment using *strategic self-presentation* (Tedeschi, 1981), a commonly used impression management strategy, in order to successfully build legitimacy through online written text.

## **3. Methodology**

### **3.1 Research Approach**

This thesis is built on an epistemological research assumption, in which the authors, through a predominant use of objectivism, aim to create a novel contribution to research of how early-stage entrepreneurs can build legitimacy through LinkedIn (Saunders, Lewis, & Thornhill, 2016, p. 127). The theory development follows a deductive approach, where the research question is built on existing theories of entrepreneurship and legitimacy (Saunders, Lewis & Thornhill, 2016, p. 146). Through quantitative data, the research aims to explain a causal relationship between previous research on building legitimacy and the use of impression management on online platforms such as LinkedIn. This is done by examining how entrepreneurs, consciously or unconsciously, implement relevant keywords of skills that build entrepreneurial legitimacy in the eyes of external stakeholders through online impression management.

### **3.2 Research Design**

This research implies an exploratory process, seeking to contribute a new aspect on how early-stage entrepreneurs build legitimacy through online impression management and the use of relevant keywords related to entrepreneurial skills (Ghuri & Grønhaug, 2002). Nascent entrepreneurs face the liability of newness and low levels of legitimacy compared

to major firms (Singh, Tucker & House, 1986). To understand how early-stage entrepreneurs can build legitimacy, previous contributions to research of entrepreneurial legitimacy and how it can be obtained conducted by Pavett & Lau (1983); Wheelen & Hunger (1989); Chandler & Jansen (1992); Herron & Robinson (1993); Lorrain et al. (1998 cited in Loué & Baronet, 2012); Cadieux (2007 cited in Loué & Baronet, 2012); Loué & Baronet (2012); Kaur (2013); Warnick, Murnieks, McMullen & Brooks (2018); Radu-Lefebvre, Loue & Redien-Collot (2019); was analysed.

From the secondary research, a list of 50 proposed skills was developed, based on those noted as important for nascent entrepreneurs within the previous researcher (see Table 1). It is important to note that the following skills were not included in the final categorisation of skills:

- Industry Specific Expertise (Chandler & Jansen, 1992)
- Competence & Achievements from previous experience (Chandler & Jansen, 1992)
- Technical/Functional competence (Chandler & Jansen, 1992)
- Technical competency (the use and adoption of technical skills relevant to the venture) (Kaur, 2013)

This is because Industry Specific Expertise (Chandler & Jansen, 1992) and Competence and achievements from previous experience (Chandler & Jansen, 1992) are not relevant to the analysis of keywords. It can be argued that expertise or competence in itself is not a skill but rather the end result of developing skills over time. As such, the notion of expertise or competence being a skill is void. Expertise and competence are therefore excluded from the list of skills used in this research. The skills Technical/Functional competence (Chandler & Jansen, 1992) and Technical Competency (the use and adoption of technical skills relevant to the venture) (Kaur, 2013) are considered too broad definitions. It is therefore argued that these skills are represented through other categories such as Commercial & Marketing and Financial Management.

The remaining 46 skills proposed by previous research were divided into 8 subcategories, as can be seen in Table 2.

**Table 2: Categorization of Proposed Skills**

<i>Skills proposed in previous research</i>	<i>Skill categorization</i>
<ul style="list-style-type: none"> <li>• Opportunity recognition (Chandler &amp; Jansen, 1992)</li> <li>• Establish opportunities (Herron &amp; Robinson, 1993)</li> <li>• Opportunity identification (Lorrain et al., 1998 cited in Loué &amp; Baronet, 2012)</li> <li>• Opportunity recognition &amp; exploitation (Loué &amp; Baronet, 2012)</li> <li>• Opportunity competence (ability to recognise opportunities and identify customer needs) (Kaur, 2013)</li> </ul>	<p><b>Opportunity Recognition</b></p>
<ul style="list-style-type: none"> <li>• Human competence (Chandler &amp; Jansen, 1992)</li> <li>• Human competence to be able to work with, understand and motivate others (Pavett &amp; Lau, 1983)</li> <li>• Motivating the human resources of the firm (Herron &amp; Robinson, 1993)</li> <li>• HR management (Loué &amp; Baronet, 2012)</li> <li>• Staff management (Lorrain et al., 1998 cited in Loué &amp; Baronet, 2012)</li> </ul>	<p><b>HR management / Human Competence</b></p>
<ul style="list-style-type: none"> <li>• Political competence (networking) (Chandler &amp; Jansen, 1992)</li> <li>• Business network management (Herron &amp; Robinson, 1993)</li> <li>• Network management Staff management (Lorrain et al., 1998 cited in Loué &amp; Baronet, 2012)</li> <li>• Relationship competence (interpersonal and communication skills) (Kaur, 2013)</li> <li>• Negotiation Staff management (Lorrain et al., 1998 cited in Loué &amp; Baronet, 2012)</li> <li>• Interpersonal relations &amp; influence (Cadieux, 2007 cited in Loué &amp; Baronet, 2012)</li> </ul>	<p><b>Networking</b></p>
<ul style="list-style-type: none"> <li>• Manage procedures (Wheelen &amp; Hunger, 1989)</li> <li>• Strategic vision &amp; decision-making Staff management (Lorrain et al., 1998 cited in Loué &amp; Baronet, 2012)</li> <li>• Managing the activity of the firm (Herron &amp; Robinson, 1993)</li> <li>• Leadership (Loué &amp; Baronet, 2012)</li> <li>• Organizing competency (directing, leading, motivating, planning and scheduling internal and external resources) (Kaur, 2013)</li> <li>• Evaluate performance (Wheelen &amp; Hunger, 1989)</li> </ul>	<p><b>Leadership / Management</b></p>
<ul style="list-style-type: none"> <li>• Marketing management Staff management (Lorrain et al., 1998 cited in Loué &amp; Baronet, 2012)</li> <li>• Market-monitoring activities (Loué &amp; Baronet, 2012)</li> <li>• Marketing-commercial activities (Loué &amp; Baronet, 2012)</li> <li>• Strategy competence (the ability to develop a mission and strategy, set goals and sell ideas) (Kaur, 2013)</li> <li>• Understand its branch of industry and its tendencies (Herron &amp; Robinson, 1993)</li> </ul>	<p><b>Commercial &amp; Marketing</b></p>
<ul style="list-style-type: none"> <li>• Budgeting (Wheelen &amp; Hunger, 1989)</li> <li>• Financial Management Staff management (Lorrain et al., 1998 cited in Loué &amp; Baronet, 2012)</li> <li>• Financial management (Loué &amp; Baronet, 2012)</li> </ul>	<p><b>Financial Management</b></p>

<ul style="list-style-type: none"> <li>• Having a sense of Responsibility (Radu-Lefebvre, Loue &amp; Redien-Collot, 2019)</li> <li>• Social Responsibility Competency (showing responsibility towards customers, employees and the public) (Kaur, 2013)</li> <li>• Ethical competency (ethical awareness and the ability to understand ethical problems) (Kaur, 2013)</li> </ul>	<b>Social Responsibility / CSR</b>
<ul style="list-style-type: none"> <li>• Conceptual competence (decision-making skills, weight risks, analytical thinking, innovation and creativity) (Kaur, 2013)</li> <li>• Problem-solving &amp; decision-making (Cadieux, 2007 cited in Loué &amp; Baronet, 2012)</li> <li>• Time management &amp; managing your work (Lorrain et al., 1998)</li> <li>• Self-management (Cadieux, 2007 cited in Loué &amp; Baronet, 2012)</li> <li>• Self-discipline, Intuition &amp; Vision (Loué &amp; Baronet, 2012)</li> <li>• Passion for the product/venture (Warnick, Murnieks, McMullen &amp; Brooks, 2018)</li> <li>• Risk taking (Radu-Lefebvre, Loue &amp; Redien-Collot, 2019)</li> <li>• Commitment competency (motivation to compete, make impact and dedication), learning competency (Kaur, 2013)</li> </ul>	<b>Behavioural Skills</b>

The above framework was developed to create a clearer overview of the entrepreneurial skills presented in previous research and how each skill can be linked to words used by entrepreneurs on LinkedIn in their self-presentation (Jones & Pittman, 1982).

To gain insights of how entrepreneurs present themselves on LinkedIn, primary research was conducted analysing 100 LinkedIn profiles from early-stage entrepreneurs in Skåne, Southern Sweden. The data was analysed by developing a list of keywords for each skill category (see Appendix 1). To analyse the use of these specific keywords, all LinkedIn profiles in the data sample were detracted using NVivo. To bring clarity to the data, the overall mean for each skill category was calculated, showing the percentage for how each skill represented in the total word count. To understand if any factors influenced the prevalence of skills used by the early-stage entrepreneurs, the total sample was split into sub-samples, to measure whether external factors influenced the prevalence of skills. To test for statistical significance t-tests were run on all data sub-samples.

Following a quantitative approach, combining primary sources from LinkedIn and secondary sources in the form of previous research ensured that the research followed an analytical and critical approach, allowing the researchers to be objective in the conclusions of the research question (Ghauri & Grønhaug, 2002).

### 3.3 Data Collection & Sample

#### 3.3.1 Data Collection: Keywords

To analyse and identify the most widely used skills presented in Table 2, of early-stage entrepreneurs when presenting themselves on LinkedIn, a list of keywords connected to each of the 8 subcategories was developed. The list was developed by collecting *synonyms for* and words *related to* the skill proposed in Table 2 through the thesaurus Merriam-Webster (Merriam Webster, 2021).

**Steps of developing list of Keywords:**

The first step of developing a list of relevant keywords for each category of skills was to streamline the list of words collected by looking into *synonyms for* and *words related to* for each of the skills proposed. This process was done manually in order to ensure that the words collected were relevant for each category. This can be seen in Table 3 below (or Appendix 2), where the words crossed out were deleted as they were considered irrelevant for the category.

*Table 3: Removal of Irrelevant Keywords*

<i>Skill categorization</i>	<i>Associated Keywords (level 1)</i>	<i>Cleaned List of Keywords (level 1)</i>
<b>Financial Management</b>	money, banking, investments, fiscal, monetary, pecuniary, pocket, capitalist, economics, account, deposit, fund, <del>chest</del> , assets, savings, bankroll, cache, collection, reserve, treasure, cash, force, fund, inventory, <del>pool</del> , stock, supply, resource, stockpile, endow, stake, subsidize, cofinance, refinance, accounting, calculating	account, accounting, assets, banking, bankroll, cache, calculating, capitalist, cash, cofinance, collection, deposit, economics, endow, fiscal, force, fund, fund, investments, inventory, monetary, money, pecuniary, pocket, refinance, reserve, resource, savings, stake, stock, stockpile, subsidize, supply, treasure

The second step of the list development involved identifying relevant keywords for each of the proposed skill categories, where all duplicates of words were removed. An example of this can be seen below (or in appendix 2):

**Table 4: Removal of Duplicates**

<i>Skill categorization</i>	<i>Cleaned List of Keywords (level 1)</i>	<i>Without Duplicates</i>
<b>Financial Management</b>	account, accounting, assets, banking, bankroll, cache, calculating, capitalist, cash, cofinance, collection, deposit, economics, endow, fiscal, force, fund, <b>fund</b> , investments, inventory, monetary, money, pecuniary, pocket, refinance, reserve, resource, savings, stake, stock, stockpile, subsidize, supply, treasure	account, accounting, assets, banking, bankroll, cache, calculating, capitalist, cash, cofinance, collection, deposit, economics, endow, fiscal, force, fund, investments, inventory, monetary, money, pecuniary, pocket, refinance, reserve, resource, savings, stake, stock, stockpile, subsidize, supply, treasure

These two steps were made for all skill categories, more rounds/levels of collecting keywords. Skills classed as irrelevant were run to ensure an accuracy and high level of saturation in the final list of keywords.

