

Signaling Organizational Purpose

- A textual analysis of corporate statements and product descriptions in the financial industry

Corporate Purpose is a topic that is being discussed increasingly often in academic literature and among management practitioners. More and more firms express their renunciation of the traditional shareholder perspective by expressing a broad and transcendental organizational purpose from a holistic stakeholder perspective. Nonetheless, there are vast differences in how organizations signal their corporate purpose. Especially between startups and mature firms, the usage of means to signal purpose and the extent to which purpose is signaled varies immensely. This thesis, therefore, aims to identify the key dimensions among which corporate purposes vary and to evaluate if the maturity of the firm is responsible for the differences in signaling. In order to evaluate these research questions, the corporate statements and product descriptions of 42 startups and 45 mature firms in the European financial industry were analyzed textually. The results of this study indicate that there is a significant difference in how startups and mature firms utilize corporate statements and product descriptions in order to signal meaning and corporate purpose. The analysis suggests that mature banks employ purpose language in their corporate statements and feature language in their app descriptions significantly more often than FinTechs and that FinTechs use feature language in their corporate statements significantly more often than mature banks.

Keywords: Corporate Purpose, Signaling Theory, Maturity, FinTechs, Banks, Corporate Statements, Product descriptions

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Abbreviations

B2C – Business to Consumer

CEO – Chief Executive Officer

cf. - "confer", meaning: "compare"

CSR - Corporate Social Responsibility

E.g. – For example

ESG – Environment Social Governance

FinTech – Financial Technology Company

i.e. – "id est", meaning: "that is to say".

iOS – Operating system developed by Apple Inc.

UK – United Kingdom

1. Introduction

The first chapter provides a background to the research topic and presents the overall point of departure. It is followed by a section in which the identified research gap is explained – the problematization. Thereafter, the central research questions are presented in the thesis purpose section, and an outlook to the expected knowledge contributions and delimitations is given. Finally, the outline of the thesis is presented.

1. 1 Background

While still ongoing, the year 2020 has already proved to be one of the most challenging years for political, economic, spiritual and social leaders since decades. Especially, the Covid-19 pandemic has caused turmoil and crisis all around the globe. Individuals have been pushed to the brink of their livelihood, business into bankruptcy and entire economies into deep recession (Staples, 2020). In short; millions are struggling and are trying to find security and meaning by turning to strong figures of influence that lead them through these dark times with confidence, strategy and a greater plan (Financial Times Visual & Data Journalism Team, 2020). Being faced with challenges of such fundamental magnitude, leaders all over the world are confronted with the need for existential introspection; Questions like *What are the values we what to be defined by?*, *What is our core meaning of existence?*, *How do we want to contribute to society at large?* and *What is our purpose?* have kicked-off essential philosophical debates not only in living rooms but more importantly in boardrooms, and parliaments. (Bill Schaninger, Bruce Simpson, Han Zhang, 2020)

Thereby, the year 2020, and the crisis it entailed has brought a provisionary pinnacle to the continuously growing trend of purpose-driven leadership. Meaning and purpose have become central to leadership theory, in recent years. Publications like "Creating a purpose-driven organization", by Thakor & Quinn (2018) or "Put Purpose at the Core of Your Strategy", by Malnight et al. (2019) showcase the growing interest in this topic on a global academic scale. Most of these academic scholars investigate how an entity can discover its actual purpose and how this newfound purpose can influence or guide future efforts.

In a similar way, purpose has also become of increasing relevance for individuals who seek guidance to their personal and professional life by finding their true purpose and raison d'être. Dozens of guidebooks, like Sinek's (2017) "Find Your Why: A Practical Guide for Discovering Purpose for You and Your Team", or Froese's (2015) "On Purpose" deal with personal fulfillment and how to redirect one's life under a guiding north star of self-grounded conviction. Of course, purpose and meaning in a larger sense has always been a relevant topic to mankind but it is evident that the overall interest, especially in terms of self-improvement and individual mental health, has become increasingly large over the last decades. Led by an increasing body of academic literature, powered by the decline of spirituality and the status of religion in the west and fueled by crisis such as those outlined above, finding one's own purpose seems to be as relevant as never before. This is also indicated by the volume of the search query "find purpose" on the search engine Google, as seen in Figure 1. While, following a certain

seasonality (it seems like with the onset of fall, people tend to seek more help on finding purpose in October), there is a clear upward trend observable since 2004, with a so far unreached peak in 2020.

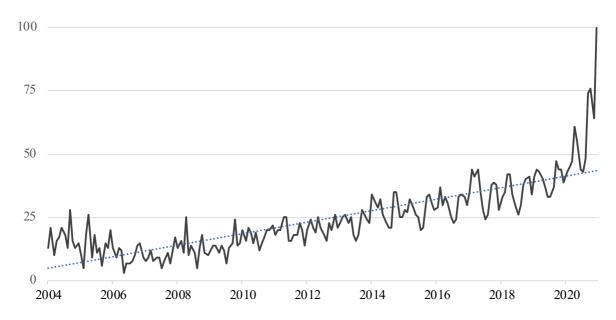


Figure 1: World-wide development of the search query "find purpose" on Google from January 2004 to December 2020 - Extracted with Google Trends

But purpose has not only entered the consciousness of academics and life-improvers but has also gained traction in corporations. It has become more and more fashionable for firms all over the globe to communicate their corporative purpose and reason for being. Some branding and marketing professionals even proclaim to have found the fifth "P" of marketing in Purpose, alongside Product, Price, Place and Promotion (Kempster, Jackson and Conroy, 2011). While some firms see this development as an honest chance to reflect upon their core purpose, many others merely view purpose as another box that has to be checked in order to show case their responsiveness to this trend. This purely communication-oriented approach has therefore often produced purpose statements that are so generic and detached from the firm's actions and characteristics that they become meaning- and useless (Gartenberg, Prat and Serafeim, 2019).

Some firms, however, have taken the concept of purpose beyond a pure communication-driven approach and try to internalize their core reason of being to such a degree that it influences every action of the organization. A true posterchild of this development is the American garment brand Patagonia. Founded by outdoor athletes, Patagonia has always had a deep connection to environmentalism, the protection of wildlife and sustainability but due to the eminent threat of global warming, the brand has set out a clear purpose for its business: "Patagonia is in business to save our home planet". This reason for being is clearly embedded in its brand identity and the corporate initiatives that were launched in order to support environmental activism. Patagonia for example introduced a self-imposed "1% For the Planet Tax" that aims at collecting funds for sustainable grassroot activities (Patagonia, 2020). It also launched a venture capital fund with a pure ESG (Environment Social Governance) focus and

introduced full transparency to their supply chain. Additionally, they raise attention to social and environmental injustice by producing and publishing films and books on the respective issues. Patagonia's very distinct purpose of saving the planet is thereby deeply imbedded into the company and inseparable from its brand image and core activities. One might even be inclined to say that the combination of environmental activism and outdoor wear has become Patagonia's unique selling point (Sonsev, 2019).

While Patagonia's purpose is clearly connected to environmental issues, this does not have to be the case for every company. As for each private citizen, purpose is a highly individual concept and each firm has to identify what best resembles their core reason of being by themselves. Only if the answers to existential questions, like those mentioned in the first paragraph, are authentic and clearly attributable to the company's core characteristics and products then purpose will truly have an impact. In times of radical visibility, firms are struggling to find their competitive advantage and stakeholders are becoming increasingly demanding. Factors such as price, quality and user experience are seen as minimal requirements but purpose as a true differentiator (Barton *et al.*, 2018).

Nonetheless, the actual potential of purpose often remains untapped by traditional incumbent firms who only understand purpose as a new version of classical management and communication tools, such as mission and vision statements. Especially, young and dynamic firms – start-ups – seem to have understood the importance of internalizing purpose and embedding it in each action and outcome (Gulati, 2019). It is therefore extremely interesting to analyze if this stark and distinct differentiation between the communication approach and the embedded approach to purpose is observable in practice.

1.2 Problematization

Overall, we observe an increasing body of literature investigating purpose in corporate governance and leadership. We also observe efforts in connecting purpose and its communication with marketing and marketing strategy (Burns, 1978; Davies, 1999; Ellsworth, 2002; Springett, 2004). Previous studies have mainly focused on how the perception of a firm changes when organizational purpose is communicated to internal and external stakeholders. It has been proven that this has an effect on the loyalty and trustworthiness of internal stakeholders (Edmans, 2016; Springett, 2004), like employees, but also that the perception of company leaders is altered positively. Additionally, the communication of purpose towards consumers has shown to effect word of mouth advertisement, and the overall perception of the brand. Nonetheless, so far there has been no research on **how** the communication and signaling of purpose differs considering key characteristics of the firm itself, e.g. its level of maturity.

As companies start using their raison d'être more excessively to signal purpose, it is highly interesting to investigate how the exact formulation of purpose differs from firm to firm and if firms with certain characteristics choose similar formulations or means of signaling. This will help us understand the mechanisms behind purpose formulation and the extent to which purpose actually effects the organization as a whole. To our knowledge, comparable research has been done on mission and vision statements (Kanze, Conley and Higgins, 2019) but this is one of the first studies that considers purpose or meaning.

Additionally, we suggest that firms primarily use two distinct ways of signaling purpose to their stakeholders. On the one hand, firms communicate their purpose by publishing official corporate statements like mission, vision and purpose statements and on the other hand, they signal their purpose by embedding it within their organizational outcomes, i.e. their products. Unfortunately, we observe that the concepts of classic corporate artifacts are often being misused and that there is a great deal of confusion regarding their intended application. Instead, these statements often degenerate to hollow and generic phrases that are not connected to the firm's raison d'être. Such statements therefore only rarely serve as an appropriate differentiator or as a distinct means of transporting corporate meaning. Purpose that is signaled in an embedded form, however, is much harder to imitate and therefore serves as a much more distinctive and effective tool of signaling purpose. Firms who manage to properly implement their purpose in their organizational outcomes, i.e. products, will be able to convey their message to a higher extent.

Since start-ups are heavily restricted in their resources, they rarely have the excess capacity to craft seemingly generic statements, they rather have to focus all available means on the development of their core product or service. These restrictions force startups to work in a purpose-driven manner and to disregard everything that does not serve this fundamental purpose. Startups are thereby inclined to develop products and services that are more purpose-oriented than firms without this rigid focus. We therefore suggest that startups tend to use an embedded form of signaling purpose.

This is supported by the stark disconnect which we observe between the perceived importance of purpose and its actual implementation in incumbent firms. While there is a broad consensus on the relevance of aligned meaning, most employees claim that there is a disconnect between the business model of their company and its purpose (Williams, 2019a). We believe that this gap of ambition and reality can largely be attributed to the maturity of a firm; the more mature a corporation, the farer it has evolved from its original motivation of inception or purpose. We believe that startups are closer to their original heritage and stakeholders are therefore more likely to share a common sense of purpose. Often, these young firms attract employees and customers exactly based on this core intention. Large and time-honored companies, on the other hand, have often diverted and developed away from the original intention. For mature companies it is thereby much more difficult to unite all stakeholders under one grand purpose as it is built upon an extremely heteronomous group – heterogeny in conviction as well as in purpose.

1.3 Thesis Purpose & Research Question

The purpose of this thesis is therefore to investigate whether companies communicate purpose differently and if so, which factors might influence this divergence in communication. This will be examined through the following three research questions.

- RQ 1: Do companies rely on different means to signal their purpose?
- RQ 2: To what extent can the differences in how purpose is signaled be attributed to the company's level of maturity?

1.4 Expected Knowledge Contributions

The problematization and approach as outlined above is set in a relatively unexplored research field. Therefore, this thesis does not investigate mature theoretical constructs but rather aims to propose relationships between new and established frameworks. It is this nascent character that also fundamentally determines the overall research goal and expected knowledge contributions. The goal of this thesis is not to test and prove/disprove nuances to already widely established theories, but to identify so far undetected patterns through exploratory testing of postulations and indicative constructs. By doing so, it can be assumed that this thesis will contribute to multiple fields of academia and management practice by developing a suggestive theory, presenting supportive or dismissive results and by inviting researchers and practitioners to further research on this topic (Edmondson and Mcmanus, 2007)

By investigating how firms signal purpose and how this varying form of expression may be related to a firm's characteristics will support corporations that are struggling with the identification and signaling of their own corporate purpose. The findings will help firms evaluate their current strategy and guide them on how to embed their purpose in their communication strategy, business model and product or service.

Therefore, it is expected that this thesis will produce insights for corporate communication and marketing strategy but also for innovation and product management. For one, the evaluation of how companies signal purpose will allow to draw conclusions on how to adapt communication strategies and therefore impact corporate marketing and branding. For another, proving that some firms, especially startups, are more prone to communicate purpose by embedding it in their product or service, will alter the way more established firms approach product development. It may lead to the advancement and permanent inclusion of innovations of purpose in the product development cycle and innovation efforts.

1.5 Delimitations

This thesis is subject to a variety of delimitations. The overall scope had to be limited due to restrictions in time and resources. First of all, the geographical scope of our analysis is Europe. Secondly, research was only conducted with in the financial sector, analyzing both mature banks and young banking startups. The former qualify as such if listed in the "STOXX® Europe 600 Banks". This index lists the largest banks by market capitalization in continental Europe and serves as a benchmark index in the financial sector. Firms are hereby categorized as bank according to their largest source of revenues. This group contains 45 components as of June 2020. The later qualify as banking startups or FinTechs if they primarily offer B2C banking products or services and if they have received at least one round of equity financing. This categorization was done according to the business intelligence platform "Dealroom". This limits the number of FinTechs to a group of 42 companies as of June 2020.

Corporate statements, such as corporate values, mission, vision or purpose statements were only considered if issued by the respective companies themselves and if they were publicly available (as of June 2020). Also, only the most recent versions of such statements were considered during the analysis. Additionally, only corporate purposes that are equal to the

brand purpose were considered. Corporate brands that are distinct from product brands and therefore also display separate purposes are not included in the scope.

