A COMFORTABLE TRANSPORTATION INTO THE UNKNOWN FUTURE

THE ROLE AND MEANING OF ACCOUNTING NUMBERS IN INNOVATIVE START-UPS

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Abstract:

As innovative start-ups are growing in numbers, a new field of research is emerging revolving around how organizations create imaginaries and how they proactively can shape the future. The business case is often the starting point for such ventures, to motivate investors and receive funding through presentations of imagined economic futures. This thesis aims to shed light on how comfort can be created internally within an innovative start-up, i.e., how actors in a social context come to agreement on future-looking accounting information in relation to 1) the process of forecasting and 2) operational capacity to deliver upon targets stipulated in the business case. A case study has been conducted, in a start-up with two different technologies under development (two cases), which builds upon the emerging field of imagined futures (Beckert, 2021) and social procedures for comfort creation around soft accounting information (Rowe et al., 2012). The empirical findings suggest that when market conditions are deemed to be predictable, comfort can be created in a forecasting sense and with emphasis on standardized procedures to ensure operational capacity. In contrast, when future market conditions are perceived to be unpredictable, comfort will rather be found through the means available at the time, by adopting an entrepreneurial logic of reasoning.

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1. Introduction

Visualize the future of transportation, where trucks out on the road operate without the involvement of drivers. A future, where autonomous trucks will be guided by smart technology coupled to the next generation of wireless networks. The connection will be instant, and the 'vision zero' will be achieved with no more fatalities on the road, and all of this achieved without the involvement of fossil fuels. The future is sustainable. Sounds great, right? Of course it does, and so do stories about flying cars. On the one hand, electric trucks are in principle already here, and autonomous trucks betrothed as a disruptive transformation to the world of transport in a few years' time. On the other hand, flying cars may sound like something belonging to a faraway future, perhaps letting your thoughts wander to the classic 80s sci-fi motion picture "Back to the future", a movie based on nothing but pure fantasies. In fact, perhaps also surprisingly, according to CNBC and McKinsey flying cars could potentially be introduced in the same time span as autonomous trucks (Ng, 2021; McKinsey, 2021). So, what is it that decides if a story of the future is deemed credible or not? How certain can we be of the future?

In business, just as with life in general, the future is not predetermined but rather unknowable (Ramoglou, 2021). Even though people commonly would like to avoid uncertainty, it is a natural state, especially with regards to the indeterminate future (Bridge, 2018). Uncertainty creates difficulty in crafting strategically important decisions and where prior experience is absent, indications of the most sensible direction for organizations may be difficult to uncover (Petrakis and Konstantakopoulou, 2015). This is especially noticeable for technology start-ups facing intense time-pressure as they are operating in rapidly changing uncertain contexts (Tomy and Pardede, 2018) while entering new markets (Dalziel, Gentry and Jamison, 2011). Recent decades have seen a considerable acceleration in development and adoption of novel technologies, and this trend is expected to continue (UNCTAD, 2019). With an increasing number of new technologies, the world moves faster than ever before. Even with the emergence of 'Big Data' to process the almost abundant information at our disposal, uncertainty with regards to the future can be perceived as high. Although uncertainty may be uncomfortable, preparing for and coping with it is essential in the process of innovation (Bridge, 2018). It has been argued that the process of business planning helps entrepreneurs as it facilitates goal attainment, increases speed of decision-making, assists in managing supply and demand, as well as turning abstract ideas into concrete operating plans (Delmar and Shane, 2003). However, as these business plans stretch far into the uncertain future, there is an argument that the process of forecasting often results in fiction and dreaming that is a waste of resources and time. (Blank, 2013). Nevertheless, business planning describes the current state and the presupposed future of an organization (Honig and Karlsson, 2002), and as start-ups are dependent on capital and growth, these need to be made convincing to investors, customers and employees. As such, there is a need for

start-ups to show that their business plan is credible from a feasibility standpoint so that investors and customers are comfortable with engagement. But what is a business plan made up of? Business plans of innovative start-ups can be regarded as one of the key instruments for communicating the fictitious future state of an organization with regards to productivity and profitability (Beckert, 2021). The word fictitious may seem harsh, but that does not make it wrong as it refers to something that does not yet exist. The business plan is per definition invented, founded upon assumptions about the future that may or may not end up coming true. In spite of this, the document may be founded upon substantiated assumptions about the future to varying degrees.