**Level of Saturation:**

The saturation was calculated by reviewing the list of keywords with duplicates and the list of keywords without duplicates. This calculation clarified how many words had a minimum of 1 duplicate and thus indicated the level of saturation. The level of saturation in the list of keywords was measured the following way:

$$Saturation = \left( \frac{Cleaned\ List\ of\ keywords\ (without\ duplicates)}{Cleaned\ list\ of\ keywords\ (with\ duplicates)} \right) - 1$$

To ensure a high saturation, the result had to be above 0.5, indicating that all keywords had a minimum of 1 duplicate. During the first round of search for keywords, the average saturation for the 8 categories was 0.1. A second round searching for keywords was made reaching an average saturation for the 8 categories of 0.7. The saturation for each category can be seen in Appendix 1.

The final list of keywords was included in the analysis of the LinkedIn profiles through NVivo and can be seen in Appendix 1.

### 3.3.2 Sample: LinkedIn Profiles

In order to examine how early-stage entrepreneurs without a track record presented themselves on LinkedIn, a quantitative data collection was conducted, involving the profile pages of entrepreneurs who are, or have been, enrolled at the Entrepreneurship & Innovation Master Program at Lund University during 2017-2021 (Appendix 4). Using a sample of past and current master students of Entrepreneurship & Innovation ensured the inclusion of individuals who are actively pursuing an entrepreneurial career or have shown an interest in pursuing an entrepreneurial career. Sweden, a European innovation leader (European Commission, 2020), provides the optimal setting for studies within entrepreneurship. With Lund University being a reputable educational institution, it is ensured that past and current students of the Entrepreneurship & Innovation program are ambitious and driven in nature. The research made use of a purposive sampling method, allowing the researchers to analyse the information conveyed by entrepreneurs who are in the very early stages of entrepreneurship. This decreased the likelihood of the individual entrepreneurs having legitimacy as a result of a favourable track record or prior networking experience.

The list of past and present master students was derived from programme coordinators at Lund University. Each entrepreneur's LinkedIn profile was then analysed with NVivo in accordance with the aim of this study. In total, 146 profiles of entrepreneurs from the Master program of Entrepreneurship & Innovation at Lund University enrolled sometime between 2017-2021 were gathered using Ncapture. From this, a sample of 46 profiles were excluded from the final sample because of insufficient information, i.e., the entrepreneur did not have an “about section” presenting themselves on their LinkedIn page or the language of the profile was not English as seen in Table 3.

*Table 5: Selection Criteria*

<b>Variable</b>	<b>Description</b>
Language	The profiles must be in English
Year of Graduation	Graduation from 2017 - 2021
About section	Must be filled in

In the final sample, 100 profiles were included, with 66 being male and 34 being female. The average number of start-ups that the entrepreneurs had taken part in was 0.61 and they all had a bachelor's degree from different educational sectors. 21 entrepreneurs had another master's degree in addition to their entrepreneurial master's degree. On average, the entrepreneurs had taken their entrepreneurial master's degree 1.5 years ago and 29% had less than 5 years of work experience.

As this research is focused on early-stage entrepreneurs' use of online impression management, the data collected from the LinkedIn profiles included text that was written by the entrepreneur/owner of the LinkedIn page. This data included an *about* section and text which was manually written to describe previous experience or education.

The data collected from the entrepreneurs' LinkedIn profiles was collected using NVivo and the web browser tool Ncapture in Google Chrome & Safari web browser. By pasting the web address of each LinkedIn profile into Ncapture, a complete download of the profile was converted into a NVCX-file which was then imported to NVivo.

## 3.4 Data Analysis

### 3.4.1 NVivo: Text Search Query

To analyse the prevalence of keywords connected to each of the 8 skill categories, the software NVivo 12 was used (see Appendix 3). As the first step, all data collected from the 100 entrepreneurs' LinkedIn profiles was imported to the NVivo software. During the second step, a *text search query* for each of the skill categories was set up. The queries were established using the following criteria to ensure accuracy in the data analysis:

- **Search for:** The keywords developed for each skill category were copy pasted into the search field
- **Selected items:** The data sample of 100 LinkedIn profiles
- **Finding matches:** Exact Matches only

The results collected from each of the 8 *text search queries* in the 100 LinkedIn profiles included the number of references corresponding to each skill category. The number of references/words was collected as a percentage of the total number of words in the text

collected from the entrepreneurs' LinkedIn profiles. The data collection can be found in Appendix 3.

## 3.5 Validity and Reliability

### 3.5.1 T-test

In order to check for statistical differences between the different subsamples, independent (two-sample) two-tailed t-tests are conducted. The formula for the T-test is as follows:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{S^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

Where:

$t$  = *t-value*

$x1$  = *Mean of subsample 1*

$x2$  = *Mean of subsample 2*

$S2$  = *Pooled std. error of the subsamples*

$n1$  = *Observations in group 1*

$n2$  = *Observations in group 2*

A larger t-value shows that the difference between subsample was greater than the pooled standard error which indicated a significant difference between the subsamples.

In this study, independent two tailed t-tests are conducted in order to examine potential differences based on *Previous start-up experience (0 start-ups or more) gender (Male or Female) years of work experience (above/below 5), amount of master's degrees (1 or 2) and number of LinkedIn-connections (above/below 500).*

## 3.6 Ethical Consideration

Due to the nature of this research, where all data collected was publicly available through an online social network, ethical considerations were made. Although this research was built on a quantitative data collection, the ethical principles of *privacy* and *anonymity* described by Bell & Bryman (2007) were adhered to.

To ensure that the *privacy* of the 100 individuals behind each of the LinkedIn profiles was protected, only publicly available data was detracted from the LinkedIn profiles.

Furthermore, the owners of the LinkedIn profiles were not contacted in relation to this research. This assured reliability in the data collection, as the text in the LinkedIn profiles had not been changed in accordance with the research aim.

To ensure *anonymity* in the research, the names from the LinkedIn profiles were omitted from the study.

## 3.7 Limitations

### 3.7.1 Sample

The academic framework of this research was restricted in terms of time and scope. This research was based on a relatively small sample, 100 entrepreneurial students from Lund University, which induced limitations when interpreting the final results. As such, the findings of this study should be treated with caution. The study used a sample of current and past students of the same academic institution which may have impacted on the conduct, of which the sample acts, in online environments such as LinkedIn. In addition to this, the sample consists primarily of Western European individuals which may act as a cultural/population bias. The study examined the use of English keywords, in a textual sense, on entrepreneurs' LinkedIn pages without regard to other contextual factors such as ethnicity, English proficiency, age, cultural background and other communication cues.

The sample consisted of entrepreneurial students as a way of examining individuals who, most likely, were in the infancy of their entrepreneurial career. As such, the individual was likely to lack an entrepreneurial track record and therefore not be in possession of legitimacy. However, there is a chance that some individuals comprising the final sample

chose a career, after graduation, other than an entrepreneurial one and therefore lacked the incentive to be seen as legitimate in the eyes of potential stakeholders. In this case, the profiles may have had a lower, or non-existent, keyword density which could have influenced the validity of this study's results.

### **3.7.2 List of Keywords**

The list of keywords related to each category of skills was developed using the *synonyms for* and *words related to* from the thesaurus Merriam Webster that is built upon Merriam Webster's own dictionary (Merriam Webster, 2021). According to their website, Merriam Webster is considered America's most trusted source for language information and has existed for more than 150 years both in print and online (Merriam Webster, 2021). Although Merriam Webster's website has more than 40 million monthly visitors, there is a risk that the list of keywords is inadequate. A reason for this could be due to its American origin, which could lead to a lack of British words and/or definitions.

As mentioned in section 3.2 *Research Design*, some of the skills presented by previous researchers were omitted from the final categorisation of skills. The skills excluded included the following:

- Industry Specific Expertise (Chandler & Jansen, 1992)
- Competence & achievements from previous experience (Chandler & Jansen, 1992)
- Technical/functional competence (Chandler & Jansen, 1992)
- Technical competency (the use and adoption of technical skills relevant to the venture) (Kaur, 2013)

The above skills were excluded as their definitions were too broad, thus building up a list of keywords from the Merriam Webster Thesaurus would not necessarily include all relevant aspects of the concepts. This could have led to an inadequate coverage of skills in the *text search analysis*. At the same time, there is a risk that searching for synonyms of *previous experience* and *technical competencies* would have led to overlapping results with some of the other categories, thereby leading to deceptive results.

As mentioned in section 2.4 *Entrepreneurial Skills*, technical skills include the knowledge and tools that are key for starting new ventures (Kaur, 2013). These, according to Chandler & Jansen, (1992, p. 223) are key for entrepreneurs to become experts in their fields and

thereby successful. The decision for excluding these skills and not delving deeper into the different types of technical skills that could be relevant for early-stage entrepreneurs, may have therefore led to an inaccurate understanding of how more industry specific skills could affect early-stage entrepreneurs' online legitimacy.

The final list of keywords reached a saturation level of 0.7, indicating that on average all keywords had one duplicate. A factor that was not concluded was that some keywords had several duplicates. To reach a higher and more accurate saturation level more rounds of searching for keywords, cleaning the list and removing duplicates should be run.

### **3.7.3 NVivo Text Search Query**

The software used in this study, NVivo 12, does not take the textual nuances into consideration. NVivo highlights the keyword regardless of the context in which identified keywords are used. In essence, this means that the method, in which this study found keywords connected to legitimacy, had a risk of showing false positives. For example, if the sample used the word *opportunity* in a negative sense, e.g. “I fear new opportunities” this would be regarded as a result in NVivo. Of course, the notion that an entrepreneur fears new opportunities does not signal legitimacy and would undoubtedly be seen as a negative characteristic by potential stakeholders.

Due to limitations in terms of time, this source of potential error was not accounted for and may have therefore affected the final results of this study.

## 4. Results

Results from the statistical analyses about early-stages entrepreneurs' usage of certain keywords and thus prevalence of skills are presented in this chapter. In order to clarify whether the usage of skills was connected to any internal or external factors, the sample of 100 entrepreneurs was split into the sub-samples: *Number of Start-ups*, *Gender*, *Number of Master's degrees*, *Years of Work Experience* and *Number of Connections*.