The app descriptions were only considered if they could be clearly attributed to a consumer-focused banking app and if this app was available in the UK iOS App Store as of June 2020.

1.6 Research Outline

This thesis is divided into nine chapters. The introductory chapter is followed by chapter two which presents the theoretical frameworks on which this thesis is based. It outlines previous research to purpose, Signaling Theory and the signaling of purpose. The third chapter describes the overall methodological approach. First a preliminary study is introduced, and its key findings are analyzed. On the basis of these insights, hypothesis are generated which serve as the point of departure for the subsequent main study. In the following subchapter, the overall approach to the main study is laid out and it is described how data was collected and processed. The results of the data analysis are presented in the fourth chapter, followed by a detailed discussion of said results in the fifth chapter. The sixth chapter presents the final conclusions that were drawn from the data analysis and its subsequent discussion. Possible theoretical and managerial implications are described in chapter 7. Finally, the limitations of this thesis and suggestions for future research are presented and outlined in the eighth and ninth chapter respectively.

2. Theoretical Context

The second chapter introduces fundamental frameworks that form the basis of this thesis. In the first part of this chapter, an introduction to purpose is given and relevant literature is reviewed. The second part, Signaling Theory, which is the selected explanatory theory of our research will be defined and evaluated in detail. The third part of this chapter deals with the evaluation of how corporations convey corporate purpose. Hereby, the two concepts of semantic and embedded signaling of purpose are introduced and reviewed.

2. 1 Purpose

2.1.1 Introduction to Purpose

Purpose is a concept that transcends several scientific fields and that is being discussed in various contexts. Nonetheless, we identify four key aspects that constitute purpose, and which form the basis of our understanding and the subsequent application of the concept of purpose: *goal orientation*, a call to action, durability and transcendence.

Kempster, Jackson and Conroy (2011) define purpose as "the aim or objective which guides action – achieving a goal in a particular context". What this definition clearly highlights are two of the four key aspects of purpose: its inherent goal orientation and a call to action. Scholars frequently describe purposeful behavior as behavior which is directed towards the attainment of a goal and purposeless behavior in turn as behavior which is not directed towards a final condition or state (Rosenblueth, Wiener and Bigelow, 1943). However, what this observation of Rosenblueth, Wiener and Bigelow highlights is not just that goal orientation is connected to purpose but that this goal orientation must be manifested in concrete action.

However, *goal orientation* and *a call to action* alone do not describe or define purpose sufficiently. This is because goal-oriented actions can manifest themselves in all sort of forms. One, for example, might describe "*arriving somewhere on time*" or "*finding a parking spot*" as a goal but most would certainly not characterize these low-level objectives as purpose. True purpose is additionally characterized by a certain stability and long-lasting nature, in the sense that it cannot be attained easily or quickly but takes time and continuous effort to be achieved (Damon, Menon and Bronk, 2003).

The final quality of purpose can be best described by the notion of transcendence. Behavioral developmental scientist, such as Damon, Menon and Bronk (2003) describe purpose as "a stable and generalized intention to accomplish something that is at once meaningful to the self and of consequence to the world beyond the self". While also considering goal orientation, a call to action and possibly also implying a certain durability, this definition quite clearly focuses on the questions of "Whom is this purpose directed towards?" and "Whom does it serve?". Some might be inclined to say that purpose is a self-oriented concept, meaning that purpose should first and foremost serve oneself. Others might tend to see true purpose in self-abandonment and only consider purely altruistic motivations as purposeful. Damon, Menon and Bronk (2003), however, define purpose as the combination of both; only if one can find

individual fulfillment and by doing so additionally serves the greater good, he or she has found purpose.

2.1.2 Purpose in Philosophy

Purpose has been a fundamentally important topic to humankind ever since philosophical debate has been practiced. This becomes apparent when analyzing how Aristotle describes purpose through the notion of *telos* (Howie, 1968). According to Aristotelian philosophy, *telos* describes a meta-goal that is directed at contributing to the good for humankind. This emphasis on the societal aspect of purpose highlights Aristotle's argumentation for a worthy purpose; one that produces an outcome which is beyond the individual and which is reflected in the above mentioned fourth key aspect of purpose; *transcendence* (Kempster, Jackson and Conroy, 2011).

Aristotle describes, that each individual is in the possession of certain virtues and has the option to cultivate these or not. If exercised accordingly, these virtues enable us to achieve what MacIntyre (1997) conceptualizes as internal goods, as opposite to external goods. While external goods describe extrinsic assets possessed by people, such as obtaining power, status or money, internal goods describe assets that benefit the greater good, such as saving lives, promoting health or vocational training. MacIntyre (1997) argues that if an individual acts upon his or her virtues and achieves internal goods then he or she will feel a greater sense of purposefulness and fulfillment as these internal goods are valued by society and therefore they are cherished and valued. If one only acts upon the achievement of external goods, then the individual is lacking the positive feedback by society and therefore misses the described sense of purposefulness (MacIntyre, 1997). A meaningless life thereby is one that lacks the movement towards a telos – the goal to benefit humankind (Kempster, Jackson and Conroy, 2011).

Additionally, Howie (1968) points out that Aristotle's notion of purpose and telos is not limited to the realization and understanding of what constitutes a purposeful life but that enacting a pursuit of that purpose is fundamental to it. Howie (1968) argues that the knowledge of purpose itself is ineffective and useless and that only the exercise of it is meaningful.

2.1.3 Purpose in the Corporate Environment

"Purpose is not an add-on. It's not an initiative. It is a culture change and it never finishes."

— Andrew White, CEO Barclays, (White et al., 2017)

Corporate purpose fundamentally follows the same notions of purpose as outlined in the introduction to purpose and the philosophical approach to purpose. Therefore, similar characteristics and aspects apply, while adapting them to the inherent nature of a corporate environment. Ellsworth (2002) describes a firm's purpose as its "overriding reason for existing". Applying Ellsworth's definition one can thereby also be interpreted purpose as "the aim or objective which guides action" or "the generalized intention to accomplish something" but at the time of the firm's inception. Nonetheless, such a corporate purpose can only be meaningful if it still applies to the firm's stakeholders in the present, which automatically implies the notion of durability as discussed above. But it is important to note that corporate

purpose, much more than individual purpose, is subject to change due to its complex interwovenness with diverse stakeholder groups and its own development over time the development of the company itself. With the organization evolving over time, so might its strategic focus, its key stakeholders and therefore its core reason of being (Gartenberg, Prat and Serafeim, 2019). It is this constant change of a firms core purpose that also closely connects to the notion of "marketing myopia", coined by Theodore Levitt (1960). Levitt rattled the business world with the question "What business are you really in?" suggesting that many firms define their field of business to narrowly, which in turn explains the downfall of many once strongly growing industries and firms. Levitt famously explained his concept of marketing myopia with railroad executives who believed to only be in the railroad business rather than in the transportation business and who, due to this product centric orientation were blind to changing customer needs and the opportunities they entailed. According to Levitt, those business leaders who focus on the lifetime value of their customers, can strive to rise above myopia, especially with the use of long-term objectives and a big-picture focus. The notion of marketing myopia should therefore invite business practitioners and managers alike to constantly rethink their reason of being, and purpose in order to stay in touch with everchanging customer requirements and to avoid falling into the trap of myopia but also to remain humble and know that growth can never be indefinitely but will stagnate at some point. Levitt points out that every dying industry is characterized by four conditions that indicate a self-deceiving cycle of undetected decay:

- 1. The belief that growth is assured by an expanding and more affluent population
- 2. The belief that there is no competitive substitution of the domination product
- 3. Too much faith in mass production and in the advantages of rapidly declining unit costs as output rises
- 4. Preoccupation with a product that lends itself to carefully controlled scientific experimentation, improvement and manufacturing costs

This myopic perspective has also found many modern and contemporary adaptations which all share the idea that business leaders adapt a form of "tunnel vision" in favor of one particular aspect of the underlying business. Papritz (2019) for example argues that the short-term focus of social media related business models has made many businesses forget their long-term vision which in turn harms their lasting growth and success. Ottman, Stafford and Hartman (2006), on the other hand argue that many green products have failed due to a myopic focus on the "greenness" of their products instead of targeting broader customer expectations. Additionally, Smith, Drumwright and Gentile (2010) introduce the notion of the "New Marketing Myopia" which suggests that modern firms have overcompensated for the mistakes of the firms described by Levitt. The authors argue that many firms today solely focus on customers at the expense of other stakeholders and that the customers underlying needs are defined too narrowly.

However established among behavioral developmental scientist or philosophers, the relevance of the notion of *transcendence* is under much debate in the context of corporate purpose. Traditional economic theorists like Friedman (1961) believe that the main purpose of a corporation is the maximization of profit and shareholder wealth. This shareholder-centric view

has been questioned increasingly by more recent scholars who introduced a broader viewpoint: the stakeholder perspective. According to this perspective, a corporation must not only cater to the needs of one specific stakeholder group, the shareholders, but to the needs of multiple, highly diverse groups of stakeholders, such as customers, employees, shareholders, partners, and many more. Nonetheless, even in this broader perspective, stakeholders are only seen as relevant if their needs and actions directly affect the business of the firm. This notion is surpassed by the idea of society centered purpose, which considers the role that organizations play in society and proposes that they should serve society and the greater good due to a mutual dependency (Drucker, 2001; Michelini and Fiorentino, 2012)

This transcendental, society-focused notion of purpose is the notion on which we will focus for the course of this thesis. We have chosen to focus on this perspective as it is increasingly gaining traction among scholars and practitioners and is reflected in many corporate purposes today.

2.2 Signaling Theory

2.2.1 Introduction to Signaling Theory

Signaling Theory is used to describe communication behavior between two parties that aims at reducing information asymmetry. Hereby, a signaler sends a signal to a receiver which in turn interprets the signal. Through this signal, additional, otherwise unobservable characteristics of the sending party (the signaler), is conveyed to the receiver and information asymmetry is reduced. This is beneficial for both the signaler and the receiver, as the signaler can communicate its underlying quality to external parties and the receiver can chose to adapt his/her decision-making behavior respectively. A key aspect of Signaling Theory lies within the ascription of costs to these information acquisition processes that aim at resolving information asymmetry (Connelly *et al.*, 2011).

This theory has found application in an extremely broad range of research fields, from anthropology to zoology. Applications in management related disciplines mainly focus on the investigation of the labor markets (Spence, 1973), investor relations (Zhang and Wiersema, 2009), board compositions (Miller and del Carmen Triana, 2009), and entrepreneurship (Certo, 2003; Lester *et al.*, 2006; Elitzur and Gavious, 2003; Busenitz, Fiet and Moesel, 2005). In this thesis, Signaling Theory will be applied to analyze how firms signal purpose to their respective stakeholders, by publishing corporate statements and product descriptions.

The following section will address key concepts of Signaling Theory and how they are manifested within our research project.

2.2.2 Key Concepts of Signaling Theory

In Signaling Theory there are two relevant parties, the signaler and the receiver. These are connected by the signal which is sent to the receiver by the signaler. We can also observe feedback which can be sent from the receiver to the signaler or the entire signaling environment (see figure 2). While this figure focuses on a linear and singular transaction of signals, some situations may show multiple representatives of each parties and multiple signals.

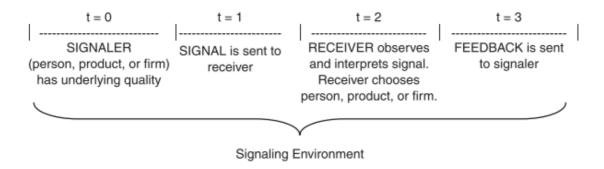


Figure 2: The Key Concepts of Signaling Theory according to (Connelly et al., 2011)

2.2.2.1 Information Asymmetry

Information asymmetry describes an unequal level of access to information between two parties in decision making processes. The greater the information asymmetry is, the greater decision-making processes are affected. Information processes are based on publicly available information and private information. Therefore, information asymmetry occurs when some people have access to private information and others do not, or as Stiglitz puts it: "information asymmetries occur when different people know different things" (Stiglitz, 2000). Information asymmetries have proven to be one of the key variables in explaining how particular economic and social communication behavior works and how the decision-making process of players within these contexts are influenced.

According to Stiglitz (2000), there are two types of information asymmetry which are particularly crucial: information asymmetry regarding *quality* and information asymmetry regarding *intent*. In the former case, information asymmetry occurs when one party is unsure of the underlying characteristics of the other party. In the latter case, information asymmetry occurs when one party is concerned regarding the behavior or the intentions of the other party. Research on information asymmetry in behavioral/ intentional contexts usually evaluate how incentives can reduce moral hazards and the results of moral hazards. Research on information asymmetry in quality contexts, on the other hand, analyzes how an informational imbalance can be outweighed by interpreting certain signals between the respective parties in order to better evaluate the underlying quality of the sending party.

2.2.2.2 Signaler

A key aspect of Signaling Theory is the so-called signaler. These signalers are insiders, meaning entities that have privileged access to private information. In an organizational context such signalers can be board members, executives or simply employees of a firm who have access to information which might be interesting and useful to entities outside of the firm (Connelly *et al.*, 2011). This information can for example be the latest financial performance report, new product development efforts or investor news. In this thesis the selected corporate entities (45 listed European Banks and 42 selected European FinTechs) are the signalers.