### 4.1 Prevalence of skills

To gain overall insights of the prevalence of skills within the total sample of 100 LinkedIn profiles, the average usage of references within each skill category was calculated. These results are presented below:

**Table 6: Word Analysis through NVivo**

<b>Skill Category</b>	<b>Average / Mean no. of references</b>
Opportunity Recognition	1.22 %
HR Management / Human Competence	0.69 %
Networking	2.00 %
Leadership / Management	2.08 %
Commercial & Marketing	3.06 %
Financial Management	0.87 %
Social Responsibility / CSR	0.77 %
Behavioural Skills	1.48 %

From the calculation of the overall average prevalence of skills within the 8 categories in the total data sample it is evident that keywords within *Commercial & Marketing*, *Leadership* and *Networking* were the most frequently used. On the other side of the spectrum, keywords signalling skills within *HR Management*, *Social responsibility*, *Financial Management* and *Opportunity Recognition* were less likely to be found on the profile pages of the chosen sample.

### 4.1.1 Number of start-ups

In order to understand whether previous start-up experience impacted the prevalence of skills the mean of this sub-sample was calculated. The sub-sample was split to look into entrepreneurs who had no previous start-up experience, and those who had start-up experience, thus the sample presented as follows:

0 Start-ups: 53      1+ Start-ups: 47

**Table 7: Calculation of Mean: Start-up experience**

<b>Skill Category</b>	<b>Average / Mean 0 Start ups</b>	<b>Average/ Mean 1+ Start ups</b>	<b>Statistically Significant differences</b>	<b>P-Value</b>	<b>Confidence Interval</b>
Opportunity Recognition	1.31 %	1.12 %	No		
HR Management / Human Competence	0.76 %	0.61 %	No		
Networking	2.18 %	1.79 %	Yes	0.07200	90%
Leadership / Management	2.30 %	1.83 %	Yes	0.04016	95%
Commercial & Marketing	3.16 %	2.94 %	No		
Financial Management	0.95 %	0.79 %	No		
Social Responsibility / CSR	0.98 %	0.53 %	No		
Behavioural Skills	1.46 %	1.49 %	No		

Table 7 shows the mean of references related to each skill category based on the number of start-ups that the entrepreneur had taken part in. As can be seen, for most skills no statistically significant differences were identified between the sub-samples. However, when it came to *Networking* and *Leadership/Management* both skill categories exhibited statistically significant differences between entrepreneurs with start-up experience and entrepreneurs without start-up experience. *Networking* was statistically significant at a 90% confidence level whilst *Leadership/Management* was statistically significant at a 95% confidence level.

### 4.1.2 Gender

To understand whether *Gender* had an impact on the usage of references connected to each skill category, the means were calculated for female and male entrepreneurs separately, the sample sizes were as follows:

Female: 34

Male: 66

The mean for each skill category can be seen in the below table:

**Table 8: Calculation of Mean: Gender**

<b>Skill Category</b>	<b>Average / Mean Female</b>	<b>Average/ Mean Male</b>	<b>Statistically Significant differences</b>
Opportunity Recognition	1.56 %	1.04 %	No
HR Management / Human Competence	0.69 %	0.69 %	No
Networking	1.88 %	2.05 %	No
Leadership / Management	1.61 %	2.32 %	No
Commercial & Marketing	3.21 %	2.98 %	No
Financial Management	0.83 %	0.90 %	No
Social Responsibility / CSR	0.73 %	0.78 %	No
Behavioural Skills	1.77 %	1.33 %	No

Table 8 shows the difference in skill keyword prevalence between genders. Although some differences can be seen, none were statistically significant.

### 4.1.3 Master's degree Count

When looking into the sub-sample *Masters other than Entrepreneurship & Innovation*, the sample was split into those with more than one master's degrees and those with only one master degree being Entrepreneurship & Innovation. The sample sizes looked as follows:

1 Master's degree: 78

2 Master's degrees: 22

The calculation for means for each of the two subsamples can be seen below:

**Table 9: Calculation of Mean: Master's degree count**

<b>Skill Category</b>	<b>Average / Mean 1 master</b>	<b>Average/ Mean 2 masters</b>	<b>Statistically Significant differences</b>
Opportunity Recognition	1.23 %	1.27 %	No
HR Management / Human Competence	0.70 %	0.70 %	No
Networking	1.99 %	1.99 %	No
Leadership / Management	2.07 %	2.06 %	No
Commercial & Marketing	3.06 %	3.03 %	No
Financial Management	0.87 %	0.88 %	No
Social Responsibility / CSR	0.77 %	0.82 %	No
Behavioural Skills	1.48 %	1.41 %	No

As demonstrated in Table 9, no statistical differences regarding skill keyword prevalence between entrepreneurs with a single master's degree and entrepreneurs with double master's degrees were identified.

#### **4.1.4 Years of work experience**

To understand whether *work experience* had an effect on the usage of references connected to each skill category, the sub-sample was split into those with less than 5 years of work experience and those with more. The sample sizes looked as follows:

<5 Years' experience: 24 >5 Years' Experience: 76

**Table 10: Calculation of Mean: Years of Work Experience**

<b>Skill Category</b>	<b>Average / Mean &lt; 5 Years</b>	<b>Average/ Mean &gt; 5 Years</b>	<b>Statistically Significant differences</b>
Opportunity Recognition	1.08 %	1.26 %	No
HR Management / Human Competence	0.71 %	0.68 %	No
Networking	1.87 %	2.03 %	No
Leadership / Management	1.74 %	2.19 %	No

Commercial & Marketing	3.21 %	3.01 %	No
Financial Management	1.11 %	0.79 %	No
Social Responsibility / CSR	0.65 %	0.80 %	No
Behavioural Skills	1.91 %	1.34 %	No

When it came to work experience, no statistically significant differences were found between entrepreneurs who had below 5 versus above 5 years of work experience, as can be seen in Table 10.

#### 4.1.5 Number of Connections

Looking into the sub-sample *number of connections*, the sample was split into those with less than 500 connections and those with more than 500 connections. The size of these subsamples presented as follows:

<500 Connections: 29 >500 Connections: 71

**Table 11: Calculation of Mean: Number of connections**

<b>Skill Category</b>	<b>Average / Mean &lt; 500</b>	<b>Average/ Mean &gt; 500</b>	<b>Statistically Significant differences</b>
Opportunity Recognition	1.25 %	1.21 %	No
HR Management / Human Competence	0.79%	0.65 %	No
Networking	1.80 %	2.07 %	No
Leadership / Management	1.85 %	2.17 %	No
Commercial & Marketing	3.26 %	2.98 %	No
Financial Management	1.00 %	0.82 %	No
Social Responsibility / CSR	0.63 %	0.83 %	No
Behavioural Skills	1.22 %	1.58 %	No

Table 11 shows the difference in skill keyword prevalence between entrepreneurs with less than 500 connections and those with more than 500 connections. Although some minor differences in prevalence can be seen, none were statistically significant.

## 5. Analysis & Discussion

This chapter analyses and discusses the results found in chapter 4. The chapter is divided into two sub-chapters, where one describes the overall prevalence of skills among early-stage entrepreneurs and the other assesses the significant statistical findings from the subsamples.

### 5.1 Prevalence of Skills - Total Sample

Considering the overall sample, building upon the results from the statistical analysis presented in Table 5 a variation in the prevalence of skills was found. Based on the mean of each skill category, *Commercial & Marketing* had the highest score, indicating that 3.6 % of all text written by the 100 entrepreneurs in the data sample included keywords related to this category. When developing the list of skills relevant for entrepreneurs, *Commercial & Marketing* was stressed as an important competence by the researchers Herron & Robinson (1993), Lorrain et al. (1998 cited in Loué & Baronet, 2012); Loué & Baronet (2012) and Kaur (2013).

Considering the research by Kaur (2013), it is evident that marketing especially in the 21st century, along with globalisation, has become an important activity within business, as all countries depend on resource utilisation to build profitable industries. According to Kaur (2013, p. 32), an “...entrepreneur is a person who changes raw material into goods by taking risk in the market for profit. Entrepreneur uses his ability to organize a business venture to achieve the goals.”. Thus, it can be argued that the most important competence of an entrepreneur is to be able to develop a profitable business by understanding the market. In relation to this research, it is evident that when early-stage entrepreneurs use keywords within *Commercial and Marketing*, conformity is built to external stakeholders in accordance with Suddaby, Bitektine & Haack (2017). This is further supported by the research of Herron & Robinson (1993), which implied that a venture’s performance depends on *the entrepreneur* who is described as an individual initiating and reallocating economic resources.

From the 100 LinkedIn profiles, it is evident that many entrepreneurs use marketing keywords when describing themselves. Some examples can be seen here: “Owned 5-digit monthly marketing budget” or “Very ambitious and hardworking individual with great marketing skills”. This displays how entrepreneurs aim to display either their previous results within marketing or stress the fact that they have skills within marketing.

Looking into the list of *20 things entrepreneurs should know about angel investors* presented by Forbes (2015) market opportunity, business plan and financial projections are deemed as important. Although these factors are related to business angels, they can arguably be connected to all investors, and by extension also be interesting for other stakeholders. The crucial aspects cited in Forbes’ list can all be related to marketing abilities, and thus align with the idea of showing the capacity to build a financially stable business through marketing strategies. It is therefore suggested that a main reason for early-stage entrepreneurs to consciously or unconsciously present themselves with marketing keywords is with the aim of building legitimacy among potential investors or stakeholders. Conversely, because the 21st century requires well-developed marketing strategies to build economic success (Kaur, 2013).

With scores of 2.08% and 2.0% *Leadership/Management* and *Networking* were the skills with the highest prevalence of keywords after *Commercial & Marketing*. These skills were suggested as the most important when building legitimacy by the following researchers: Wheelen & Hunger (1989); Chandler & Jensen (1992); Herron & Robinson (1993); Lorrain et al. (1998 cited in Loué & Baronet, 2012); Kaur (2013); Cadieux (2007 cited in Loué & Baronet, 2012) and Loué & Baronet (2012).

According to Kaur (2013, p. 32), the ability to “...direct, lead, delegate, motivate, plan and schedule work.” are one of the most important competencies for entrepreneurial success. While marketing can be seen as an explicit knowledge or tacit skill that is part of the entrepreneur’s human capital, the competency of *Leadership/Management* can be seen as a social capital which the entrepreneur collects among other individuals (Wasserman, 2013, p. 79). The same is applicable for the skill *networking* which is a social capital that can be strengthened amongst other individuals through e.g., social networks (Lans, Blok & Gulikers, 2015). When entrepreneurs present themselves with keywords such as “Creative, Leader, Time Manager, Good activities organizer, Effective discipline skills, Organization

of behaviour...” it is a way to prove that they not only have the skills required to do a certain job but also the personality traits required to do it. LinkedIn is a social network that is built to let business and career professionals connect, it is a way for young entrepreneurs to build strategic partnerships or even find a potential investor or stakeholder for their venture (Duermeyer, 2020). It is a website that is built to show a resumé online and can be considered as a marketing tool to “sell yourself”. However, as indicated in this study, in order to stand out from the crowd, it is key to show social competences and build strong and relevant connections. In accordance with this, it can be argued that an entrepreneur’s human capital is not enough on its own, but that attributes of the social capital such as *Management & Leadership* or *Networking* make the entrepreneur appear more legitimate.