2.2.2.3 Signal

As insiders the signalers have privileged access to private information of both positive and negative nature and therefore, they must decide if and which information they would like to communicate to outsiders in order to reduce information asymmetry. While most research on Signaling Theory focuses on the intentional communication of positive information, a signaler can also send signals by communicating negative information or by sharing information unintentionally. Nonetheless, in order to serve as a useful signal, actions must exhibit two characteristics: *signal observability* and *signal cost*. In order for actions to be interpreted by outsiders they must be observable to a certain degree – this notion of noticeability is captured with signal observability. Signal cost, however, describes the fact that sending signals must be costly for signalers to produce. Otherwise, these signals are not viewed as signals according to Signaling Theory. If signals entail costs then a selected portion of signalers will be able to absorb these costs better than other signalers, allowing these signalers to better communicate their underlying quality. Additionally, this underlying quality will prove to be higher and the

signal will be the proof of it. If inferior signalers are able to *false signal*, meaning to send the same signal associated with high quality without actually having to perform at the respective quality level then receivers will at some point chose to ignore these signals altogether. In this case signals do not bear any actual costs and therefore can no longer be a warrant for high quality. Hence, signals are only effective in conveying private information when dishonest signals do not pay off (Connelly *et al.*, 2011). In this thesis we aim to identify and subsequently analyze how corporate entities signal purpose. Therefore, we have identified multiple corporate statements and publications that could serve as signals of purpose. These are: mission statements, vision statements, purpose statements, corporate values, and product descriptions (here is a clear limitation on app descriptions of consumer banking apps in the UK iOS AppStore).

Signal Traits	
Signal Cost	The costs a signaler has to bear, and which are associated to producing the signal
Signal Observability	The degree to which a signal is observable by outsiders/ receivers Also referred to as: signal clarity, intensity, quality
Signal Fit	The extent to which a signal correlates with its unobservable quality (private information) Also referred to as: signal strength (strong vs. weak)
Signal Frequency	The number of signals being sent or the number of observable signals Relevant as a signal always referrers to a particular point in time
Signal Consistency	The degree to which multiple signals convey the same message

Table 1: Signal Traits according to Connelly et al. (2011)

2.2.2.4 Receiver

Receivers are typically situated outside of the contextual environment of the signalers. These outsiders lack private information but are highly interested in receiving additional information in order to adapt their decision-making processes. Nonetheless, if signals are sent intentionally, there is also a conflict of interest as the receiver is influenced by the signal which was specifically selected by the signaler (e.g. buying a stock after financial reports are released). Therefore, outsiders usually gain directly from or jointly with the signaler by making decisions based on signaled information. In corporate environments or in management literature in general, receivers typically are individuals or groups of individuals that can represent a broad array of stakeholders. In these contexts, receivers can for example be investors, shareholders, customers, competitors or employees (Connelly *et al.*, 2011). In this thesis we have to differentiate between the receivers of signals from mature firms and the receivers of signals from startups. In the case of mature firms, the most essential receivers are shareholders of the public stock, such as individual private and large-scale institutional investors and customers. In the case of startups, the most essential receivers are the early stage private investors such as venture capital firms but also customers and potential employees.

Receiver Traits	
Receiver attention	The degree to which receivers are actively searching the signaling environment in order to identify relevant signals.
Receiver interpretation	The process of translating signals. Can vary from receiver to receiver – even with the same signal. Depends on preconceived notions and the signaling environment.

Table 2: Receiver Traits according to Connelly et al. (2011)

2.2.2.5 Feedback

Feedback describes countersignals receivers send back to signalers in order to communicate the effectiveness of the initial signal. The underlying assumption here is that information asymmetry works in both directions: from the signaler to the receiver but also from the receiver to the signaler. Additionally, it is assumed that signalers desire information regarding the effectiveness of their signals in order to adapt them if necessary. Next to the concrete content of the feedback, simply the fact that receivers chose to address some signals with feedback and other signals not can also be interpreted as signal in itself (Connelly *et al.*, 2011). In this thesis feedback of receivers is neglected.

2.2.2.6 Signaling Environment

The signaling environment refers to the medium in which a signal is communicated. The signaling environment is particularly important as it can affect the effectiveness of signals and their ability to reduce information asymmetry. If the signaling environment alters the observability (especially negatively), environmental distortion occurs. Common examples for such distortions are media reports on signal which change the way said signal is interpreted by the respective receiver (Connelly *et al.*, 2011). In this thesis the specific signaling environment is neglected.

2.3 Signaling of Purpose

With purpose being defined as "the aim or objective which guides action", purpose can be interpreted as a poignant summary of an organization's overall strategy and operational goals. Following the assumption that the underlying entities actually act upon this predefined raison d'être and that they adapt all corporate actions accordingly, outsiders are able to draw inferences from this poignant summary and this will allow them to draw conclusions regarding the organization's upcoming moves and strategic trajectory by analyzing and interpreting signals of purpose.

Being aware of the fact that outsiders systematically screen the market for such signals (high degree of signal observability) and the inherently positive nature of purpose expressions, organizations are intrinsically motivated to signal their purpose intentionally and the private information it entails by publishing purpose related statements and artifacts. During this thesis, we define the entirety of these statements as *semantic means of signaling purpose*. The term *semantic means of signaling purpose* therefore refers to publicly accessible statements on an entity's purpose, issued by the respective entities themselves, and includes common tools and frameworks such as mission statements, vision statements, corporate values and purpose statements.

An alternative means for outsiders to receive similar private information on a firm's overall strategy and operational goal is to observe the outcomes produced by the underlying entity and screen them for signals of purpose. This process therefore follows an idea already proposed by Carl Jung, who stated that one's intentions can be, to a certain degree, identified by analyzing one's actions. Once again, the underlying assumption hereby is, that the firm acts upon its purpose and embeds it in every action and outcome. We therefore refer to this kind of signaling as *embedded means of signaling purpose*. The concrete manifestation of this outcome can be diverse and potentially every action or outcome produced by a firm could be considered as an *embedded means of signaling purpose* but in this thesis, we would like to focus on one outcome in particular: the product or service offered by the signaling entity. It can be assumed that, if carried out authentically, a firm's purpose will directly affect the characteristics of said product and therefore serves as indirect measure of how purpose is signaled. Since we consider digital product offerings (Mobile Applications) and in order to make both means of signaling measurable and comparable we specifically focus on the descriptions of mobile applications.

2.3.1 Semantic Signaling of Purpose

With the umbrella term *semantic means of signaling purpose*, we describe all written or verbal artifacts issued by the signaling entity that aim at communicating the firm's purpose. Next to relevant sections in reporting documents, such as in annual or quarterly reports, *semantic means of signaling purpose* can also be found in shareholder letters, interviews, slogans or industry reports. Nonetheless, there is an entire series of corporate statements that embody the concept of *semantic means of signaling purpose* perfectly; mission statements, vision statements, corporate values and purpose statements. These corporate statements will be the focus of our analysis when speaking of *semantic means of signaling purpose*.

First introduced in the 1980s, these managerial tools are now widely adapted by both academic scholars and practitioners and aim at supporting corporate players in defining and analyzing corporate strategies. All of these artifacts have been developed in order to communicate the firm's internal motivation to external stake- and shareholders. While crafted with the intention to establish more clarity, these managerial artifacts have since then often been misused, pulled out of context or entirely redefined. The confusion about the exact distinction between this plethora of corporate statements has caused many firms to use them interchangeably or simply mistake one concept for another.

In order to establish a clear foundation for our research and to further investigate the corporate statements that are connected to the signaling of meaning and corporate purpose, the following section discusses the theoretical concepts of mission statements, vision statements, corporate values and purpose statements. Nonetheless, during the subsequent analysis, as further described in chapter three and carried out in the chapters thereafter, they will be treated as one; semantic means of signaling purpose.

2.3.1.1 Mission Statements

"Mission Statement - A written description of what a company or an organization is trying to achieve with all its activities." - (McIntosh, 2013a)

The mission statement is one of the most widely used managerial tools globally. Both academic literature and management theory state that mission statements of corporations describe the company's present state and why the company does business (Rukstad and Collis, 2008). The overall objective of a mission statement is to communicate the organization's why to all its stakeholders which among others include employees, customers, vendors, and investors. The mission entails a definition of the overarching goals of the firm and a description of the corporation's business. By stating the overall goals, the firm provides a sense of direction to the organization and motivates its stakeholders to strive for a certain level of performance. The description of the business usually demands a portrait of the company's main products or services, their typical customer or target market and what makes the product/ service unique.

According to Pearce & David (1987) and David (1989), mission statements are comprised of nine components: 1) The specification of target customers and markets, 2) The identification of principal products and services, 3) The specification of the geographic domain, 4) The identification of the core technologies, 5) The expression of commitment to survival, growth, and profitability, 6) The specification of key elements in the company philosophy, 7) The identification of the company self-concept, 8) The identification of the firm's desired public image and 9) The concern for the employees. By applying the two categories of above to the nine components by Pearce and David, we can see that components 1 - 4 describe the company's business and that components 4 - 9 describe the company's goals and motivation. By communicating the overall goal of the firm, parallels with "goal orientation" and "call to action" become apparent, which are also defining points in our use of purpose. It can be assumed that purpose can also be found in mission statements.

According to theory, organizations usually do not change their mission statements over time, since they define the firm's continuous, ongoing purpose and focus. This attitude toward the stability of mission statements over time is being questioned more and more by recent researchers (Koch, Galaskiewicz and Pierson, 2015). These scholars state that mission statements must evolve over time and adapt to relevant changes in the environment and the firm itself. Mission statements can therefore only serve their intended purpose of informing the stakeholders of the firm's *why* if that *why* is altered dynamically (Koch, Galaskiewicz and Pierson, 2015).

2.3.1.2 Vision Statements

"Vision Statement - a statement of what a company or an organization would like to achieve in the future." – (McIntosh, 2013d)

Vision statements of organizations describe what the organizations wants to be (Rukstad and Collis, 2008) or in the words of Thomas and Greenberger (1995) they describe a cognitive image of the future. Nanus (1993), on the other hand, defines visions as a mental model of a future state of a process, a group, or an organization. Collins and Porras (1991) propose that corporate visions consist of a guiding philosophy and a tangible image. The authors define a firm's guiding philosophy as a system of fundamentally motivating assumptions, principles, values and tenets. Analog to the "philosophy of life" for an individual, the guiding philosophy of a corporation directs the firm as a whole and each individual belonging to the firm throughout the firm's lifetime. This concept is very comparable to what we call purpose. A tangible image, on the other hand, is described as an envisioning of the future which clearly focuses the efforts of the organization by describing it vividly. The authors specifically put a large emphasize on the language used when formulating vision statements, stressing the illustrative and symbolic nature of most vision statements. Especially this vivid and more engaging part of what Collins and Porras (1991) define as vision, is what is more commonly referred to as vision.

While Collins and Porras (1991) state that there are four distinct types of vision statements (see appendix, table 14), they all share a certain orientation towards the future and the aim to capture the main in a captivating and illustrative description. A company's vision, thereby, allows all stakeholders, individually and collectively, to make sense of the firm's activities, its general ambition and its growth trajectory. This allows to funnel individual capacity and behavior toward a joint goal. Due to its motivating purpose, the vision statement is mostly directed towards internal stakeholders. Contrary to the mission, the vision therefore is self-centered, inward looking and primarily directed at influencing internal decision making.

Vision statements undergo minimal revisions during a firm's lifetime. The firm's philosophy which expresses its core ideology should not change continually but remain largely untouched. This timeless character is complemented by the tangible image or the envisioned future which, despite also having a long-term focus, is practically a dream with an expiration date. This part of the vision should be reachable in 10 to 30 years in order to additionally enhance the relatability.

2.3.1.3 Corporate Values

"Values - the principles that help you to decide what is right and wrong, and how to act in various situations." – (McIntosh, 2013c)

Corporate values describe *what* a corporation, as a united entity, *believes in* and *how* these believes should guide and shape its members behavior (Rukstad and Collis, 2008). Rokeach, who investigated values from a pure psychological perspective, defines values as "beliefs that help entities make choices among available means and ends" (Rokeach, 1973). Thomsen (2004), however, describes these available ends as alternative goals and corporate values, in turn, as "the weight corporate decision makers choose to allocate to these alternative goals". Such alternative goals can be increasing profitability, accelerating growth, achieving employee satisfaction or satisfying measures of corporate social performance.

Other scholars understand corporate values as an integral part of a much larger normative and multifaceted construct: corporate culture. In short, corporate culture can be defined as the social and normative glue that holds an organization together (Smircich, 1983). It expresses the social ideas and the believes that an organization's members share. While behavior, norms, philosophy and rules are utterly substantial to the corporate culture, values are at the very center of each corporate culture (Hunt, Wood and Chonko, 1989). They form the bedrock on which culture and each previously mentioned aspect of it is built upon. These values are, once lived, manifested in symbolic devices such as myths, rituals, stories, legends an specialized language (Smircich, 1983).

On a societal level, values serve as a decisions compass, guiding them when judgement is necessary. For an organization, values serve to convey a sense of identity to its members, create a certain stability within its social system, guide management attention to particular topics, and also to facilitate commitment to something larger than the corporation or its business. While some values seem to only serve self-centered goals and convictions, others – the so called ethical values – aim to capture an altruistic and transcendent commitment (Hunt, Wood and Chonko, 1989). These underpin all values and define the standards by which all members behavior will be judged. Ethical values, thereby, delineate how to do things right but also which things are worth doing (Rukstad and Collis, 2008). If they are shared among a critical proportion of the organizations members a certain level of cohesiveness is created and organizational success will be enhanced (Hunt, Wood and Chonko, 1989). Companies that have a set of well-defined and shared values at their core, perform superiorly compared to their peers (Lee, Fabish and Mcgaw, 2005).

2.3.1.4 Purpose Statements

"Purpose - the reason for doing something or the reason something exists." – (McIntosh, 2013b)

As defined in chapter 2.1, purpose is described "the aim or objective which guides action" (Kempster, Jackson and Conroy, 2011) and the "overriding reason for existing" (Ellsworth, 2002). Purpose statements, therefore, transport these key elements and clarify what a firm stands for, provide an impetus for action and are aspirational (Malnight, Buche and Dhanaraj,

2019). A conveying purpose statement has to fulfill multiple criteria. It has a time competent, an action-oriented component, a motivational/ emotional component, and an altruistic component.