Keywords signalling skills within *HR Management*, *Social responsibility*, *Financial Management* and *Opportunity Recognition* had an overall average score of less than 2%, indicating that they were used less by the entrepreneurs in the sample.

In their research, Pavett & Lau (1983) concluded that human competence, especially within managing roles, was the most important for job performance. The specific skills that Pavett & Lau (1983, p. 176) suggest are “... listening skills, verbal communication skills, patience, understanding...” which are all important particularly in leadership or management roles. For early-stage entrepreneurs who either are solo founders or work in a small team, the roles within the team are often undefined, where all team members adapt to mutual roles within the organisation (Singh, Tucker & House, 1986). It can therefore be argued that skills within *Human Resources* are developed in a later stage when there is a clear division of roles in a founding team (Wasserman, 2012).

The same can be argued for *Behavioural Skills* which include motivation, passion for the project and self-discipline (Loué & Baronet, 2012; Kaur, 2013; Warnick et al. 2018). According to Haas & Mortensen (2016), motivation or passion can be strengthened through 4 enabling conditions (compelling direction, strong structure, supportive context and shared mindset) in a founding team. This arguably concludes that behavioural skills are a result of other factors being settled and present for an early-stage entrepreneur.

*Financial Management* is suggested as an important entrepreneurial skill by Wheelen & Hunger (1989); Lorrain et al. (1998 cited in Loué & Baronet, 2012) and Loué & Baronet (2021). *Financial Management* can be considered as a tacit skill that can be obtained through previous experience or training. Although the expectation for financial success or a profitable business are often mentioned in relation to successful entrepreneurs, the category only comprised a total average score of 0.87%. When using keywords related to finance, the entrepreneurs often used it in relation to other objects such as in this example: “*Preparing budget processes, cost analysis and adjustments...*” where the financial terms *budget* and *cost analysis* describe responsibilities within the job function as an organisational manager.

Although *Opportunity Recognition* is considered as an important entrepreneurial skill by many researchers (Chandler & Jansen, 1992; Herron & Robinson, 1993; Lorrain et al., 1998 cited in Loué & Baronet, 2012; Loué & Baronet, 2012; Kaur, 2013) it only had an average score of 1.22%. Recognising opportunities is considered as a core ability for entrepreneurs and according to Hofer & Sandberg (1987 cited in Chandler & Jansen, 1992, p. 225) “Selecting a high-quality business opportunity is believed to impact venture performance.”. This indicates that opportunity recognition is an ability which pioneers the entrepreneurial career. It can therefore be argued that once a feasible opportunity is discovered and tested, the entrepreneur rather aims to “sell/showcase” their business idea than the ability to discover opportunities. Nevertheless, some examples found in the sample included entrepreneurs stressing their ability of recognising opportunities in certain contexts. One example included: “I possess the ability to successfully analyse an organization's support requirements, identify deficiencies or opportunities...”. This example indicates that the relevance of opportunity recognition is not only deemed necessary when starting a new venture but can also be important in established businesses.

*Social Responsibility / CSR* has an average score of 0.77% which was among the lowest in the dataset. Interestingly, only newer research such as Kaur (2013) and Radu-Lefebvre, Loue & Redien-Collot, (2019) mention social responsibility as an important entrepreneurial competency. According to Kaur (2013, p. 32), social responsibility is “...the positive activities a company under takes [sic] in the society in which it operates”. This statement aligns with the nowadays view on CSR practices that include ideas such as *the triple bottom line* (Elkington, 1994) or *creating shared value* (Porter & Kramer, 2011). From a financial

perspective, Baron (2007, p. 683) argues that “*When investors anticipate the CSR, shareholders do not bear its cost. Instead, the entrepreneurs who form the CSR firms bear the cost.*”.

This statement anticipates that entrepreneurs who incorporate social responsibility in their venture are willing to take the risk of financial loss, as a way of reaping the potential benefits of being seen as a company “doing good” or an entrepreneurial “warm glow” (Baron, 2007). In social entrepreneurship shareholders cannot expect financial returns after an investment but rather social return and a feeling of “doing good”. Therefore, it could be concluded that early-stage entrepreneurs focus on the profitability and scalability of their ventures or business ideas rather than the social return, especially if the aim is to build legitimacy among potential financial equity investors (Oranburg, 2020).

## **5.2 Statistical significances - Sub-samples**

Irrespective of how the sample is subdivided, except for one instance, no differences in how entrepreneurs present themselves were found. This indicates that the LinkedIn profiles that were captured are objective in the sense that they were not dependent on e.g., gender or education, but more than anything else, the profile is rather a picture of the individual entrepreneur. This is further highlighted by the fact that statistical significance was found in the subsample *start-up experience* with *Networking* having a 90% confidence level, whilst *Leadership/Management* was statistically significant at a 95% confidence level.

A possible explanation as to why entrepreneurs with start-up experience to a lesser degree highlight their skills within *networking* and *leadership / marketing* is that the success of the venture speaks for itself. Entrepreneurs who have successfully launched a start-up have, to some extent, already proved that they have what it takes to start a business and make it successful. This notion is in accordance with Stuart & Abetti (1990) who find that entrepreneurial experience of the company’s leader/founder is the most significant variable explaining start-up performance.

As such, it is unsurprising that evidence was found of experienced entrepreneurs omitting an emphasis of their tacit skills, but rather social capital on LinkedIn. This is because, as Stuart & Abetti (1990, p. 160) phrases: “...obviously experience in starting previous ventures

provides knowledge on what's important, how to do things, contacts etc". This implies that founders with already acquired experience in starting a venture are more focused on building and managing relationships with stakeholders and leading the early-stage organisation and processes, which is aligned with the findings in the research of Shane & Stuart (2002).

## 6. Conclusion

This study provided an investigation of how early-stage entrepreneurs try to highlight their skills on LinkedIn and connected the findings with previous research on which entrepreneurial skills were deemed most important.

The results showed that entrepreneurs with prior start-up experience to a lesser degree opt to highlight their skills within *Networking* and *Leadership / Management* in comparison with entrepreneurs who have no prior start-up experience. The notion that experienced entrepreneurs to a lesser extent highlight their skills is in line with previous research (Stuart & Abetti, 1990), arguing that previous experience clearly demonstrates that the entrepreneur knows how to start, run and manage a start-up successfully. That is, there is no need to showcase the entrepreneurial skills as they are self-explanatory within themselves and function as a way of building legitimacy.

This research also shows that experienced entrepreneurs make use of the social network LinkedIn to *perform* their legitimacy. This is demonstrated by both their technical and behavioural skills, in accordance with the strategy described by Suddaby, Bitektine & Haack (2017) the experienced entrepreneurs build legitimacy by *performing*. As an early-stage entrepreneur with no track record, and therefore suffering from liability of newness (Stinchcombe, 1965), it may be hard building legitimacy by *performing*. In this case, entrepreneurs may find it easier to build legitimacy by *conforming* (Suddaby, Bitektine & Haack, 2017), in which an entrepreneur tries adopting characteristics, forms or practices instituted mainly by external potential stakeholders. This provides an explanation as to why inexperienced entrepreneurs, seemingly, to a larger extent opt to highlight their skill sets in written text on LinkedIn.

Furthermore, the results from this study indicate that there are no differences in how entrepreneurs present themselves on LinkedIn in terms of gender, educational background, number of connections or previous work experience (outside of start-up experience). However, there seems to be differences in which skills are highlighted by entrepreneurs on LinkedIn. Skills such as *marketing, leadership / management* and *networking* are much more prevalent in the texts on LinkedIn than other skills such as *HR management / human competence, social responsibility* and *financial management*. Although the differences in prevalence have not been statistically tested for significance, a domain that can favourably be examined in future research, the results indicate that early-stage entrepreneurs favour skills crucial to early-stage venture success.

Stinchcombe (1968) highlighted the importance for ventures in the growth-stage of becoming part of a *power hierarchy* in order to build exchange relationships and gain legitimacy. This is arguably an important reason for why early-stage entrepreneurs aim to build a strong network during the nascent stages of a venture or career. Related to *Commercial & Marketing*, it is clear that skills within this field are seen as important by many researchers. Kaur (2013) explained how globalisation and resource utilisation have become an important aspect of how businesses function and become profitable. Whilst Herron & Robinson (1993) stress the importance of the entrepreneur's role as initiating and relocating economical resources. This implies that entrepreneurs need to show an understanding of the market their venture operates in, to prove profitability and thus build legitimacy in the eyes of stakeholders.

This gives some indication that early-stage entrepreneurs in fact consciously or unconsciously make use of impression management strategies (Harlow, 2018) on LinkedIn in order to influence the perception of them as a legitimate entrepreneur from others (Tedeschi, 1981).

## **6.1 Practical implications & Future research**

The findings in this research may be useful for early-stage entrepreneurs as a guidebook into appropriately showcasing their skill sets and building legitimacy via online social networks. By understanding how the early-stage entrepreneurs in different stages of their

entrepreneurial career highlight different skill categories can serve as an inspiration and guideline for entrepreneurial students

Furthermore, it opens, and may lay the foundation for, future research examining how entrepreneurs are branding themselves and how it is perceived by potential stakeholders.

The list of keywords in this study was built on previous researchers' suggestions of skills that make early-stage entrepreneurs appear legitimate in the eyes of potential stakeholders or investors (see Table 2). However, the findings of this study are based on a relatively small sample and not tested outside an academic setting. This means that while this research clarified what keywords were most frequently used by early-stage entrepreneurs in the data sample there was no confirmation that the skills reflected those sought after by entrepreneurial stakeholders. To counteract this notion, future research could further build on this research by cross-examining the found keywords with the opinions of potential stakeholders.

Considering that stakeholders are relevant for early-stage entrepreneurs, it is suggested that future research assesses early-stage entrepreneurs' legitimacy in relation to professional equity investors such as business angels. New ventures lack a previous track record and factual data; thus, a private investor's perception of the founder's legitimacy is most often built on subjective opinions (Maxwell, Jeffrey & Lèvesque, 2011). The same applies to angel investors who tend to spend much time considering and collecting information about a new venture from their network or online (Harkins, 2019). Therefore, future research, building upon this study, that examines the connection between entrepreneurs' conscious or unconscious use of certain keywords and the perception of legitimacy among potential investors, would not only build an insightful guideline for early-stage entrepreneurs but also provide valuable insights for business angels.

Although this research did not find any statistical significance between the number of connections on LinkedIn and the use of keywords, previous research by Banerji & Reimer (2019) found a positive correlation between an entrepreneur's number of followers on LinkedIn and the amount of funds raised by the start-up. It is therefore suggested that future researchers conduct a mixed-method research combining quantitative data collection from LinkedIn with qualitative data from interviewing entrepreneurs who have successfully received financial funding. Such research could bring clarity for how these successful

entrepreneurs present themselves online and whether this has a correlation to the amount funded.