A purpose statement links a goal to an indefinite point in time or should last an organization at least 100 years (Collins and Porras, 1991). This time component thereby differentiates the purpose for the vision statement which is linked to a definite point in time. The time component is also directly linked to the actionability and achievability of the implied goal. Purpose is a paradox in this regard; in an ideal state each activity of an organization should fulfill the purpose a bit more than before, but it should still never be reachable or at least only in the very distant future. The motivational component highlights the fact that a purpose statement must also be inspiring and emotional. Only if the purpose is broad enough to reach a critical mass within the organization but also personal enough to differentiate the firm's purpose from other purposes, only then will the purpose serve as distinguishing character and, as Collins and Porras (1991) put it, "grab the soul of each organizational member" and motivate him or her to achieve a transcendental goal. The altruistic component addresses this transcendental goal. It delineates how the organization fulfills basic human needs (Collins and Porras, 1991) and how the firm plans to utilize its capacity to make a contribution to the world (Gast et al., 2020).

Purpose thereby forms the most fundamental guideline to organizational behavior. As the figurative north star, it will influence strategic choices, define the corporate culture and engage customers and community. If purpose is lived authentically, it will give direction in moments of truth and drive impact daily, benefitting shareholders, but also employees, customers, suppliers, partners and the environment the firm operates in (Gast *et al.*, 2020).

2.3.1.5 Synthesis

All of these statements were developed with a unique intention. Originally, they were meant to communicate a very distinct aspect of the firm's cognitive sense making and therefore all of them enjoy an explicit right to exist. But while they might be distinct in theory, the practical application of these concepts often overlap significantly. This has caused great confusion among practitioners on how and when to apply which concept and often the original definitions are changed and mixed up. The misperceptions regarding the actual intent of these corporate statements prevails and still causes harsh debate until today. But since many practitioners do not differentiate in such a nuanced manner as outlined above, it would be impractical and far from reality to insist on the strict definition and in turn dismiss the real-world practicalities.

Each corporate statement above transports meaning and purpose to a certain degree. While some have been explicitly developed for this regard, others incorporate parts of this and should therefore not be forgotten when analyzing corporate purpose and meaning. Overall, a proper corporate purpose forms the bedrock on which the aforementioned managerial artifacts (mission statement, vision statement and corporate values) are built upon and all of them must embed purpose to a certain degree within their own format and objective. Therefore, going forward we will consider all mentioned statements as semantic means of signaling purpose.

2.3.2 Embedded Signaling of Purpose

As described in the preface of section 2.3, the conceptual framework of *embedded means of signaling purpose* combines all means by which purpose is signaled through actions or outcomes of the signaling entity under one term. This conceptual framework relies upon the assumption that organizational purpose goes beyond the identification and definition of organizational purpose but that it transcends purely intangible conceptions and manifests itself within concrete outcomes.

When speaking of this manifestation of purpose, we speak of the embeddedness of purpose, borrowing from the term embeddedness that was coined and popularized by Granovetter (1985). The theory of embeddedness proclaims that market transactions are influenced by the social interactions surrounding the actors carrying out these transactions and that market transactions must be analyzed by considering the social relationships in which the actors are embedded (Granovetter, 1985). According to Granovetter (2017), all economic activities are affected by non-economic social processes surrounding them and that *embeddedness* describes the very "intersection of economic and non-economic aspects of society". Adopting this concept of embeddedness to our conceptualization of how purpose is signaled, embedded purpose forms the intersection of the theoretical conceptualization of purpose and all tangible and intangible outcomes produced by an entity. Additionally, when following the line of argumentation made by Uzzi (1997), who stated that the embeddedness of social ties subsequently affects the way market actors conduct themselves in markets, one can assume that the embeddedness of purpose subsequently affects how an organization is perceived, thus making the embeddedness of purpose a fundamentally important signal to those observing an organization's purpose.

Since this conceptual framework, as defined above, spans the entirety of an entity's outcomes – intangible or tangible – there is a plethora of options when analyzing the embeddedness of purpose. Considering the scope of this thesis, we have decided to focus on one outcome in particular; the product or service offered by the signaling entity. The subsequent subchapter will additionally explore how purpose can be embedded in a firm's product and how this characterized our thesis.

2.3.2.1 Signaling through the Product

"Purpose is certainly not just a marketing issue or positioning of your brand image. Purpose should impact every aspect of the firm." – Raj Sisodia, (Williams, 2019b)

As mentioned above, if a corporation manages to define a clear and compelling purpose which is shared among all organizational members then this purpose will fundamentally alter corporate culture and influence strategic decisions. These strategic choices in turn affect a broad array of managerial initiatives and corporate tactics. Purpose will therefore, if lived authentically by the corporation, influence branding efforts, business model choices, business/market development initiatives and most importantly product development efforts (Malnight, Buche and Dhanaraj, 2019). According to a study, done by Harvard in corporation with the consulting and auditing firm EY, one third of all companies that show and articulate purpose

say that their purpose has propelled shifts in product and service development (Williams, 2019b).

We thereby conclude that, while being signaled to a significant degree through corporate statements, purpose can also be embedded in many more corporate initiatives and can therefore also be signaled through the products or services of a firm. According to Dell'era and Verganti (2007) and Karjalainen (2003), products play a key role in transporting meaning to consumer and customers. They argue that especially the aesthetic, symbolic, and emotional value of the product, or in short "the design language", is responsible for signaling purpose to the user. This is a highly interesting and a largely unaddressed aspect in the signaling of corporate purpose. Signaling purpose in such a manner could speak for the underlying characteristics of the firm due to the high quality of the signal and the high signaling costs associated with such a signal. Nonetheless, the overall signal observability could be weak due to the subtle and only indirect signaling style. In order to further investigate this promising means of signaling purpose, we therefore also consider the products offered by the corporate entities which are subject of our analysis. In order to make both means of signaling purpose (semantic means and embedded means of signaling purpose) comparable and in order to analyze them in a mutual manner, we decided to focus on the respective descriptions of the product offerings. While we realize that product descriptions only captures a fragment of the entire purpose that is being signaled via the product, we believe that product descriptions serve as a valid approximation the embedded signaling of purpose. Karjalainen (2003) describes that linguistic descriptions are often used in order to define and explain the overall design language and the value it entails. Product descriptions are therefore also considered by literature as an appropriate approximation to analyze the embedded signaling of purpose.

In this particular thesis, we solely focus on the digital consumer products offered by the underlying FinTechs and banks in form of mobile applications. Unlike for physical products, which deliver product descriptions on their packaging, in advertisement or in form of product instruction manuals, the product descriptions of mobile applications can be found on the purchasing platform offered by the respective mobile provider, e.g. the iOS App Store or the Google Play Store. In this thesis we explicitly focus on the UK version of the mobile banking apps offered in the iOS AppStore. Even though focusing on only one specific product (some of the selected firms offer multiple products and services, targeting multiple customers), we aim at examining to which degree products themselves and their descriptions function as signal and whether there is a clear distinction between how purpose is signaled.

2.4 Life Cycle Theory of the Firm

2.4.1 Introduction to Life Cycle Theory of the Firm

Mueller (1972) proposes that a firm undergoes a relatively well-defined life cycle while transitioning from a freshly founded venture to a mature and established firm. The "Life Cycle Theory of the Firm" refers to this idea.

According to Mueller (1972), a firm originates as it aims to exploit an "innovation involving a new product, process, marketing or organizational technique". In this early state, the new venture, or startup, focuses all it resources, both in terms of human and financial resources, in further developing this innovation. Nonetheless, the overall resources are heavily restricted and since the startup is unable to meet its demand for financial resources through the generation of cash internally it relies on external support, i.e. from capital markets or private investors, to meet this demand. In exchange for their financial support, these investors often receive a small share of the firm by buying it from the initial foundesr. However, the entrepreneurs or founders retain the majority of the firm's shares in order to align his/ her interests with those of the investors (Mueller, 1972).

Until the new venture has successfully overcome initial "teething issues" related to the innovation itself and until it is able to establish an initial foothold in the market, the growth of the startup remains slow. Once these difficulties are solved, the firm grows rapidely. This growth is additionally spured by entering new markets and offering the product or service to new customers and segements. Attreted by this rapid growth, competitors enter the market by imitating the initial innovation but also by improving it (Mueller, 1972).

This fierce comptetion soon leads to a high degree of market penetration, and as new markets and cusomters are becoming increasingly hard to identify market saturation sets in and with it growth slows down. In order to regain rapid growth levels, the now mature firm has to generate new innovations. This, however, becomes increasingly difficult as with the overall growth of the firm, its ability to process information and its risk-taking attitude deteriorates. The larger an organization becomes, the greater the limitations on its innovation capabilities are. In this mature state, the firm therefore concentrates on preserving the status quo or on identifying new growth areas to enter (Mueller, 1972). Additionally, the mature firm traditionally beginns to distribute earnings to its shareholders (Grabowski and Mueller, 1975).

The life cycle of the firm therefore follows an s-shaped growth curve; the inception or startup phase is characterized by slow growth, followed by rapid growth in the scaleup phase and finally the firm reaches maturity where growth reaches a plateau or slows down.

2.4.2 Life Cycle Theory of the Firm and Signaling Theory

By applying the most relevant key concepts of Signaling Theory to the development curve that is postulated in the Life Cycle Theory of the Firm, it becomes apparent that with the development of the underlying signaling firm (from startup to mature firm) the qualities and traits of the signal but also of the receiver change.

As hinted at above, startups are very young firms that are still developing or just recently started offering a product or service. Due to their young age, these startups are relatively unknown and are still rather small in size. Since their offering is not yet established in a mainstream market, they often rely on external funding (Mueller, 1972). This overall situation requires startups to balance the amount of signaling very carefully; on the one hand, startups needs to signal their underlying quality periodically by sending high quality signals, as these signals will attract new customers, talented employees, strong partners and investors. On the other hand, startups do not want to signal too much for their underlying quality as this will increase the chance of their innovation being imitated or copied by another player. Startups therefore send much less standardized signals that often require interpretation and expert knowledge. Additionally, due to their overall limited access to resources, startups cannot afford to send inefficient signals but must focus on those that actually have an impact. Finally, startups tend to target a very specific set of receivers when sending signals. Due to their resource constraint and their ambitious growth plans, they want to attract private investors who offer financial support along their growth journey. Startups also want to attract interest by the general public and potential customers by targeting the press and they want to attract new talent by focusing on universities or social networks (Elitzur and Gavious, 2003).

Mature firms, however, are established players within the market. They are operating since many years and they have a proven track record, with established relationships and successful business models and products/ services. Mature firms often have a historically grown product portfolio that is being offered across multiple markets. This diversification, both in terms of products and markets, has increased their reach and has caused significant brand awareness. Overall, the organizational structures are much more standardized and professional and often the original founder no longer leads the company as a CEO. Ideally, the firm manages to cover occurring expenses and product development efforts with cash that is generated internally, but nonetheless many mature firms additionally seek equity by offering their shares to the general public. Moreover, due to their large size, the growing responsibility and power, the mature firm is subject to a broader and different set of regulations than the new venture (Mueller, 1972). Therefore, mature firms are required to send signals in a very standardized and consistent way. For one, there are certain communication means that force mature firms to periodically send signals (e.g. financial reporting) and for the other, they can choose to be more transparent and must not fear imitation due to their financial strength and resource surplus. This is also closely connected to the respective receivers that mature firms target. If they are publicly listed, they must communicate with their shareholders on a regular basis. Additionally, mature firms want to reach the general public and address potential customers.

2.5 Hypothesis Definition

After reviewing purpose in general, Signaling Theory and how purpose is signaled in a corporative context, we concluded that there are two primary means of signaling purpose: semantic signaling of purpose and embedded signaling of purpose. In order to analyze semantic signaling of purpose we have decided to consider corporate statements and in order to analyze embedded signaling of purpose we have decided to consider product descriptions.

Additionally, we expect product descriptions to differ mainly along two dimensions: *feature vocabulary* and *purpose vocabulary*. *Feature vocabulary* refers to the language that is used to actively highlight and communicate the products underlying features, such as technical characteristics. *Purpose vocabulary* refers to the language that is used to actively communicate the firm's purpose and reason of being. While purpose vocabulary is the main dimension of interest, feature vocabulary aims at providing further insights in the use of corporate statements and app descriptions.

Based on the reasoning of the Life Cycle Theory of the Firm, startups and mature firms differ immensely among multiple dimensions. It is therefore reasonable to assume that these vast differences will also affect the way in which the respective firms signal their corporate purpose. It is likely that these differences will affect the extent to which they utilize semantic and embedded means of signaling purpose and the extent to which they use feature and purpose vocabulary.

Inspired by these findings, we developed the following hypotheses, which form the basis of the subsequent study:

H1a: In their corporate statements, mature firms tend to use more purpose vocabulary than startups.

H1b: In their corporate statements, startups tend to use more feature vocabulary than mature firms.

H2a: In their product descriptions, mature firms tend to use more feature vocabulary than startups.

H2b: In their product descriptions, startups tend to use more purpose vocabulary than mature firms.

	Corporate Artifacts		App Descriptions	
	Feature Vocabulary	Purpose Vocabulary	Feature Vocabulary	Purpose Vocabulary
Bank	H1b	H1a	H2a	Н2Ь
FinTech	H1b	H1a	H2a	Н2ь

Table 3: Hypothesis as part of the data set

3. Methodological Approach and Data

The third chapter describes the methodological approach which was chosen in order to answer the identified research questions and proposed hypothesis. In the first subchapter, the general scientific/methodological approach which was chosen for the analysis of the selected data is described. Thereafter, a descriptive and quantitative pre-study is described which formed the basis for the final study design and analysis approach. The next sub-chapter, therefore, describes the main study, its underlying data sample and the overall procedure.

3.1 Scientific Approach

For this thesis, a combination of both a deductive and inductive approach was used. The primary goal of this thesis is to explore the application of well-established theory (i.e. Signaling Theory and the Life Cycle Theory of the Firm) in relatively unexplored fields (i.e. the comparison of purpose in mature firms and startups). Therefore, we were confronted with the challenge of including and building upon existing frameworks from literature but also expanding these frameworks by setting them in to an entirely new context.