The saturation levels of the list of keywords developed are all above 0,5 or 50%. Future research could further build on the vocabulary set during this study to increase the likelihood of including relevant keywords. This could be done by additional rounds of *synonyms of*, and *words related to* as per the Merriam Webster thesaurus being included in the list of keywords. In doing so, future research should in theory reach higher levels of keyword saturation, resulting in a higher accuracy when searching LinkedIn profiles of entrepreneurs for relevant keywords. In addition, future research could favourably use methods of finding keywords that have a lower propensity of showing false positives. This could be done by manually reviewing the results given using NVivo or using other software that may take textual nuances into account.

Lastly, future research could be conducted using a larger sample of entrepreneurs in a different setting. This study's proxy for sourcing early-stage entrepreneurs consisted of entrepreneurial students e. Focusing on entrepreneurs who are, or have, started a business and as a consequence, are seeking the legitimacy of potential stakeholders would enable future researchers to more accurately find results relating to the approach entrepreneurs follow within online environments as a means of gaining legitimacy.

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## 8. Appendices

### Appendix 1: List of Keywords

Skill	Keywords	Saturation
<b>Opportunity Recognition</b>	absorption, account, acuity, acumen, adherence, advisement, alertness, aperture, appreciation, apprehension, apprehensiveness, ascertain, astuteness, attend, attendance, attention, awareness, behold, belfry, blitz, brightness, broadside, burst, carefulness, casualty, catch, chance, circumstance, clear-sightedness, cleverness, cogitation, cognizance, compliance, comprehension, conception, concern, conscientiousness, consciousness, consider, consideration, contemplate, contemplation, deliberation, descry, detect, determine, direction, discern, discernment, discover, disquiet, disquietude, distinguish, distress, disturbance, dread, ear, edification, endeavor, enlightenment, espy, exactness,, examine, eye, familiarity, find, firing, flash, focus, follow, for, foreboding, foreknowledge, foresight, foresightedness, fortuitousness, fortuity, fortune, fusillade, gaze, get, glance, glare, glimpse, grasp, grip, happenchance, hear, hearken heed, heedfulness, helm, hesitation, hunt, hyperawareness, hyperconsciousness, identify, incertitude, indecision, insight, judiciousness, juncture, jurisdiction, keenness, knowledge, learn, learnedness, learning, literacy, locate, logic, look, lore, lot, mastery, meticulousity, meticulousness, might, mind, mindfulness, nose, notice, observance, observation, observe, occasion, offer, opening, opportunity, oversight, particularity,	0.726

	peer, perceive, perception, perceptiveness, perceptivity, percipience, perspicacity, perturbation, pick, ponder, pondering, precision, premeditation, premonition, presage, presentiment, prudence, rationality, realization, reason, recognition, reflection, regard, watch, regulation, remark, risk, rumination, rummage, salvo, sapience, scan, scout, scrutinize, scrutinize, search, see, seek, sense, sensitivity, shot, sight, solicitude, space, split, spot, stare, storm, stretch, striving, struggle, study, superintendence, suspense, suspiciousness, sway, thinker, thought, throes, track trial, trice, trouble, try, turn twinkle, understanding, undertaking unease, uneasiness, uptake, view, vigilance, visualization, wake, wariness, watch, watchfulness, way, while, whirl, wink, wisdom, wit, witness	
<b>Human competence / HR management</b>	acknowledgement, antecedent, aptitude, ascertain, assimilate, behold, cause, co-workers, coadministration, cognize, colleagues, conceive, consideration, construe, contemplate, coworkers, crew, decipher, derive, dig, discern, employees, extrapolate, find, follow, force, gather, guise, HR, impetus, incentive, instigation, intelligence, intuition, jobbers, jobholders, labor, means, mind, motivate, nine-to-fivers, occasion, personnel, pretense, pretext, rationale, rationality, rationalization, rationalize, reason, register, savvy, speculate, staff, stimulus, suppose, take, talent, team, think, tumble, understand, understanding, wage, workers	0.503
<b>Networking</b>	affection, affiliate, affiliation, affinity, aggregate, aim, likeness, alliance, ally, ambit, amity, amplitude, aristocracy, arrangement, associate, association, attachment, befriend, board, bond, branch, brotherhood, bunch, cadre, cahoots, camaraderie, camorra, camp, caucus, chamber, , choice, chumminess, circle, civility, clan, class, clique, closeness, clout, club, coalesce, coalition,, cohere, collaborate, collaboration, collegueship, collective, combine,, comity, community, compact, companionship, compass, compassion, completeness, comradery, comradeship, concord, concurrence, confederacy, confederate, confederation, conference, confine, conformity, conglomerate, congruity, conjoin, connection, , consolidate, consortium, conspiracy, converge, cooperate, cooperation, cooperative cordiale, cordiality, corporation, correlation, correspondence, coterie, council, counter influence, coven, covenant, cream, credit, crew, crowd, cumulativeness, custom, dainty, deal, dealings, delicate, denomination, device, devotion, empathize, empathy, empire, establishment, exchange,, faction, faithful, familiarity, federate, federation,, fellowship, fraternity, friendliness, friendship, gang generosity, give-and-take, goodwill, group, guild haggle, hand, heft, help, identicalness, identify, impress, impression, imprint, in, in-group, incorporate, incorporation, institute,, institution, integration, intent, intention, interaction, interconnection, interlacement, interpersonal, interrelation, interrelationship, , intrigue, involvement, junta, junto, kindness, linkup, maneuver, manner, map, materiality, means, membership, merge, merger, mesh, meshwork, mess, , movement, multinational, mutualism, nearness, negotiation, network, networking, organization, organize, outstanding, pack, partnership, plot, project, proposal, protocol, reciprocity, reign, relate, relation, relations, relationship, sequence, series,	0.688

	settlement, similarity, sisterhood, situation, society, sodality, solidarity, sorority, sovereignty, squad, stable, symbiosis, symbiosis, sympathize, sympathy, syndicate, team team, team, ,together, togetherness, totality, trust, unification, union, unionize, unite, unity, vocation, whole,	
<b>Leadership / Management</b>	abidance, accelerating, accession, accompanying, acquiescence, act, activating, active, adherence, administering, administrating, administration, advice, advise, advisement, aegis, affiliating, agency, allocate, allot, allying, along, appoint, apprehension, apprehensiveness, arraignment, , assign, auspices, authoritative, authority, authorize, authorized, behest,, boss, brief, briefing, captainship, care, carefulness, ceaseless, chaperoning, chieftainship, s, co-directing, co-managing, coaching, coadministration, code, codirecting codirection, codirection, cognizance, collaborating, co-management, comanaging command, command, commandership, commanding, commandment, commission, commission, compact, companying, compel, compulsion, compunction, concentration, concern, concernment, condemnation, confederating, conformance, conformity, consecutively, considerateness, consideration, control, controlling, convention, conveying, cooperating, counsel, counseling counselling, count, custody, designation, direct, directing, direction, directive, directorship, directory, discernment, dominion, dominion, empower, entertainment, exciting, exhilaration, exhortation, exhorting, expostulation, feedback, feel foreboding, forefront, foresight, foresightedness, generalship, governance, governing, government, governorship, guardedness, guardianship, guarding, guidance, guide, guideline, guiding, handling, headship, heed, heedfulness, informing, injunction, innuendo, input, insinuation, instigating, instruct, instructing, instruction, intendance, interdiction, interference, interminable, interrelating, lead, leadership, leading, machination, main, manage, management, managing, mentoring, micromanaging, monitoring, navigating, observance, observation, observe, observing, operating, operation, operational, operative, piloting, pontificating, post, power, powering, practice, preaching, prearrangement, preceding, precept, presidency, presidentship, presiding pressing, , prompting, recommend, recommendation, recrimination reduction, reg, regime, regimen, regulating, regulation, reign, remonstrance, remonstrating, respect, responsibility, shepherding, steering, steering, stepping stewarding, stewarding, stewardship, stimulating, superintend, superintendence, superintendency, superintending, supervise, supervising, supervision, training, tremor, tribute, triggering, tripping, troth, trouble, trust, trusteeship, truth turning tutelage, tutelage, tutoring, ward, wariness, warn, warning,	0.787
<b>Commercial &amp; Marketing</b>	accelerate, acclaim, acclaiming, accost, accumulate, across, action, ad, advance, advent, advert, advertise, advertisement, advertising, aggrandize, amplify, announce, announcement, announcing, annunciate, annunciating, annunciation, apprise, article, auctioning, augment, ballyhoo, ballyhooing, banderol, banderole, banner, bargain, bargaining, bark, barking, barter, bartering, bid, bill, billboard, billboarding, billing, black-	0.887

	<p>marketing, blare, blaring, blaze, blazing, blazon, blazoning, blitz, blow, blurb, boost, boosting, bootlegging, broadcast, broadcasting, broadside, brochure, build, buildup, bulletin, bulletining, business, buying, cablecast, call, calling campaign, campaigns, catalog, catalogue, catchphrase, chaffering, chapbook, clashing, coat, collect, collectanea, commentary, commerce, commercial, communicate, communicating, communication, commutation, comparison, corporate, correspond, correspondence, custom, customer, day-trading, deal, dealing, dealings, declaration, disclose, disclosing, dispatch, disseminate, distributing, distribution, e-mail, e-tail, endorse, endorsing, engrossing, enhance, enlarge, enounce, ensign, enterprise, enunciate, enunciation, epistle, exchange, exchanging, fair-trading, flier, flyer, flyersheet, gazette, guidebook, haggling, handbook, handling, handout, hassling, hawking, horse-trading, hype, hyping, impart, imparting, increase, indorse, indorsing, inflate, influencer, inform, launch, leaflet, lengthen, letter, loyalty, magazine, mail, market, market-monitoring, marketable, marketing, marketplace, mass-market, mass-produced, merchandise, merchandising, merchandize, merchandizing, merchantable, message, mission, monopolizing, negotiating, negotiation, news, newscast, newsletter, newsmagazine, newspaper, peddling, pitch, pitching, placard, placarding, plaster, playbill, preselling, present, proclaim, proclaiming, proclamation, profitable, promo, promote, promoting, promotion, promulgate, promulgating, promulgation, pronouncement, propaganda, publication, publicity, publicize, publicizing, publish, publishing, push, pushing, raise, rebuying, reciprocation, recommend, recommending, recompense, release, releasing, remarketing, reselling, resend, retailing, sell, sellable, selling, speak, speculating, spot, word, spread, spreading, story, streamer, tattle, telecast, tout, touting, tract, trade, trade-off, trading, trading, traffic, trafficking, transacting, transaction, vending, wholesale, wholesaling, word, write-up</p>	
<p><b>Financial Management</b></p>	<p>accession, account, accounting, accumulation, acquisition, advocate, affluence, assemblage, assessing, assets, bank, bankable, banking, bankroll, belongings, bequeath, bill, billionaire, budget, buyer, cache, calculating, calibrating, capital, capitalist, capitalize, cash, coffer, coffers, cofinance, coin, collection, cost, counting, cushion, deducting, defray, deposit, depositing, discharge, dollars-and-cents, donate, economic, economics, endow, enlistments, enrollments, expense, factoring, finance, finances, financial, financing, fiscal, fortune, gazillionaire, gold, grant, grubstake, hoard, holding, holdings, inventory, invest, investitures, investments, invoice, itemizing, liquidate, millionaire, monetary, money, money-spinner, money-spinning, moneybags, moneymaker, money making, multibillionaire, multimillionaire, multimillionaires, patronize, pay, paying, pecuniary, pocket, pocketbook, pockets, possessions, profitable, property, prospect, prosperity, provide, recompense, recomputing, refinance, refund, remunerative, renewal, repertoire, reserve, riches, roll, savings, spending, sponsor, stake, stock, stocking, stockpile, subsidize, substance, treasure, treasury, wealth,</p>	<p>0.70</p>

<b>Social Responsibility / CSR</b>	answerability, blameless, clean, commendable, commit, commitment, conscientious, conscionable, correct, credibility, creditable, creditableness, CSR, decent, dependability, dependableness,, ethical, exemplary, good, goody-goody, guiltless, honest, honorable, immaculate, incorrupt, irreproachable, law-abiding, legitimate, menschy, moral, moralistic, noble, oath, pharisaical, pledge, principle, principled, principles, promise, reputable, respectable, respected, responsibility right, right-minded, righteous, scrupulous, self-righteous, social solidity, solidness, stand-up, standards, sustainable, triple-bottom-line, troth, true, uncorrupted, unerring, unobjectionable, upright, upstanding, values, vow, worthy	0.514
<b>Behavioural Skills</b>	adhesion, adjudge, adjudicate, admiration, adventure, ,aggrandize, alleged, allegiance, ambition, amplify, analogize, analytic, answer, answering, appreciate, appreciation, apprehend, apprehension, aptitude, artful, artist, ascertain, assimilate, attachment, behold, bent, causality, causation, cause, certifiable, chance, changeless, charting, check, checkable, chimera, choose, chronicling, claim, clasp, clench, clever, cleverness, co-operative, cognitive, cognize, commitment, compass, connoisseur, consequent, constancy, constructive, continence, control, controlling, creativeness, creativity, daydream, decide, decipher, dedication, defendable, defensible, delusion, design, designing, devotedness, devotion, difference, differentiate, distinguish, dream, dredge, effective, effectual, efficacious, efficient, effort, empirical, encourage, encouragement, endowment, espy, esteem, excite, excusable, faith, faithfulness, fancy, favor, fealty, fidelity, figure, figuring geek, genius, grapple, grasp, grip, grok, illusion, imagination, imaginative, imaginativeness, impassion, impetus, impulse, incitation, incite, incitement, infer, ingenious, ingeniousness, ingenuity, inhibition, innovational, innovative, innovativeness, innovatory, intellect, intellection, intellectuality, intelligence, intention, intuit,, inventive, inventiveness, judge, justifiable, , learn, logic, logical, look, loyalty, meaning, meister, mentality, momentum, more, motion, motivation, move, negotiate, nonentity, note, notice, , observe, open, openness, operative, organizing, original, originality, perceive, perception, percipience, perform, piety, pique, practice, predicting, prediction, premonition, preparing, presage, presaging, provocation, provoke, rational, rationale, realize, reason, reasonable, reasoning, recall, reciting, recognize, recollect, self-command, self-containment, self-control, self-government, self-mastery, self-possession, self-restraint, sense, sensible, steadfastness, steady, steel, step-up, stimulant, stimulate, stimulus, strategizing,, understand, understanding, unmask, view, vindicable, virtuoso, vision, well-founded, well-grounded, work working	0.540
<b>Average Saturation:</b>		<b>0.7</b>

Reaching an average saturation level of 0.7 indicates that all words in the list had minimum 1 duplicate, before the list was cleaned.

## Appendix 2: Data Collection - Key Words

Below the process of developing the final list of keywords for each skill category is shown. The words collected are found through the functions *synonyms for* and *words related to* in the Merriam Webster Thesaurus. To gain access to the original excel file showing the entire process please contact: [Jacquelinermohr@hotmail.com](mailto:Jacquelinermohr@hotmail.com) or [nicholaskelly28@gmail.com](mailto:nicholaskelly28@gmail.com)

NB: Words crossed out were not included in the cleaned list and words marked with bold are duplicates.

<b><i>Skills proposed in previous research</i></b>	<ul style="list-style-type: none"> <li>● Having a sense of Responsibility (Radu-Lefebvre, Loue &amp; Redien-Collot, 2019)</li> <li>● Social Responsibility Competency (showing responsibility towards customers, employees and the public) (Kaur, 2013)</li> <li>● Ethical competency (ethical awareness and the ability to understand ethical problems) (Kaur, 2013)</li> </ul>
<b><i>Skill categorization</i></b>	<b>Social Responsibility / CSR</b>
<b><i>Associated keywords</i></b>	responsibility, ethical, decent, good, social, honest, honorable, just, moral, nice, right, righteous, true, upright, virtuous, correct, decorous, proper, seemly, noble, principle, commendable, creditable, exemplary, legitimate, esteemed, law-abiding, menschy, reputable, respected,

<b>Level 1</b>	upstanding, worthy, blameless, clean, guiltless, immaculate, incorrupt, <del>innocent, inoffensive, irreproachable</del> , unobjectionable, pure, scrupulous, <del>spotless</del> , uncorrupted, unerring, moralistic, <del>pharisaical, rectitudinous, sanctimonious, self-righteous</del> , CSR, corporate social responsibility, <del>charge, commitment, duty</del> , imperative, incumbency, <del>need</del> , obligation, <del>office, oath, pledge, promise, troth, vow, word, arraignment, prearrangement, setup, compact, contract, covenant, pact, trust, debt, tribute, compulsion, constraint, restraint, must, requirement, coercion, duress, force, appointment, engagement, reservation, onus, all right</del> , ethical, good, honest, honorable, just, moral, nice, right, right-minded, righteous, straight, true, upright, virtuous, ethical, honest, honorable, just, noble, principled, respectable, righteous, <del>stand up, upright, upstanding, befitting, correct, de rigueur, decorous, genteel, nice, polite, proper, respectable, seemly, acceptable, adequate, all right, fairish, fine, good, passable, respectable, satisfactory, serviceable, tolerable, commonsense, commonsensible, commonsensical, firm, hard, informed</del> , just, justified, level headed, logical, rational, reasonable, reasoned, sensible, sober, solid, valid, well-founded, all right, decent, ethical, honest, honorable, just, moral, nice, right, righteous, right-minded, straight, true, upright, virtuous, admiring, applauding, appreciative, approbatory, approving, commendatory, complimentary, favorable, friendly, positive, <del>constant</del> , dedicated, devoted, <del>devout, down the line, faithful, fast, loyal, pious, staunch (also stanch), steadfast, steady, true, true blue, deserving, meritorious, worthy</del> , truthful, <del>veracious, all right, decent</del> , ethical, good, honorable, just, moral, nice, right, right-minded, righteous, straight, true, upright, virtuous, decent, ethical, honorable, just, noble, principled, respectable, righteous, stand-up, upright, upstanding, artless, genuine, <del>guileless, ingenuous, innocent, naive</del> , natural, real, <del>simple</del> , sincere, true, unaffected, unpretending, unpretentious, candid, direct, <del>forthcoming, forthright, foursquare, frank, free-spoken, freehearted, open, openhearted, out front, outspoken, plain, plainspoken, straight, straightforward, unguarded, unreserved, up front, conscientious, conseionable</del> , ethical, honorable, just, moral, principled, scrupulous
<b>Cleaned List of associated keywords level 1</b>	abiding, admiring, all right, applauding, appreciative, approbatory, approving, artless, blameless, candid, clean, commendable, commendatory, complimentary, correct, corporate social responsibility, creditable, CSR, decent, <b>decent, decent</b> , decorous, dedicated, devoted, direct, esteemed, ethical, <b>ethical, ethical, ethical, ethical</b> , exemplary, favorable, friendly, genuine, good, <b>good, good</b> , guiltless, honest, <b>honest, honest, honest</b> , honorable, <b>honorable, honorable, honorable, honorable</b> , immaculate, incumbency, imperative, incorrupt, just, <b>just, just, just, just</b> , justified, law-menschy, legitimate, moral, <b>moral, moral, moral, moral</b> , moralistic, natural, nice, <b>nice, nice, nice</b> , noble, <b>noble, noble</b> , obligation, positive, principle, principled, <b>principled, principled</b> , proper, pure, real, respected, respectable, <b>respectable</b> , respectable, reputable, responsibility, right, <b>right, right, right</b> , righteous, <b>righteous, righteous, righteous, righteous, righteous</b> , right-minded, <b>right-minded, right-minded, right-minded</b> , seemly, scrupulous, <b>scrupulous</b> , sincere, social, stand-up, straight, <b>straight, straight</b> , truthful, true, <b>true, true, true, true</b> , unaffected, uncorrupted, unerring, unobjectionable, unpretending, unpretentious, upright, <b>upright, upright, upright</b> , upright, upstanding, upstanding, virtuous, <b>virtuous, virtuous, virtuous</b> , well-founded, worthy
<b>Without Duplicates</b>	abiding, admiring, all right, applauding, appreciative, approbatory, approving, artless, blameless, candid, clean, commendable, commendatory, complimentary, correct, corporate social responsibility, creditable, CSR, decent, decorous, dedicated, devoted, direct, esteemed, ethical, exemplary, favorable, friendly, genuine, good, guiltless, honest, honorable, immaculate, incumbency, imperative, incorrupt, just, justified, law-menschy, legitimate, moral, moralistic, natural, nice, noble, obligation, positive, principle, principled, proper, pure, real, respected, respectable, reputable, responsibility, right, righteous, right-minded, seemly, scrupulous, sincere, social, stand-up, straight, truthful, true, unaffected, uncorrupted, unerring, unobjectionable, unpretending, unpretentious, upright, upstanding, virtuous, well-founded, worthy
<b>Level of Saturation</b>	<ul style="list-style-type: none"> <li>● Cleaned List: 141</li> <li>● Without duplicates: 82</li> <li>● Result: 0,418</li> </ul>
<b>Associated keywords Level 2</b>	blame, fault, liability, accountability, answerability, burden, charge, commitment, devoir, duty, imperative, incumbency, need, obligation, office, oath, pledge, promise, troth, vow, word, arrangement, prearrangement, setup, compact, contract, covenant, pact, trust, debt, payment, tribute, compulsion, constraint, restraint, must, requirement, coercion, duress, force, appointment, engagement, reservation, onus, dependability, dependableness, reliability, reliableness, solidity, solidness, sureness, trustability, trustworthiness, inerrancy, infallibility, credibility, creditability, creditableness, all right, decent, good, honest, honorable, just, moral, nice, right, right-minded, righteous, straight, true, upright, virtuous, correct, decorous, proper, seemly, high-minded, noble,