Additionally, due to the nature of the underlying data (corporate statements and product descriptions; large amounts of qualitative data), we had to collect, process and analyze qualitative data in excessive amount. While qualitative research is well suited for understanding phenomena and unearthing connections between certain concepts (Glaser and Strauss, 1967; Miles and Huberman, 1994; Crabtree and Miller, 1999; Patton, 2000) it lacks the ability to conclude generalizable insights but rather suggests common themes by looking at a limited amount of cases. In order to adequately process the vast amount of data and add to the generalizability of our findings accordingly, we decided to apply a mixed methods approach. Mixed methods refer to research in which elements of qualitative and quantitative approaches are combined. Mixed methods therefore combine the quantitative approach of counting occurrences and the qualitative approach of making sense of the underlying phenomenon (Tashakkori, Teddlie and Creswell, 2015). While qualitative and quantitative research has historically been seen as mutually exclusive, mixed methods are increasingly recognized as an appropriate tool for analyzing complex and paradigm-overlapping research questions (Bradley, Curry and Devers, 2007).

Nonetheless, the detailed approach as outlined below and the empirical context itself is relatively unexplored. Therefore, our main goal is to identify patterns and potentially develop new constructs in an exploratory manner. Traditional, more positivistic measures are thereby less relevant to our research than the detailed discussions of the coding structure, which forms the basis of our analysis, and the identification and explanation of relevant phenomenon.

3.2 Pre-study

As part of a broad, preliminary investigation we explored how a selected number of firms formulate and signal purpose. Next to considering the level of maturity as a potential key variable in explaining the vast differences, we also considered design orientation as a distinctive factor. Design orientation describes the degree to which firms align and adjust their corporative processes, including their products/ services and business model, according to design and aesthetics in general. In order to better understand the potential of this analysis and the relevant underlying categories, we conducted a pre-study in which we analyzed a small number of firms based on a variety of assumptions. After this pre-study we were able to reformulate these assumptions into concrete hypotheses, which now form the basis of our thesis.

3.2.1 Procedure

First, we formed two clusters of firms. The first cluster (subset A) exclusively contained firms where at least one of the founders has a background (educational or professional) in design. The underlying assumption hereby was, that if at least one of the founders is a designer, design in general would have a pivotal impact on the firm's choices and conceptualization and hence the firm would be design-oriented. The second cluster (subset B) consisted exclusively of firms which operate within the financial sector. We hereby chose to focus on a selected portion of the largest banks in Europe, measured by market capitalization. The underlying assumption was that firms within one sector behave similarly and therefore they also signal purpose similarly. We assumed that this similarity would also result in better comparability and measurability. From the firms in these two clusters, we collected corporate statements.

3.2.2 Sample

Subset A included: Airbnb, Etsy, Twitter and Square among others, while subset B included: ING-DiBa, BNP Paribas, UBS, Santander, Deutsche Bank and HSBC and many more. From these firms we gathered corporate vision statements, mission statements, purpose statements and the most recent shareholder letter, if available.

3.2.3 Data Processing

The data points described above were then compared and analyzed both descriptively and textually. Due to the limited number of data points, we decided not to use a text analysis software, but rather to compare the statements manually. By doing so, we identified patterns in the formulation of the statements, but also in terms of their general usage. These preliminary insights were then compared with literature and theoretical concepts, such as Signaling Theory.

3.2.4 Key Findings

While collecting the described datasets, we noticed how hard it was to identify firms that fulfill our predefined requirements associated with design-orientation. Even after intensive research we only managed to collect a handful of firms that meet these requirements and therefore we had to conclude that it is unfeasible to measure design-orientation in the way we intended and doubted that categorizing by design-orientation would produce a sample large enough to

analyze. Nonetheless, we observed how valuable it is to compare two relatively homogenous subsets with each other and that we can reduce the number of uncontrollable variables by staying within one sector.

During the process we also noticed that many firms actively communicate corporate values and that they express purpose when addressing values. This was something we previously had not anticipated. Nonetheless, we noticed that the terms purpose statement, mission statement and vision statement were often used interchangeably and ambiguously. While some companies communicated their purpose explicitly under the label "purpose statement", others presented similar and comparable content under the label "corporate values" or "mission" and "vision statements".

Additionally, we noticed that it is not efficient to screen and analyze the shareholder letter of all selected firms – even for this reduced pre-study. Due to the vast extent of shareholder letters in general, it was not feasible and simply too hard to identify patterns and since only publicly traded firms have to produce such a document all private firms would have been disregarded.

Finally, after screening literature regarding Signaling Theory we noticed that purpose might also be signaled indirectly through a firm's products and services (*embedded signaling of purpose*). In order to investigate this embedded purpose communication, we subsequently looked at how the underlying firms describe their products and if they use them to additionally signal purpose. Hereby, we noticed patterns in the use of embedded signaling of purpose among startups and banks. While some players strongly focused on the communication of the products features, others also took the opportunity to express classic aspects of purpose, such as the firm's *why*, its long-term goals or the impact they want to have on society.

3.2.5 Conclusion and Implications for Main Study Design

Due to the insights, we gained during our preliminary-study, we realized that it is unfeasible to measure design-orientation as intended and decided to discard design-orientation as a key explanation variable. Nonetheless, we saw a significant difference in the signaling of purpose when comparing startups (those that we did identify as design-oriented, Subset A, happened to be startups) and more established firms (all firms in subset B). We therefore saw that the level of maturity might cause the observed differences in signaling and decided to apply this distinction going forward. Additionally, we saw a high degree of homogeneity and therefore comparability within the banking subset (subset B) of our pre-study, which led us to the conclusion that we would focus on one sector only in order to increase comparability. For the main study we decided to focus on the financial industry in Europe. Applying the distinction of startups and mature firms to this specific empirical setting, we decided to define financial technology companies (FinTechs) as the subject of our analysis when speaking of startups and to define established banks (banks) as the subject of our analysis when referring to mature companies.

Additionally, we noticed that, and this was also supported by the literature review as outlined in chapter 2, many firms used corporate statements interchangeably and express their sense of purpose throughout several of their corporate artifacts. It could therefore not be excluded that

a company expresses purpose in its mission statement, while another company expresses purpose in its values. We therefore decided not to rely only on one corporate statement when analyzing purpose (e.g. only purpose statement) but to take all statements into consideration and screen them for purpose content. While also accounting for the actual label, we decided to consider them jointly under the term "corporate statement". Additionally, it should be noted that we decided to disregard the shareholder letter as a relevant corporate artifact for the main study.

Since the interesting initial patterns of embedded signaling were generally supported by existing literature, which also highlights the importance of action-oriented and enacted purpose (cf. Chapter 2.1) and suggests that authentically lived purpose will influence the actions and outcomes produced by a firm, we decided to expand our research by analyzing the embedded signaling of purpose by considering product descriptions as embedded means of signaling purpose in our main study. In order to further increase comparability, we wanted to analyze the product description of a product which all underlying players (both FinTechs and banks) offered. Therefore, we decided to use the product descriptions of the respective consumer-facing banking apps.

3.3 Main Study

3.3.1 Procedure

To explore the validity of our hypothesis we gathered corporate artifacts and app descriptions from two distinct clusters of organizations. These groups are: 1) traditional banks and 2) banking FinTechs. These two clusters were chosen in order to reduce the number of variants in our analysis, as all selected firms operate within the financial sector. The data that was gathered from these two clusters was then compared by using textual analysis. A detailed description of how we proceeded in our textual analysis can be found in the subchapter 3.3.3 Data Processing.

3.3.2 Sample

For the analysis in our thesis, we gathered data from 87 firms. As described above they can be clustered into two groups. The first cluster exclusively entails "traditional banks". These banks are the largest banks in continental Europe according to the "STOXX® Europe 600 Banks" benchmark index. This index regards firm as banks according to their largest share of revenue and only lists the largest 45 banks in Europe, according to market capitalization. Since the composition of this index is dynamic, it should be noted that we are referring to the status of the index by June 2020. The second cluster exclusively contains "banking FinTechs". In order to be categorized as such, their main focus has to be on Business-to-Consumer (B2C) banking, they have to be founded in Europe, and they have to have received at least one round of equity financing. The respective data was gathered with the help of the business intelligence platform Dealroom. As of August 2020, this group contains 42 companies.

A substantial part of the data that we gathered from the corporate entities as defined above can be subsumed under the term corporate statements. These corporate statements were gathered in order to analyze the semantic signaling of purpose and entail mission statements, vision statements, corporate values and purpose statements. These data points were compiled through excessive online research. Corporate statements were only considered if they were found in original sources (i.e., on the official company website, in an annual report, in a blog post of the company, in official statements of senior managers, etc.), meaning that the artifacts had to be published by the underlying corporate entity itself. Additionally, the corporate artifacts had to be clearly identifiable as such. This could mean that they were either explicitly labeled as mission statements, vision statements, corporate values or purpose statements or if it became apparent from the context that the respective content could be classified as corporate artifact.

Additionally, we have also gathered the app descriptions of the firm's consumer-oriented retail banking app. For the sake of consistency, we have chosen to focus on the UK iOS AppStore only – if one of the selected corporate entities does not offer an app in the UK iOS AppStore, but for example in another local AppStore or for another operating system or if it was not available in English, then these app descriptions were disregarded and are therefore not subject to this thesis. Additionally, we would like to point out that if a firm has more than one banking app that meets the predefined criteria, then the description of the app with the most downloads was chosen. (The collected data and corresponding sources can be found under Appendix 1)

3.3.3 Data Processing – Textual Analysis

3.3.3.1 Database

The quint essence of mix methods research is the combination of both qualitative and quantitative approaches. While the combination of qualitative and quantitative approaches can manifest itself in various aspects, such as the research questions, the sampling procedures or the data analysis (Tashakkori and Creswell, 2007), our thesis clearly follows a clear mix method due to the data that was collected. The data, as described above, consists of both numerical and textual data points and thus combines qualitative and quantitative aspects.

A tool that is often used in mixed methods research as a data recording tool is excel as it allows to record both textual and numerical data within one spreadsheet. Additionally, the collection of data within spreadsheets offers specific functions that are of value to mixed methods researchers (Tashakkori, Teddlie and Bazeley, 2015). Excel therefore is a useful tool for mixed methods analysis that involve the synthesis of varied forms of data from a range of sources. Due to these reasons we also decided to use excel as our primary data recording tool. Here we collected all data points from each corporate entity in a combined datalist within a single spreadsheet.

Once the data was recorded and organized, we could perform simple descriptive analysis by calculating sums, means, percentages of the dataset itself and by producing cross-tabulations, as recommended by Tashakkori, Teddlie and Bazeley (2015). This allows us to describe the underlying dataset. The respective results of this analysis can be found in chapter 4.

3.3.3.2 Coding via Start Lists

After the data was recorded, reviewed and analyzed on a descriptive level, patterns within and between the concepts described in the data were uncovered using textual analysis. The first step to textual analysis is coding the respective data. Coding provides a formal system to organize the data and thus enables deeper analysis and the identification of links within the data (Bradley, Curry and Devers, 2007). Codes can be defined as tags or labels which are assigned to chunks of data, such as paragraphs, sentences, or words (Miles and Huberman, 1994). These codes help to catalogue key patterns and concepts within the data while preserving the context in which these patterns occur.

Nonetheless, there is substantial diversity in how to develop the respective code structure; with an inductive or a deductive approach. The inductive approach to coding refers to a theory-driven method, where a code or tag is assigned to a chunk of data whenever a concept is identified. The definition of said concept is hereby based on a priori identified literature and aims at identifying concepts that are already well known in literature (Bradley, Curry and Devers, 2007). The deductive approach to coding, however, refers to data-driven method, where codes are only assigned after reviewing and considering the data. The data is reviewed line by line and once a pattern becomes apparent, code is assigned (Bradley, Curry and Devers, 2007). Finally, there is also the so-called integrated approach to coding which combines elements of both the inductive and deductive methods. After reviewing relevant literature, so called *start lists* are developed. These start lists incorporate concepts which are expected to emerge from the data based on the previously reviewed literature. This broad framework is then continuously

adapted while examining the actual data (Bradley, Curry and Devers, 2007). Thus, code development is an iterative process (DeCuir-Gunby, Marshall and McCulloch, 2011). While there is no single right way to develop the code structure, it is elementary that the code is developed in a clear and comprehensive manner that promotes the quality of the subsequent analysis (Miles and Huberman, 1994). For the sake of this thesis, we have settled on an integrated approach of coding.

The first step to the development of our code structure was the review of literature. This enabled us to break the broad and abstract concepts of *feature* and *purpose vocabulary* down into more tangible subcategories. These subcategories are based upon core aspects that constitute the superordinate concepts of *feature* and *purpose vocabulary*.

The identified subcategories for *feature vocabulary* are: *Technology*, *Performance*, *Finance* and *Action*. According to Smith and Colgate (2007), one key manifestation of value in a product lies within the functional and instrumental aspects of said product. This functional dimension of value describes key functions, features, attributes and characteristics of the product but also its relevant performance and the outcomes or consequences of its usage (Smith and Colgate, 2007). The subcategory *Technology* thereby was chosen to account for the technological side of the product's key functions and features, which is expected to consist predominantly out of terminology related to digital technology and mobile applications. The subcategory *Performance* links directly to the expected performance of the product and the value that comes along with it. It entails aspects such as reliability and quality. The subcategory *Finance* was selected to account for the specialized terminology that is exclusively inherent to the financial industry and which in turn also affects the description of the banking application. Finally, the subcategory *Action* was chosen to account for the functions of the underlying product.