	<p>principled, commendable, creditable, exemplary, legitimate, esteemed, law-abiding, menschy, reputable, respected, upstanding, worthy, blameless, clean, guiltless, immaculate, incorrupt, incorruptible, innocent, inoffensive, irreproachable, unobjectionable, angelic, lily-white, pure, scrupulous, spotless, uncorrupted, unerring, goody-goody, moralistic, pharisaical, rectitudinous, sanctimonious, self-righteous, decent, honest, honorable, just, noble, principled, respectable, righteous, stand-up, upright, upstanding, conscientious, conscionable, honest, honorable, just, moral, principled, scrupulous, uncorrupted, unerring, moralistic, pharisaical, just, moral, nice, right, righteous, true, upright, CSR, corporate social responsibility, oath, pledge, promise, troth, vow, word, arraignment, noble, principle, commendable, creditable, exemplary, legitimate, esteemed, law-abiding, menschy, reputable, respected, upstanding, worthy, blameless, clean, guiltless, immaculate, sustainable, decent, ethical, honest, honorable, just, noble, respectable, righteous, stand-up, upright, upstanding, conscientious, conscionable, ethical, honest, honorable, just, moral, scrupulous, form, mode, mores, norm, principles, standards, values, convention, custom, heritage, prescription, rubric, rule, actual, concrete, de facto, effective, existent, factual, genuine, real, sure-enough, very, social responsibility</p>
<i><b>Cleaned list of associated keywords level 2</b></i>	<p>answerability, blameless, <b>blameless</b>, clean, <b>clean</b>, commendable, <b>commendable</b>, commit, <b>commit</b>, commitment, <b>commitment</b>, conscientious, <b>conscientious</b>, conscionable, <b>conscionable</b>, correct <b>correct</b>, , credibility, <b>credibility</b>, creditable, <b>creditable</b>, creditableness, CSR, <b>CSR</b>, decent, <b>decent</b>, <b>decent</b>, dependability, dependableness,, ethical, <b>ethical</b>, exemplary, <b>exemplary</b>, good, <b>good</b>, goody-goody, guiltless, <b>guiltless</b>, , honest, <b>honest</b>, <b>honest</b>, <b>honest</b>, <b>honest</b>, honorable, <b>honorable</b>, <b>honorable</b>, <b>honorable</b>, <b>honorable</b>, <b>honorable</b>, immaculate, <b>immaculate</b>, incorrupt <b>incorrupt</b>, irreproachable, <b>law-abiding</b>, <b>law-abiding</b>, legitimate, <b>legitimate</b>, menschy, <b>menschy</b>, moral, <b>moral</b>, <b>moral</b>, <b>moral</b>, moralistic, <b>moralistic</b>, noble, <b>noble</b>, <b>noble</b>, <b>noble</b>, oath, <b>oath</b>, pharisaical, <b>pharisaical</b>, pledge, <b>pledge</b>, principle, principled, <b>principled</b>, <b>principled</b>, principles, promise, <b>promise</b>, <b>reputable</b>, reputable, respectable, <b>respectable</b>, respected, <b>respected</b>, responsibility <b>responsibility</b>, right, <b>right</b>, <b>right</b>, right-minded, righteous, <b>righteous</b>, <b>righteous</b>, <b>righteous</b>, scrupulous, <b>scrupulous</b>, <b>scrupulous</b>, self-righteous, social <b>social</b> solidity, <b>solidity</b>, solidness, stand-up, <b>stand-up</b>, standards, sustainable, triple-bottom-line, <b>triple-bottom-line</b>, troth, <b>troth</b>, true, <b>true</b>, , uncorrupted, <b>uncorrupted</b>, unerring, <b>unerring</b>, unobjectionable, upright, <b>upright</b>, <b>upright</b>, <b>upright</b>, upstanding, <b>upstanding</b>, <b>upstanding</b>, <b>upstanding</b>, values, vow, <b>vow</b>, worthy, <b>worthy</b>,</p>
<i><b>Without Duplicates</b></i>	<p>answerability, blameless, clean, commendable, commit, commitment, conscientious, conscionable, correct credibility, creditable, creditableness, CSR, decent, dependability, dependableness,, ethical, exemplary, good, goody-goody, guiltless, , honest, honorable, immaculate, incorrupt, irreproachable, law-abiding, legitimate, menschy, moral, moralistic, noble, oath, pharisaical, pledge, principle, principled, principles, promise, reputable, respectable, respected, responsibility right, right-minded, righteous, scrupulous, self-righteous, social solidity, solidness, stand-up, standards, sustainable, triple-bottom-line, troth, true, uncorrupted, unerring, unobjectionable, upright, upstanding, values, vow, worthy,</p>
<i><b>Level of Saturation</b></i>	<ul style="list-style-type: none"> <li>● Cleaned List: 136</li> <li>● Without duplicates: 66</li> <li>● Result: 0.514</li> </ul>

### Appendix 3: NVivo Text Search Query

The results from the NVivo text search query for each category were analysed as a percentage of the entrepreneur’s total written word on LinkedIn.

LinkedIn / Skill	Opportunity Recognition	HR / Human Competence	Networking	Leadership / Management	Commercial & Marketing	Financial Management	CSR / Social Responsibility	Behavioural Skills
1	0.65%	0.22%	2.60%	3.25%	2.82%	0.87%	0.54%	1.08%
2	0.74%	0.74%	1.40%	2.22%	3.54%	1.32%	1.23%	0.49%
3	2.96%	1.18%	2.37%	1.78%	2.96%	0.00%	1.78%	2.37%
4	0.20%	0.60%	2.40%	2.20%	5.01%	1.00%	1.00%	0.40%
5	0.83%	2.33%	2.33%	2.33%	0.83%	1.66%	0.50%	2.16%
6	0.83%	0.69%	1.66%	1.79%	1.79%	0.28%	0.14%	1.38%
7	0.70%	0.00%	0.70%	0.70%	4.20%	0.70%	1.40%	1.40%
8	0.72%	1.61%	2.33%	1.43%	0.54%	0.00%	0.36%	3.40%
9	1.30%	0.52%	2.34%	2.08%	5.47%	0.26%	0.52%	1.30%
10	0.93%	0.69%	2.08%	4.17%	3.70%	1.16%	0.93%	2.08%
11	2.00%	0.67%	2.67%	1.33%	0.67%	0.00%	3.33%	2.67%
12	2.68%	0.67%	3.36%	2.68%	3.36%	0.00%	0.00%	2.01%
13	1.45%	0.87%	1.73%	1.16%	2.31%	0.87%	0.00%	1.73%
14	1.22%	0.61%	3.04%	1.09%	3.04%	0.24%	0.73%	1.46%

15	0.40%	0.80%	1.20%	2.41%	2.01%	0.40%	0.00%	4.82%
16	1.06%	0.91%	1.21%	1.21%	0.76%	0.30%	0.30%	2.87%
17	1.38%	0.55%	1.30%	2.06%	0.88%	0.59%	0.50%	0.92%
18	0.78%	1.17%	1.95%	4.28%	5.06%	0.39%	0.00%	2.72%
19	0.00%	0.00%	3.13%	3.13%	0.00%	0.00%	3.13%	0.00%
20	0.34%	0.00%	3.44%	0.69%	2.75%	0.69%	0.00%	0.69%
21	1.09%	0.41%	3.28%	1.37%	5.20%	0.68%	0.00%	0.96%
22	0.91%	1.32%	1.83%	2.13%	2.13%	1.02%	0.10%	1.52%
23	0.89%	0.89%	1.56%	0.89%	3.57%	0.00%	0.67%	0.67%
24	1.27%	0.63%	2.53%	3.16%	5.38%	0.95%	0.32%	1.90%
25	1.52%	0.00%	0.51%	1.02%	6.09%	1.52%	0.00%	0.00%
26	1.29%	0.00%	1.94%	1.94%	2.59%	0.65%	1.62%	0.65%
27	1.32%	1.18%	3.03%	4.08%	4.08%	0.66%	1.05%	1.45%
28	0.44%	0.87%	2.62%	3.49%	4.37%	3.49%	0.00%	0.87%
29	1.42%	0.36%	0.89%	2.49%	1.60%	1.42%	0.53%	2.31%
30	0.00%	0.00%	0.00%	5.26%	1.75%	0.00%	0.00%	7.02%
31	1.13%	0.38%	1.88%	0.38%	3.01%	4.51%	0.00%	0.00%
32	1.51%	0.57%	0.76%	0.57%	2.65%	0.57%	0.19%	1.51%
33	0.00%	2.20%	2.20%	0.00%	0.00%	0.00%	0.00%	3.30%
34	0.96%	0.00%	1.92%	0.96%	5.77%	2.88%	1.92%	0.96%
35	8.57%	2.86%	0.00%	0.00%	2.86%	5.71%	0.00%	0.00%
36	0.00%	0.49%	1.96%	0.49%	3.43%	0.98%	0.00%	0.49%
37	1.37%	0.69%	1.72%	1.03%	1.72%	0.34%	0.00%	2.06%
38	1.14%	0.49%	2.28%	2.12%	2.61%	0.65%	1.63%	0.98%
39	2.15%	1.08%	0.00%	0.00%	2.15%	0.00%	1.08%	0.00%
40	0.94%	0.81%	2.96%	2.69%	2.15%	0.54%	0.27%	0.94%
41	2.13%	0.71%	2.37%	2.61%	2.13%	2.84%	0.47%	1.42%
42	0.39%	1.17%	3.91%	2.73%	5.47%	0.00%	0.00%	1.56%
43	1.52%	0.76%	2.66%	0.76%	5.70%	0.00%	0.00%	1.52%
44	1.72%	1.38%	0.52%	1.55%	1.20%	0.00%	0.00%	3.10%
45	1.04%	1.14%	1.04%	2.07%	2.49%	0.41%	0.62%	1.24%
46	1.42%	1.01%	3.85%	1.01%	1.62%	0.41%	0.61%	0.41%
47	3.13%	0.82%	0.66%	0.82%	1.64%	0.00%	0.82%	1.15%
48	1.68%	0.37%	2.24%	1.68%	2.80%	0.37%	0.00%	1.31%
49	1.69%	0.56%	3.37%	3.37%	5.06%	0.56%	0.00%	0.56%
50	4.41%	1.47%	2.94%	2.94%	4.41%	0.00%	0.00%	1.47%

51	1.49%	0.93%	2.79%	1.86%	5.03%	0.74%	0.56%	2.05%
52	1.07%	0.00%	2.14%	5.88%	1.07%	0.00%	1.60%	0.53%
53	0.92%	0.46%	1.39%	0.23%	1.39%	0.23%	0.69%	1.39%
54	0.63%	2.22%	2.54%	4.52%	1.51%	0.63%	1.03%	0.95%
55	0.86%	0.74%	3.08%	1.85%	2.96%	0.62%	0.49%	1.23%
56	0.91%	0.72%	4.53%	1.45%	2.17%	0.72%	0.36%	0.91%
57	1.32%	0.33%	1.32%	1.97%	0.66%	0.33%	0.33%	1.64%
58	1.27%	0.00%	1.02%	1.27%	1.78%	6.62%	0.00%	1.53%
59	0.00%	1.00%	2.49%	4.98%	2.49%	0.50%	0.00%	1.00%
60	0.00%	0.79%	3.15%	0.79%	0.79%	1.57%	3.15%	1.57%
61	1.87%	0.33%	1.76%	1.32%	1.98%	0.33%	1.21%	0.99%
62	1.70%	0.31%	4.48%	2.93%	2.16%	1.08%	0.77%	1.85%
63	1.52%	1.61%	1.23%	1.80%	2.65%	0.76%	0.09%	1.04%
64	0.91%	0.26%	1.96%	2.87%	2.22%	0.39%	0.00%	0.91%
65	0.63%	0.63%	1.26%	2.52%	8.18%	0.00%	1.89%	0.00%
66	0.62%	0.62%	1.24%	4.35%	2.48%	0.00%	1.24%	1.86%
67	0.00%	1.39%	1.39%	2.78%	4.17%	0.00%	0.00%	2.78%
68	0.31%	0.31%	1.24%	1.86%	7.76%	0.62%	0.62%	0.62%
69	0.66%	0.22%	2.21%	1.44%	4.54%	0.11%	0.88%	0.55%
70	0.43%	0.43%	0.64%	2.36%	5.15%	0.64%	0.43%	2.58%
71	1.32%	1.32%	0.66%	0.00%	0.66%	0.00%	0.66%	0.66%
72	1.20%	0.80%	2.40%	2.00%	2.80%	0.80%	0.80%	1.20%
73	2.28%	0.00%	1.37%	1.83%	5.94%	1.37%	0.46%	0.00%
74	1.23%	0.74%	1.96%	2.94%	2.94%	1.10%	0.12%	0.37%
75	1.24%	0.41%	2.49%	4.01%	4.29%	1.11%	1.80%	0.28%
76	1.44%	0.24%	0.24%	0.00%	4.56%	0.24%	0.72%	1.44%
77	2.15%	0.96%	2.39%	1.91%	7.66%	0.72%	0.96%	0.72%
78	1.55%	0.77%	2.32%	1.55%	1.80%	1.55%	20.36%	1.03%
79	2.25%	0.45%	3.60%	2.25%	1.80%	0.00%	1.35%	0.45%
80	0.22%	0.22%	0.86%	1.73%	2.38%	0.22%	0.22%	1.08%
81	1.06%	1.23%	2.65%	1.59%	2.47%	1.23%	0.18%	0.88%
82	0.85%	0.28%	1.71%	3.70%	2.85%	0.57%	0.28%	2.28%
83	0.71%	0.29%	1.71%	2.57%	2.28%	0.57%	0.43%	1.00%
84	1.77%	0.88%	0.88%	0.88%	0.88%	0.00%	0.88%	1.77%
85	4.17%	0.00%	0.00%	4.17%	0.00%	4.17%	0.00%	4.17%
86	1.54%	0.00%	4.62%	3.08%	3.08%	0.00%	0.00%	0.00%
87	1.76%	0.78%	2.94%	1.18%	2.75%	0.00%	0.20%	2.55%

88	0.97%	0.49%	1.46%	1.95%	4.99%	0.97%	0.61%	1.71%
89	1.42%	0.94%	1.42%	0.47%	1.18%	0.71%	0.94%	1.42%
90	0.00%	0.00%	0.00%	2.38%	11.90%	7.14%	0.00%	0.00%
91	0.71%	0.24%	3.07%	3.07%	0.24%	0.24%	0.00%	2.36%
92	1.08%	0.46%	1.08%	0.92%	5.54%	0.31%	0.31%	0.77%
93	0.30%	0.60%	1.19%	1.79%	2.39%	1.19%	0.00%	0.00%
94	0.85%	0.00%	2.54%	5.08%	5.08%	0.85%	0.85%	0.00%
95	1.30%	0.87%	2.16%	3.46%	3.25%	2.16%	0.00%	0.22%
96	0.00%	0.00%	2.54%	6.09%	4.57%	0.00%	0.00%	0.00%
97	2.00%	1.33%	5.00%	1.00%	2.67%	0.67%	0.67%	1.33%
98	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.29%
99	1.28%	0.32%	2.09%	1.61%	4.82%	1.44%	0.32%	0.64%
100	0.00%	1.69%	1.69%	0.00%	1.69%	0.00%	0.00%	1.69%

Average	1.22 %	0.69 %	2.00 %	2.08 %	3.06 %	0.87 %	0.77 %	1.48 %
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## Appendix 4: Sample - LinkedIn Profiles

No.	Gender	Graduation	Start-ups	Bachelor	Master other than Entrepreneurship & Innovation	Years of work experience	Connections
1	Male	2021	0	Law	Business Administration	>5	500+
2	Male	2019	1	Business Administration	-	>5	500+
3	Female	2020	0	Public health nutrition and food policy	-	>5	261
4	Female	2021	0	Media & entertainment management	-	>5	500+
5	Male	2021	0	Management	-	>5	439
6	Male	2019	2	Hospitality /Administration Management	-	>5	500+
7	Female	2021	1	Marketing & Communication	International business & marketing	>5	450
8	Male	2021	0	Architecture	Architecture	>5	500+
9	Female	2017	1	Business Administration	-	>5	373
10	Male	2021	0	Finance, political science	-	>5	500+
11	Female	2021	1	Education, English language & Literature	Education & teaching	>5	408

12	Male	2019	0	Industrial engineering and business management	-	>5	500+
13	Female	2018	1	Arts	-	>5	500+
14	Male	2018	0	Business Administration	-	>5	500+
15	Male	2017	1	Industrial design	-	>5	500+
16	Female	2019	1	International relations	-	>5	500+
17	Male	2020	1	Business Administration	Leisure, tourism & environment	>5	500+
18	Male	2021	0	Marketing, graphic design	-	<5	439
19	Male	2020	0	International Marketing & Sales	-	>5	346
20	Female	2018	1	International Business & Management	-	>5	500+
21	Female	2020	0	International Relations	-	>5	500+
22	Male	2017	0	Finance	-	>5	500+
23	Male	2017	3	Sports & exercise Management	-	<5	382
24	Male	2021	0	Psychology & management	-	<5	442
25	Female	2021	0	Finance	Public finance	>5	457
26	Male	2019	0	Business Administration	-	<5	500+
27	Male	2019	0	International Relations & diplomatic affairs	Fashion Management	<5	500+
28	Male	2021	0	Real Estate Management & Business Administration	-	>5	500+
29	Male	2021	2	Business administration	-	>5	500+
30	Male	2021	0	Hospitality & business management	-	>5	500+
31	Male	2018	1	Business Administration	-	>5	500+
32	Female	2019	0	Food Technology & Processing	-	<5	249
33	Female	2020	1	Business Administration	-	<5	500+
34	Female	2021	0	International business, international relations	-	<5	500+
35	Female	2018	0	Finance	-	>5	181
36	Male	2021	1	Business & Economics	-	>5	462
37	Male	2021	1	Design Engineering	-	>5	168
38	Female	2021	0	Occupational Therapy	-	<5	117

39	Female	2018	1	Online communications	-	>5	500+
40	Male	2019	0	Energy Engineering	-	>5	500+
41	Male	2021	0	International Business	-	>5	155
42	Male	2017	0	International Business & Languages	-	>5	277
43	Male	2018	0	European Public Administration	-	<5	500+
44	Male	2021	0	Hospitality & business management	-	>5	500+
45	Male	2021	1	Tourism Management	-	>5	500+
46	Male	2019	0	Management & Economy	-	>5	500+
47	Male	2020	2	Multimedia Production	-	<5	500+
48	Male	2020	0	Politic & economy	Economic growth & population development	<5	500+
49	Male	2018	1	Economics	Economics	>5	500+
50	Female	2017	1	Marketing, Management & Innovation	Int. Marketing and Brand Management	>5	500+
51	Male	2019	0	International Business	-	>5	500+
52	Male	2021	0	Industrial engineering & Management	-	<5	500+
53	Male	2017	2	Psychology	-	>5	218
54	Male	2021	0	Psychology	-	>5	378
55	Female	2021	1	Business Administration	Business Administration	>5	500+
56	Male	2021	0	Software Development computer science systems development	IT project management	>5	500+
57	Male	2017	1	Industrial Engineer	-	>5	370
58	Male	2020	1	Financial Engineering	Finance	<5	500+
59	Male	2018	0	Political Science	-	>5	500+
60	Female	2021	0	Global Management	International Marketing & Brand management	<5	500+
61	Male	2017	1	Mechanical Engineering	-	>5	500+
62	Male	2018	0	Business	-	>5	500+
63	Female	2021	0	International Business & Languages	-	<5	417
64	Female	2021	1	Hospitality Management	-	>5	500+
65	Female	2020	0	Business Administration	-	>5	500+
66	Female	2017	1	??	-	>5	500+
67	Male	2017	1	Business Administration	Engineering	>5	500+
68	Male	2017	0	Business Administration	-	>5	76

69	Female	2020	1	Business Administration	-	>5	500+
70	Male	2021	1	Business administration	Digital Business & Innovation	>5	500+
71	Male	2021	1	Hospitality & Business management	-	>5	500+
72	Female	2020	0	Business Administration	-	<5	500+
73	Female	2020	0	Business Administration	-	>5	500+
74	Male	2021	0	Law	-	>5	500+
75	Male	2021	2	International sales & marketing management	-	>5	500+
76	Female	2021	0	Korean studies & Global Business	-	<5	500+
77	Female	2017	1	Media, Information & Communication	-	>5	500+
78	male	2018	0	International Relations, Economics & Policy	-	>5	500+
79	Male	2018	4	Political Science	Strategic Communication	>5	500+
80	Male	2017	1	Journalism & Communication; International Development	-	>5	433
81	Male	2021	1	Global Business Studies	-	<5	500+
82	Female	2020	0	Sport Management: Marketing Management	-	<5	318
83	Male	2019	1	Arts	-	>5	500+
84	Male	2017	2	Arts	-	>5	500+
85	Female	2019	0	Accounting and finance	-	>5	500+
86	Male	2018	1	Business Administration	Business Administration	>5	303
87	Female	2019	0	BA Industrial & Product Design	MA Design	>5	500+
88	Male	2021	0	Computer science	-	>5	500+
89	Male	2019	0	Activities & Societies	Construction Engineering	>5	406
90	Male	2020	1	Ba Media Management	-	<5	454
91	Female	2018	0	International relations	Conflictology	>5	500+
92	Male	2019	1	Business Administration	-	>5	500+
93	Male	2017	3	Int. Business & Management	-	>5	488
94	Male	2020	2	International Business	-	>5	500+
95	Male	2021	0	Business administration	-	>5	500+

96	Male	2018	1	Energy technology & HVAC	-	>5	500+
97	Female	2021	1	Organization management & human resources	-	<5	500+
98	Female	2017	1	Commerce	-	<5	500+
99	Male	2021	0	European Studies	-	>5	500+
100	Male	2021	0	Business administration	-	<5	337