The identified subcategories for purpose vocabulary are: General, Descriptive, Transcendental and Stakeholders. As outlined in the hypotheses it is expected that one of the main sources of purpose vocabulary are the many corporate artifacts gathered from the corporate entities. In order to account for the diverse nature of the four kinds of corporate artifacts (mission statements, vision statements, corporate values and purpose statements), the subcategory General describes common words associated with these corporate artifacts. As outlined in chapter 2, purpose statements are often formulated by appealing to four key components: the altruistic component, the motivational/emotional component, the time-related component and the actionable component. The subcategory was chosen in order to account for the emotional and motivational component of a classic purpose statement. It describes how the firm aims to perform by indicating an inspiring state of the firm. The subcategory *Transcendental* speaks to the altruistic and time-related component of purpose and entails references to positive impact the firm aims to have beyond itself in the future, e.g. by contribution to society or fighting climate change. Finally, the subcategory refers to the fact that firms often attribute a certain purpose or mission directly to a specific stakeholder. These might be employees, customers, partners or shareholders.

Once the described subcategories were derived and defined, the raw data was examined in order to identify if it would match the expectations associated with the outlined subcategories.

If the raw data would indicate that the most important words would fit to the categories, then they were matched accordingly. If the discrepancy would be too large, then the categories had to be adjusted in order to account for the unexpected data.

$$tf(t,d) = \frac{\text{\# of occurences of term t in document d}}{\max \# \text{ of term occurences in d}} \qquad idf(t,D) = \ln\left(\frac{\text{\# of documents}}{\text{\# of documents containing word t}}\right)$$

Figure 3: Formular to calculate the tf and the idf score

In order to determine which words to consider, we conducted a *tf-idf* analysis, which stands for *term frequency – inverse document frequency. Tf-idf* aims to define the importance of a keyword or phrase within a document and consist of two distinct parts (*term frequency* and *inverse document frequency*). The first part, *term frequency*, simply refers to the number of occurrences of a word within a specific document. The second part, *inverse document frequency*, indicates how frequently a word appears in the entire corpus of documents. This value is calculated on a per word basis and is inverted by using the logarithm of it.

Words with a high *tf-idf* factor are therefore relevant to the text – so-called specific words – and words with a low *tf-idf* factor are generic words – so-called stop words. By performing the *tf-idf* analysis, we derived four distinct word lists, organized by corporate entity (Banks and FinTechs) and the kind of data (corporate artifact and app descriptions) and sorted by *tf-idf* score (the higher the score, the higher the word is ranked).

Word Item d1	tf		tf-idf	Word Item d3	tf	·	tf-idf
& d2	d1, d2	idf	d1, d2	& d4	d3, d4	idf	d3, d4
card	0.15	0.29	0.04	integrity	0.07	0.69	0.05
accounts	0.10	0.29	0.03	businesses	0.06	0.69	0.04
payments	0.08	0.29	0.02	employees	0.06	0.69	0.04
Osper	0.03	0.69	0.02	responsible	0.04	0.69	0.03
pay	0.07	0.29	0.02	society	0.04	0.69	0.03
cards	0.07	0.29	0.02	sustainable	0.09	0.29	0.02
transactions	0.07	0.29	0.02	deliver	0.03	0.69	0.02
ID	0.06	0.29	0.02	enabling	0.03	0.69	0.02
transfers	0.06	0.29	0.02	excellence	0.03	0.69	0.02
if	0.06	0.29	0.02	innovation	0.03	0.69	0.02
spending	0.06	0.29	0.02	purpose	0.03	0.69	0.02
save	0.06	0.29	0.02	shareholders	0.03	0.69	0.02
set	0.06	0.29	0.02	collaboration	0.03	0.69	0.02
using	0.06	0.29	0.02	commitment	0.03	0.69	0.02
no	0.05	0.29	0.02	ethics	0.03	0.69	0.02
•••		•••	•••	•••		•••	

Table 4: tf-idf output (d1: App Descriptions Bank; d2: App Descriptions Fintech; d3: Corporate Statements Bank; d4: Corporate Statements Fintech)

By revising these word lists, we could take the data into account that was most specific and relevant to the respective content. This allowed us to match the most important words in our

data with our predefined subcategories of purpose and feature vocabulary and to develop our start list – the basis for the development of our code. Nonetheless, as indicated by the literature, this is not a one-time action, but an iterative process that becomes more refined the more it is executed (Bradley, Curry and Devers, 2007). In order to finalize the start lists, both members of the research team re-reviewed all the data and independently applied the codes. After the team reviewed discrepancies and resolved differences by in-depth discussion and negotiated consensus. As a result, we derived at a single, agreed upon application of the final codes to the entire data. This iterative approach is suggested and frequently used in the published literature (Bradley, Curry and Devers, 2007).

	Feature V	ocabulary		Purpose Vocabulary			
Entry	Subsection	Entry	Subsection	Entry	Subsection	Entry	Subsection
Download	Technological	Credit	Finance	Purpose	General	Society	Transcendental
Mobile		Debit		Goal		Environment	
Login		Wallet		Vision		Sustainable	
Pin		Currencies		Mission		Global	
ID		Cryptocurre	encies	Values		World	
Account		Bitcoin		Collaboratio	n	Future	
Application		Crypto		Respect		Social	
Data		Bitcoin		Trust		Public	
App		Litecoin		Prosper		Change	
Card		Coin		Integrity		Create	
Fast	Performance	Trade	Action	Best	Descriptive	People	Stakeholder
Secure		Transfer		First		Shareholder	
Safe		Saving		New		Employees	
Quick		Save		Top		Customers	
Performance		Block		Better		Client	
Best		Check		Open		Partner	
Smooth		Manage		Innovative		Colleagues	
Easy		Pay		Latest		Government	
Open		Feature		Serve		Users	
Free		Function		Advanced		Businesses	

Table 5: Finalized version of the start lists/feature and purpose vocabulary dictionary

As the start lists or dictionaries were defined, we were able apply an algorithm to the raw data that was stored in our excel spreadsheet. This algorithm automatically codes the data if vocabulary, that was defined in the start list, is detected by using a binary system (0 representing the absence of relevant vocabulary, 1 representing the presence of relevant vocabulary). We thereby arrived at a large dataset which entails a coded version of the raw data based on the predefined start lists.

3.3.3.3 Processing the Codified Data

In order to process the coded data (more than 22.000 words), a second algorithm automatically detects the total frequency of each individual item listed in the dictionary and in aggregated form for the *feature* and *purpose vocabulary*, respectively. In mixed methods analysis, the described frequency of particular qualitative data is referred to as *count*. According to Tashakkori, Teddlie and Bazeley (2015), *counts* effectively communicate the frequency of the occurrence of a certain feature in a text and they are the most common form in which numbers are introduced into qualitative studies. The total frequency of a specific feature or phenomenon

thereby indicates the importance of these emergent themes (Tashakkori, Teddlie and Bazeley, 2015). In our case, the algorithm thereby automatically generates *counts* on individual itemand aggregated list-level.

In order to process these *counts* for further analysis, we calculated the absolute and relative distributions of counts among the collected data. Hereby, we focused on the following analysis:

1) the occurrence of *feature vocabulary* in Corporate Artifacts and App Descriptions of Banks,

2) the occurrence of *feature vocabulary* in Corporate Artifacts and App Descriptions of FinTechs,

3) the occurrence of *purpose vocabulary* in Corporate Artifacts and App Descriptions of Banks, and 4) the occurrence of *purpose vocabulary* in Corporate Artifacts and App Descriptions of FinTechs. Therefore, we could in a next step statistically compare the occurrences of different vocabularies in the app descriptions and corporate statements of banks and FinTechs according to our hypotheses.

The further statistical analysis was conducted using Python 3.8.3 with SciPy 1.5.4. Based on the hypothesis with two variables each, the statistic test performed to determine whether one of two variables is stochastically larger than the other is a one-tailed Mann-Whitney U test. The Mann-Whitney U test can be performed with two independent samples of ranks where each sample is > 20 (Mann and Whitney, 1947). (The data list for the Mann-Whitney U test can be found under Appendix 1)

To additionally analyze the distribution of counts in these four scenarios and in order to further display the overall variance in phenomena, we created boxplot charts. Boxplots are helpful tools that are commonly used in mix methods, especially since the underlying sample set often does not meet the requirements for traditional statistical analysis such as regression (Tashakkori, Teddlie and Bazeley, 2015). In order to interpret and evaluate the collected data nevertheless, visual tools such as boxplot charts are useful in suggesting trends and patterns within the data (Dickinson, 2010). The box plots were created using Seaborn 0.11.0.

3.4 Reliability and Validity

Reliability refers to whether a particular technique, applied repeatedly to the same object, yields the same result each time (Babbie, 2012). Therefore, reliability describes the overall consistency of a measure. In this thesis, data is collected in two ways. First, data is collected by searching the corporate statements (vision, mission, purpose and values) on the websites of the companies in the sample. A potential source for errors could therefore be the collection process itself; It is possible that no corporate statements were found for a specific firm, but the company does in fact exhibit corporate statements. To ensure that the data is reliable at this point, companies for which no data was found in the first step were checked repeatedly. This kind of error also holds true for the collection of the app descriptions respectively. These were collected by copying app descriptions of the company's most popular app from the UK iOS AppStore. In the next step data is coded using the pre-defined start lists that were created by the researchers in an iterative procedure. Creating the start-list it a qualitative procedure and depends on the experience and impressions of the researchers but is therefore also subject to the researcher's individual perspective and personal bias (Bradley, Curry and Devers, 2007). As the data is then coded using an algorithm, the resulting coding of data is repeatable using the start list developed in the course of this thesis.

Validity refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration (Babbie, 2012). There are four types of validity. Face validity describes that quality of an indicator that makes it seem a reasonable measure of some variable. Criterion-related validity¹ describes the degree to which a measure relates to some external criterion. Construct validity describes the degree to which a measure relates to other variables as expected within a system of theoretical relationships. Content validity describes the degree to which a measure covers the range of meanings included within a concept (Babbie, 2012). In this thesis the measures "purpose vocabulary" and "feature vocabulary" are used to measure the extend of purpose orientation and feature orientation in companies written artifacts. To measure the extent to which a company uses "purpose vocabulary" or "feature vocabulary" in statements and app descriptions, a start list is used. This start list searches for keywords and, although it leads to very reliable results, can lead to inaccuracies in content validity. Take, for example, the word "trust" which is coded as a "purpose vocabulary" but can also be understood as a "feature vocabulary" in the context accordingly². Therefore, even though we have followed the methodological guidelines of existing literature in detail, inaccuracies may occur in the data evaluation and the underlying method does not account for contextual meaning (Bradley, Curry and Devers, 2007).

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¹ Also known as predictive validity

² Consider, for example, the use of "The customer can trust the two-factor authentication for secure access to your account".

4. Results and Analysis

This chapter firstly presents an overview of the collected data. Secondly, it shows the results of the textual analysis. In the last step the results are summarized and related to the hypotheses.

4.1 Data Overview

Data was collected from 45 banks and 42 FinTechs (detailed information on the respective firms and their business can be found in Appendix 1, 5 and 6). The data collection resulted in a total of 58 app descriptions and 98 corporate statements (see Table 6). As previously outlined, all corporate statements, i.e., Mission, Purpose, Vision Statements and Values, are aggregated and considered "Corporate Statements". This results in 32 app descriptions and 35 corporate statements for banks and 26 app descriptions and 24 corporate statements for FinTechs. While Banks predominantly use values as corporate artifacts (45% of all corporate statements), FinTechs predominantly use mission statements (62% of all Corporate Artifacts). Additionally, it is striking that purpose statements are rarely used by FinTechs, while roughly a third of all banks explicitly state a purpose. It should also be noted that 78% of all banks use at least one corporate statement and 47% use two or more statements. In contrast, only 57% of all analyzed FinTechs use at least one corporate artifact and merely 21% use at least two. Interestingly, no corporate entity, neither bank nor FinTech, uses all four selected corporate artifacts. But there are clear patterns in terms of combining corporate artifacts; While all FinTechs that use two corporate statements use a combination of mission and vision statements, banks that use two corporate statements predominately use a combination of purpose statement and values. If three corporate statements are being displayed, FinTechs only use the combination of mission, vision and values, whereas banks use purpose, values and either vision or mission.

		Corporate Statements								
	App	Mission	Purpose		Vision					
	Descriptions	Statements	Statements	Values	Statements	Total				
Banks	32	12	13	28	8	61				
FinTechs	26	23	1	4	9	37				
Total	58	35	14	32	17	98				

Table 6: Number of collected App Descriptions and Corporate Statements

Putting the number of words in relation to the number of App Descriptions and Corporate Artifacts, the mean length of app descriptions for banks is 341.6 words and for FinTechs it is slightly longer with 385.0 words. The mean length of corporate statements is 22.1 words for banks and 16.1 words for FinTechs (see Table 7).

	App Descriptions	Corporate Statements
Banks	341.6	22.1
FinTechs	385.0	16.1
Mean	361.1	19.8

Table 7: Mean word count of all App Descriptions and Corporate Statements

4.2 Textual Analysis

4.2.1 Analysis of Corporate Statements

4.2.1.1 Analysis of the Use of Purpose Vocabulary

The following section displays the results of the textual analysis which aims to find an answer to Hypothesis 1a. Hypothesis 1a predicts that in their corporate statements, mature firms tend to use more purpose vocabulary than startups. Therefore, we compare the count of purpose vocabulary divided by the total number of words per corporate statement (the ratio of purpose vocabulary) of banks and FinTechs. The sample includes 35 banks and 24 FinTechs that have at least one corporate statement. The median purpose ratio in banks and FinTechs is .107 and .037 respectively and the distribution in the two groups differs significantly (Mann–Whitney U = 236.5, p = 0.002 one-tailed). The results of the Mann-Whitney U test also suggest that the null hypothesis, that the ratio of purpose vocabulary in corporate statements of banks and FinTechs come from the same population, can be confidentially rejected (p < .05). Therefore, the results suggest that Hypothesis 1a can be supported.

	count	mean	std	min	0.25	0.5	0.75	max
Bank (1)	35	.1193	.0910	.0000	.0588	.1071	.1703	.4444
FinTech (0)	24	.0568	.0690	.0000	.0000	.0371	.1028	.2222

Table 8: Descriptive analysis of the ratios of Purpose Vocabulary in Corporate Statements of FinTechs and Banks

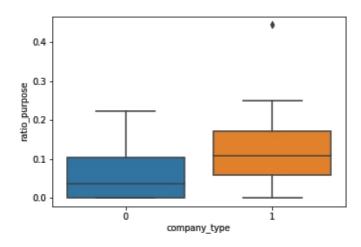


Figure 4: Box plot of the ratios of Purpose Vocabulary in Corporate Statements of FinTechs (0) and Banks (1)

4.2.1.2 Analysis of the Use of Feature Vocabulary

The following section displays the results of the textual analysis which aims to find an answer to Hypothesis 1b. Hypothesis 1b predicts that in their corporate statements, startups tend to use more feature vocabulary than mature firms. Therefore, we compare the count of feature vocabulary divided by the total number of words per corporate statement (the ratio of feature vocabulary) of banks and FinTechs. The sample includes 35 banks and 24 FinTechs that have at least one corporate statement. The median feature ratio in banks and FinTechs is .000 and .004 respectively and the distributions in the two groups differs significantly (Mann–Whitney U = 299.5, p = 0.015 one-tailed). The results of the Mann-Whitney U test also suggest that the null hypothesis, that the feature ratio of banks and FinTechs come from the same population, can be confidentially rejected (p < .05). Therefore, the results suggest that Hypothesis 1b can be supported.

	count	mean	std	min	0.25	0.5	0.75	max
Bank (1)	35	.0158	.0420	.0000	.0000	.0000	.0078	.2000
FinTech (0)	24	.0398	.0572	.0000	.0000	.0036	.0769	.2222

Table 9: Descriptive analysis of the ratios of Feature Vocabulary in Corporate Statements of FinTechs and Banks

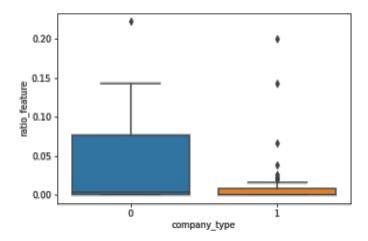


Figure 5: Box plot of the ratios of Feature Vocabulary in Corporate Statements of FinTechs (0) and Banks (1)

4.2.2 Analysis of App Descriptions

4.2.2.1 Analysis of the Use of Feature Vocabulary

The following section displays the results of the textual analysis which aims to find an answer to Hypothesis 2a. Hypothesis 2a predicts that in their product descriptions, mature firms tend to use more feature vocabulary than startups. Therefore, we compare the count of feature vocabulary divided by the total number of words per app description (the ratio of feature vocabulary) of banks and FinTechs. The sample includes 32 banks and 26 FinTechs that have an app description. The median feature ratio in banks and FinTechs is .084 and .075 respectively and the distributions in the groups differs significantly (Mann–Whitney U = 299.0, p = 0.034 one-tailed). The results of the Mann-Whitney U test also suggest that the null hypothesis, that the feature ratio of banks and FinTechs come from the same population, can be confidentially rejected (p < .05). The results suggest that Hypothesis 2a can be supported.

	count	mean	std	min	0.25	0.5	0.75	max
Bank (1)	32	.0855	.0241	.0375	.0691	.0842	.0957	.1525
FinTech (0)	26	.0745	.0304	.0283	.0570	.0748	.0849	.1582

Table 10: Descriptive analysis of the ratios of Feature Vocabulary in App Descriptions of FinTechs and Banks

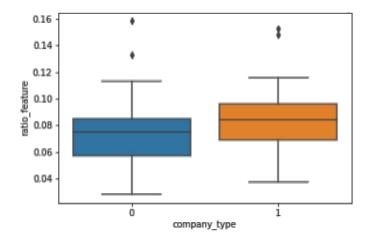


Figure 6: Box plot of the ratios of Feature Vocabulary in App Descriptions of FinTechs (0) and Banks (1)

4.2.2.2 Analysis of the Use of Purpose Vocabulary

The following section displays the results of the textual analysis which aims to find an answer to Hypothesis 2b. Hypothesis 2b predicts that in their product descriptions, startups tend to use more purpose vocabulary than mature firms. Therefore, we compare the count of purpose vocabulary divided by the total number of words per app description (the ratio of purpose vocabulary) of banks and FinTechs. The sample includes 32 banks and 26 FinTechs that have an app description. The median purpose ratio in banks and FinTechs is .015 and .013 respectively and the distributions in the two groups does not differ significantly (Mann–Whitney U = 363.5, p = 0.208 one-tailed). The results of the Mann-Whitney U test also suggest that the null hypothesis, that the feature ratio of banks and FinTechs come from the same population, cannot be confidentially rejected. Therefore, the results suggest that Hypothesis 2b cannot be supported.

	count	mean	std	min	0.25	0.5	0.75	max
Bank (1)	32	.0174	.0099	.0035	.0134	.0152	.0199	.0563
FinTech (0)	26	.0156	.0096	.0000	.0070	.0129	.0241	.0372

Table 11: Descriptive analysis of the ratios of Purpose Vocabulary in App Descriptions of FinTechs and Banks

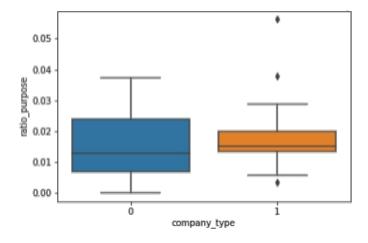


Figure 7: Box plot of the ratios of Purpose Vocabulary in App Descriptions of FinTechs (0) and Banks (1)

4.3 Hypotheses Summary of Results

Summarizing all findings, it can be concluded that comparing banks and FinTechs based on feature ratios and purpose ratios in corporate statements and app descriptions using the Mann-Whitney U test suggests that Hypotheses 1a, 1b and 2a can be supported, while Hypothesis 2b cannot be supported.

	$\boldsymbol{\mathit{U}}$	p
Comparison of purpose ratios in corporate statements	236.5	.002**
Comparison of feature ratios in corporate statements	299.5	.015*
Comparison of feature ratios in app descriptions	299.0	.034*
Comparison of purpose ratios in app descriptions	363.5	.796

^{*} Significant at p < .05; ** Significant at p < .01

Table 12: Summary of Mann-Whitney U tests

Нуро	theses	
H1a	In their corporate statements, mature firms tend to use more purpose vocabulary than startups.	Supported
H1b	In their corporate statements, startups tend to use more feature vocabulary than mature firms.	Supported
H2a	In their product descriptions, mature firms tend to use more feature vocabulary than startups.	Supported
Н2ь	In their product descriptions, startups tend to use more purpose vocabulary than mature firms.	Not Supported

Table 13: Summary of Hypotheses and Results

5. Discussion

In the following chapter the results of the analysis in chapter 4 are discussed. First, the use of feature vocabulary is discussed, followed by a discussion of the use of purpose vocabulary by Banks and FinTechs respectively. This is followed by a general discussion of the results.

5.1. Discussion of the Textual Analysis

5.1.1 Discussion of the Use of Feature Vocabulary

The aim of this study was to investigate how banks and FinTechs use semantic means of signaling purpose and embedded means of signaling purpose and to evaluate potential differences in their usage. Narrowing our attention to the corporate artifacts and app descriptions of the respective companies, we evaluated the use of feature vocabulary and purpose vocabulary in a qualitative textual analysis in order to determine to which degree companies rely on semantic signaling of purpose or embedded signaling of purpose.

Therefore, we examined the use of feature vocabulary in app descriptions and corporate statements. By doing so, H1b (In corporate statements start-ups tend to use more feature vocabulary than mature firms) and H2a (In product descriptions mature firms tend to use more feature vocabulary than startups) were supported. This allows us to conclude that in embedded signaling, Banks emphasize features more than FinTechs. This can be attributed to different signaling traits resulting from the different product portfolios of Banks and FinTechs. Most of the Banks in the sample are much older than the FinTechs and have a historically grown product portfolio that does not differ much from bank to bank. FinTechs, on the other hand, are rarely older than 10 years and tend to solve problems in a more targeted, less diverse product(portfolio). This leads to two differences in the signaling of features. Firstly, it can be assumed that FinTechs have fewer features to signal because of their smaller product portfolio - the observability of the features is given with less feature vocabulary. Second, it can be assumed that in order to differentiate themselves from other banks with similar product portfolios, Banks need to describe the differences in the features of their products in a more nuanced way - the level of signaling quality is already very high and more costs need to be incurred to make differences observable. Therefore, more feature vocabulary is being used. This is reinforced by looking at the use of feature vocabulary in corporate statements. It shows that FinTechs' use of feature vocabulary in their corporate artifacts is higher in relative terms than that of Banks. This may also be due to the fact that FinTechs have fewer products and can therefore communicate their features on a cross-company level while ensuring signaling fit and signaling observability. This would not be possible to the same extent with banks and their wide product portfolio that has different features on a per-product basis.

5.1.2 Discussion of the Use of Purpose Vocabulary

Additionally, we examined the use of purpose vocabulary in App Descriptions and Corporate Statements. By doing so, H1a (In corporate statements mature firms tend to use more purpose vocabulary than start-ups) was supported and H2b (In product descriptions start-ups tend to use more purpose vocabulary than mature firms) was not supported. Therefore, it can be

assumed that Banks tend to rely more on semantic means of signaling purpose than FinTechs. This can be attributed both to the receivers and to the adequacy of the signal. The receivers of the purpose statements of publicly listed banks are, not exclusively but to a large extent, the shareholders, i.e. investors in public equity. Investors in public equity expect, more than investors in private equity, a high degree of clarity and consistency from signaling entities. These very demanding investors are used to standardize means of communication that require little interpretation and ambiguity which is additionally intensified by the according regulation. This consistency is comparable to that of financial reporting or the general standard of using shareholder letters as means of communication. With semantic signaling of purpose, banks make it easier for investors in public equity to see and understand the underlying purpose of the respective company quickly and without having to interpret the embedded purpose. In addition, as mentioned in the previous chapter, banks usually have a wider product portfolio than FinTechs. Semantic signaling of purpose in the corporate statements therefore makes it less costly for banks to communicate the purpose across all products instead of relying on embedded signaling of purpose for each product respectively.

As H2b was not supported with the underlying data, we cannot conclude that FinTechs focus more on embedded signaling of purpose than banks. This may be attributable to app descriptions not being an adequate proxy for the embeddedness of purpose in the product. Additionally, design language in the actual product (cf. figure 8) might have to be assessed to gain a more precise understanding of embedded purpose. However, looking at the absolute numbers of corporate statements of FinTechs (chapter 4.1) it becomes clear that FinTechs, based on our sample, rely less on corporate artifacts than banks. This may be attributable to that facts that, first, unlisted FinTechs have different investors than publicly listed banks. The investors as receivers of signaling, whether venture capital or other types of private equity, place less emphasis on standardized semantic signaling of purpose. Furthermore, they generally have less access to proven and reliable financial information and, therefore, attach more importance to the product and the development potential of the product. In addition, the product is also aimed at other stakeholders who expect different communication from FinTechs than from banks. Looking, for example, at FinTechs' customers, they are often innovators or early adopters who are rather driven by purpose compared to the typical customers of banks (early and late majority). Rogers (2003) suggests that particularly innovative and early adaptors are driven by a high degree of empathy and awareness of meaning. Since these two groups are of high importance to subsequently motivate a majority to adapt to the product, it is essential to address the need for purpose of these groups. Secondly, since FinTechs are at an earlier stage of development than banks in which they typically strive for reaching a mission with restricted time and financial resources, they are dependent on using their resources in a more efficient way. By spending less effort on semantic signaling of purpose, which is rather irrelevant to their stakeholders, they can invest more time in developing embedded signals of purpose and thus allocate capital more efficiently. Additionally, in the emergence of a new company the purpose drives many of the efforts of a company. Therefore, during the development process the purpose becomes embedded in various aspects in the company and its products. As a result, both a higher signaling intensity can be generated on the product and the quality can be improved, resulting in a better signaling effect on the receiver. Thirdly, FinTechs, due to their

limited product portfolio, can put more emphasis on embedded signaling of purpose without having to incur the costs that banks would incur if they did the same for all their products. This makes it less costly for FinTechs to signal their purpose not at the corporate level through semantic signaling of purpose but at the product level though embedded signaling of purpose.

5.3 General Discussion

Discussing the four hypotheses in light of the analysis and results in chapter four show several findings that can be explained to a large extend using parts of Signaling Theory.

FinTechs are mostly young companies that focus on few products that are new or relatively new to the market. Therefore, they are urged to use their capital efficiently and facilitate only those ways of signaling purpose that are efficient. The data of this thesis suggests that this observation can be supported and that therefore FinTechs rely less on semantic means of signaling than banks. The feeling of "being on a mission" (Gulati, 2019), pushes FinTechs to signal their mission and vision or to dismiss corporate statements altogether. Through embedded signaling of purpose, however, they can send high quality signals to their receivers. Looking at the box plot in figure 7, the noticeably wider spread in the distribution of the purpose ratio in FinTechs indicates that the use of embedded purpose has already been adapted to a very strong degree by some companies, while others still lag behind. A case example of one extreme example can be found in figure 8 where purpose related formulations in the app description of Monzo (FinTech) are compared to purpose related formulations of Santander (bank).

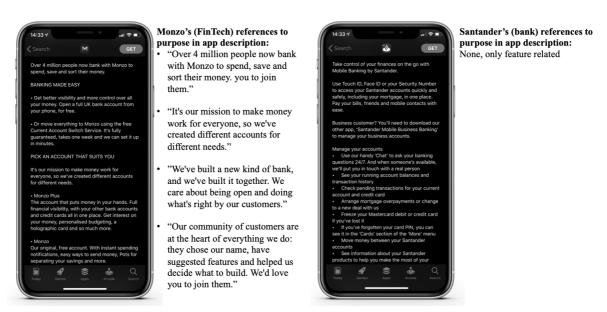


Figure 8: Comparison of Monzo's and Santander's app descriptions

For banks, however, the spread, even though the mean and median are comparable, is much narrower, suggesting a very homogenic treatment of embedded means of signaling and underlining the similarity of banks' business models, stakeholder demands and the overall approach to their product and purpose. Banks, as public and more mature companies, focus on a wide range of products in their portfolio and usually have better access to capital. Therefore,

they can rely on semantic signaling of purpose, which is a weaker signal and therefore less cost efficient, but at the same time important for many investors in public equity. Additionally, the wide-ranging product portfolio makes embedded signaling of purpose especially costly.

This homogeneity is reinforced by the fact that most banks have the same combinations of corporate statements (e.g., banks that have two statements predominantly use purpose and values in combination). If one looks at the use of statements in a more granular way, it is also noticeable that FinTechs and banks form different clusters in the way corporate statements are used. For example, values are the most frequently used corporate statement and mission at FinTechs. This can again allow the conclusions that banks signal to other recipients and that investors and customers expect that the bank explains itself in the "is" situation and that the FinTech describes itself in the "should" situation. Therefore, it is apparent that the discussion of the results in connection with the Signaling Theory and the other theoretical foundations from chapter two lead to several reasons that can potentially explain the differences in the signaling of purpose of mature companies and start-ups.

6. Conclusion

Research has documented how purpose is perceived by different stakeholders of a company and how different corporate statements, e.g. mission and vision statement, differ from each other (Free, 2014). However, the signaling of purpose from companies of varying maturity and has remained largely unaddressed. Therefore, the aim of this thesis was to investigate whether companies communicate purpose differently and if so, along which dimensions does the signaling differ and which factors might influence this divergence. The findings of this thesis are summarized below by answering the predefined research questions.

RQ 1: Do companies rely on different means to signal their purpose?

Through our pre-study and literature review we were able to uncover two ways in which companies signal their purpose: Semantic signaling which focuses on classical communication means such as the well-known corporate statements and embedded signaling which focuses on the purpose embedded in a firm's actions or outcomes, such as in the product or service of a company. By investigating H1a and H2b we were able to demonstrate that purpose vocabulary is utilized differently by Banks and FinTechs and that this difference can be attributed to the signaling itself, i.e., corporate artifacts and app descriptions. Therefore, we conclude that different companies do rely on different signaling means to signal their purpose.

RQ 2: To what extend can the differences in how purpose is signaled be attributed to the company's level of maturity?

By looking at the financial industry and comparing the incumbent banks with nascent banking, FinTechs, we have been able to compare different companies at different stages of their life cycle in the same rapidly changing industry. H2a suggests that mature companies are much more focused on features in product descriptions than startups. H1a suggests that depending on age, a different focus, which can also deviate from purpose, is set within a comparable signaling environment. Therefore, we conclude that the signaling of purpose, even within the same sector, differs according to the age of the company.

7. Implications

7.1 Theoretical Implications

This thesis is based on the idea that in the landscape of management literature, which in recent years has increasingly dealt with the underlying purpose of a company, the question how the signaling of a purpose differs among firms has not yet been answered. Furthermore, no recommendations could be found in existing literature on how purpose is communicated differently based on the sector a company operates in or the maturity level of a firm. To create a basis in this nascent field of research, a qualitative study was chosen to identify patterns for future research to build upon. Therefore, this thesis itself builds on the existing body of literature by exploring how purpose is communicated in a corporate setting and adds two dimensions to this existing literature: On the one hand, the signaling of purpose at different stages of a company's life cycle, on the other hand, the exploration of different means of signaling by a company. Thus, this thesis ties in with the research areas of corporate communication and marketing strategy and offers these areas new dimensions for further exploration. But it also adds new dimension to and highlights the importance of the proper reflection of how a company's purpose is best embedded in its products. This strong combination of corporate purpose and product development is largely unexplored and offers room for further exploratory research. In addition, the combined findings from both dimensions can be utilized within the research areas of leadership theory and corporate governance as guidance for leading an incumbent company through a rapidly changing market landscape.

While this study was a qualitative study with a very specific set of company data which certainly serves as the foundation for further research, it still leaves room for quantitative studies which elaborate and statistically underpin the new dimensions more precisely. More indepth quantitative analysis is additionally needed to draw generalizable conclusions from much larger data samples. For the mentioned areas of management research this implies that if in the corporative purpose is examined, these dimensions "maturity of the company" and "signaling means" can be taken into account.

7.2 Managerial Implications

This thesis, which examines an industry that currently experiences many new developments and tensions in the competitive environment, may also have some implications for practitioners. For incumbents the threat posed by new, innovative business models has become an increasingly central part of corporate strategy over the last decade (Rigby, Sutherland and Takeuchi, 2016). Especially disruptive companies, which start at the lower end of the price spectrum and conquer market shares through a more precise focus on the problem of customers, have become increasingly relevant (Christensen, Raynor and MacDonald, 2015). The financial services industry clearly shows how FinTechs, which can take market share from traditional banks through low-cost and targeted products, pose an acute threat as new companies. Our research suggests that the signaling of purpose differs between traditional banks and FinTechs.

For traditional banks and potentially other companies in a similarly dynamic industry, a rethinking of the communication of purpose in a competitive market environment could lead to a better competitive position. In addition, an understanding of the differences in purpose signaling can lead to a more focused use of resources that are intended for communication and stakeholders of all kinds.

Especially with regard to banks, companies may consider using more embedded purpose, which leads to a better signal effect due to higher costs. In addition, more purpose that is signaled close to or through the product can create a differentiation factor in an otherwise homogeneous industry. Especially if a firm wants to differentiate itself from companies entering the market, this could be a crucial factor to remain visible to customers. One problem that could arise is the actual disconnect between stellar corporate statements and the actual product. This could make it especially difficult for banks to fulfill embedded means of purpose.

On the other hand, FinTechs can also position themselves closer to established banks by emphasizing semantic means of signaling, thus increasing legitimacy, which is usually not available to new entrants. It might be easier to start with expressing the purpose in corporate statements if embedded means of purpose is already pronounced than the other way around.

8. Limitations

Certain delimitations were already established at the beginning of this thesis. Thus, this thesis only deals with one specific industry, the financial services industry, and only considers "traditional Banks" and "banking FinTechs" within this industry. The companies in the respective subsets have been defined by accessible and existing benchmark lists (Eurostoxx Index and Dealroom database) and some of them may not be mutually exclusively included in the respective cluster and only serve as a closest approximation. A further limitation is the use and aggregation of the different signals, as we considered the entirety of a company's corporate artifacts as "corporate statements". It is possible that certain companies may use other communication tools to signal purpose which were consequently not included in this cluster but could be considered in further research. In addition, app descriptions from the UK iOS App Store were used as a proxy for purpose embedded in the product. Future research could therefore go a step further and consider multiple applications or the product itself, with a focus on, for example, design language, as embedded means of purpose, to make the investigation more precise. This would need to take customer perception into account and might be adjacent to the domain of design research. In addition, in the textual analysis, with the help of the respective dictionaries, we have developed a code structure on a word level, i.e. not on the sentence or paragraph level. Therefore, context could only be regarded to a limited degree. Although this type of coding is suitable for coding a qualitative data set such as the one in this thesis, some aspects of developing the underlying code structure are subject to the researchers individual interpretation and biases and therefore the concrete application of the underlying code might vary from individual to individual (Tashakkori, Teddlie and Bazeley, 2015).

Furthermore, our methodology is a procedure that is applied to topics that are in very early stages. This is to provide an initial basis for further research by identifying problem patterns, suggesting additions to theory and outlining further research (Edmondson and Mcmanus, 2007). An alternative methodology, which is also suitable for the exploration of nascent fields like the one of this research, is to study the underlying phenomenon by analyzing case studies. Hereby the content of qualitative data is analyzed in a pair-wise comparison of two distinct cases or one case is studied in detail over time. Cases thereby allow to study a limited number of actors to a high degree of detail, accounting both for the occurrences of phenomenon but also their specific context. Therefore, this method is suitable as it allows to make sense of the observations and to identify initial patterns that lead to research propositions and potentially a provisional theory. However, neither the chosen methodology nor case studies cover areas that are considered standard in intermediate or advanced research. For example, statistical interferences were not identified, and a classical regression model was not developed. In addition, due to the iterative approach, especially in connection with the coding of the qualitative data and the pre-study, a bias cannot be excluded on our part, as would be the case in a quantified study.

Although this work is subject to certain limitations, we have acted to the best of our knowledge and believe in the framework of our research methodology.

9. Future Research

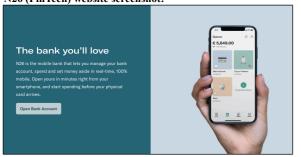
Purpose research is a rapidly developing field that is experiencing high demand from both theory and practice and will continue to provide many more strands of research in the future. In particular, research will continue to focus on the expression of purpose in a corporate context, as is the case in the field of corporate communication and marketing strategy. Building on this area, our research suggests that further research should take a company's level of maturity into account, but also consider the varying means of signaling purpose. In these two areas, further research efforts should include studies that allow for more robust hypothesis testing through a more quantified study design.

In addition, the statements in this thesis may be an interesting basis for the related field of design research. If one assumes that companies that have products that are perceived by consumers as designed in a more appealing manner, also have a better understanding of their purpose, the connection between the signaled product-related purpose and perceived design quality could be investigated. Especially if "embedded purpose" is in fact considered as part of a product and not the product description, the consideration of website design, marketing design, product or packaging design can lead to further results. Though we are no experts in the design language of products, figure 9 shows some apparent differences in the product and marketing design of N26 (FinTech) and Commerzbank (Bank), e.g., in the choice of colors, the use of fonts, the structure of the app and call-to-action that might suggest embeddedness of purpose.

Further research could also be done in the arc research, where findings on the signaling of purp venture architecture. Thus, this thesis offers a further research in several areas related to purpos



N26 (FinTech) website screenshot:



Commerzbank (bank) website screenshot:



F The bank at your side. A better place for banking.

With the Commerzbank Banking-App, you can make all your banking transactions even easier and faster - unknowntime, from unknownwhere.

New: You can buy and sell securities within the

G Play Store 💣 App Store



ommerzbank (bank)

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Appendix

Appendix 1

Source to the collected firm data:

https://drive.google.com/file/d/1uzaLizwgR2Pi-CRgH5gm0dUfxpTH5UP8/view?usp=sharing

Appendix 2

Source to the collected data and input for the Mann-Whitney U test: https://drive.google.com/file/d/17gbPds6hpJJ qAg kOAEt1vGgy7Yytrh/view?usp=sharing

Appendix 3

Patagonia's purpose letter:

We're in business to save our home planet.

Our Reason for Being

At Patagonia, we appreciate that all life on earth is under threat of extinction. We aim to use the resources we have—our business, our investments, our voice and our imaginations—to do something about it.

Patagonia grew out of a small company that made tools for climbers. Alpinism remains at the heart of a worldwide business that still makes clothes for climbing—as well as for skiing, snowboarding, surfing, fly fishing, mountain biking and trail running. These are silent sports. None require an engine; rarely do they deliver the cheers of a crowd. In each, reward comes in the form of hard-won grace and moments of connection with nature.

As the climate crisis deepens, we see a potential, even probable end to such moments, and so we're fighting to save them. We donate our time, services and at least 1 percent of our sales to help hundreds of grassroots organizations all over the world so that they can remain vigilant, and protect what's irreplaceable. At the same time, we know that we risk saving a tree only to lose the forest—a livable planet. As the loss of biodiversity, arable soils, coral reefs and fresh water all accelerate, we are doing our best to address the causes, and not just symptoms, of global warming.

Staying true to our core values during forty-plus years in business has helped us create a company we're proud to run and work for. To stay in business for at least forty more, we must defend the place we all call home.

Core Values

Our values reflect those of a business started by a band of climbers and surfers, and the minimalist style they promoted. The approach we take toward product design demonstrates a bias for simplicity and utility.

Build the best product

Our criteria for the best product rests on function, repairability, and, foremost, durability. Among the most direct ways we can limit ecological impacts is with goods that last for generations or can be recycled so the materials in them remain in use. Making the best product matters for saving the planet.

Cause no unnecessary harm

We know that our business activity–from lighting stores to dyeing shirts–is part of the problem. We work steadily to change our business practices and share what we've learned. But we recognize that this is not enough. We seek not only to do less harm, but more good.

Use business to protect nature

The challenges we face as a society require leadership. Once we identify a problem, we act. We embrace risk and act to protect and restore the stability, integrity and beauty of the web of life.

Not bound by convention

Our success-and much of the fun-lies in developing new ways to do things.

Appendix 4The four types of vison statements and real-life examples (Collins and Porras, 1991):

Type	Firm	Vision Statement
1) Enemy focused	1964	"We want to smash Adidas."
	Canon 1980	"We want to beat IBM."
2) Goal focused	Walmart > 1990	"We want to be a 125 Billion USD company by the year 2000."
3) Change focused	Rockwell International 1995	"We want to evolve from a producer of defense products to one of the world's leading diversified high-tech companies."
4) Role model focused	watkins-johnson	"In 20 years from now we want to be as respected in the industry as Hewlett Packard is today."

Table 14: The four types of vison statements and real-life examples (Collins and Porras, 1991)

Appendix 5Overview of the details collected from all underlying Banks:

		Market value	Employees	Revenues
	Founded	(in €bn)	(in '000)	(in €bn)
Max.	2017	125.11	235.00	50.09
Median	1932	15.62	25.50	7.25
Mean	1929	20.81	51.09	13.09
Min.	1727	1.32	0.20	0.46

Data overview: Established Banks

Appendix 6Overview of the details collected from all underlying FinTechs:

		Total Funding	Last Funding	Valutation at last funding	Total funding
	Founded	(in €m)	(in €m)	(in €m)	rounds
Max.	2017	763.09	454.55	5000.00	14
Median	2013	31.80	13.10	445.00	5
Mean	2011	143.20	54.03	1009.42	5
Min.	1999	0.15	0.04	38.18	1

Data overview: FinTechs