Although forecasts are regularly inaccurate and have a well-known high failure rate, their credibility in the present moment is of principal importance (Beckert, 2016). The quality of accounting information, constituting the basis for forecasting, hence need to reach a consensus between the actors concerned in order for it to be used for decision-making (Rowe et al., 2012). Previous research has argued that accounting is incomplete (Mouritsen and Kreiner, 2016) and soft (Rowe et al., 2012) in its nature, in that its quality is regularly debated. When dealing with an unknowable future, as innovative start-ups do, this social process of agreeing on information becomes increasingly more challenging. With regards to innovation, getting comfortable with the forecasting and the ability to deliver operationally upon it may not always only be found in the substantiation of information. In the social context, actors within organizations together manufacture imagined futures as a way of coping with highly turbulent environments (Beckert, 2021). In innovative start-ups, coming to terms with the business plan as credible thus relate both to actors' agreement on information (Rowe et al., 2012) as well as their construction of intersubjectively envisioned futures (Beckert, 2021). When coping with uncertainty in an innovative environment, there is thus a need for start-ups to create comfort in their business plan, which can be accomplished in different ways depending on the context. Consequently, Beckert (2021) put forward the need to research when organizations manage uncertainty, with regards to their business plan, through imagined futures, and when they can manage it through habits and routines. Hence, this paper will aim to shed light on the research question: *How do innovative start-up firms create comfort in their business plan when accounting for an uncertain future?*

The research question will be explored through conducting a case study surrounding an innovative start-up called TransportCo, with two different lines of business and technologies under development (two cases). TransportCo is the designated alias of the company, to ensure anonymity in this study. The focal point for consideration when exploring this research question is the interpretation of actors' feelings and perspectives towards the internal tools and procedures that affect the perception of comfort in the business plan. The business plan can be seen as a tool that is used for imagining the uncertain future, rather than a tool for prediction (Beckert, 2021). Previous research on imaginaries by Jens Beckert (2021) however, does not go into depth on how comfort in

the social context can be created in the business plan. Furthermore, previous research on the agreement of quality on soft accounting information (Rowe et al., 2012) do enlighten how comfort can be created, but does so without regard for the uncertain future faced by highly innovative start-ups. This research question is thus important, as without actors feeling comfortable in their own business plan of the future, decision-making will be made more difficult and the organization in question will stand without direction. Furthermore, the business plan is communicated to stakeholders and as such, the comfort created internally with regards to the document affects how it is presented externally. As such, through the integration of the two aforementioned fields, this study hopes to give more insights into this issue.

The study is arranged into six sections, including this introduction. In the next section, the conceptual background will be presented along with the developed theoretical framework that will support the analysis of the empirical findings. In the third section, the research methodology will be motivated and expanded upon. In the fourth section, the empirical analysis will start by presenting the setting of the case company and then further delve into identified empirical themes surrounding the two distinct cases. The fifth section will include the discussion of the interpreted empirical findings resulting in a conclusion in section six where the research question will be answered along with two propositions. Concludingly, section six will include a discussion surrounding the limitations of this study along with suggestions for further research.

2. Conceptual Background

2.1. Imagined futures: accounting under uncertainty

In the light of an imagined future, characterized by radical uncertainty, accounting can be used to reflect "fictional expectations", enforcing meaning to the envisioned future and a commitment to act upon it (Beckert and Bronk, 2019). Accounting and the imagined future thus work in an iterative process, where accounting can be an important tool to construct the future as it develops. However, accounting numbers are soft in their nature and need to be agreed upon (Rowe et al., 2012). Hence, when confronted with an uncertain future this becomes even more important, for the accounting information to be the foundation for planning and decision-making.

2.1.1. Accounting for an uncertain future

Strategic planning and uncertainty

Through the depiction of an imagined future, it is argued that business plans can shape expectations, affect behavior and become a guiding force for the organization. (Beckert and Bronk, 2019) In trying to understand the dynamics of the future with regards to organization, strategy and entrepreneurship, studies on imagined futures have garnered much interest due to an increasing acknowledgement that these constitute the foundation of organizational prospection (Thompson and Byrne, 2021). Innovative start-ups are with regards to future scenarios, according to conventional knowledge, subject to the most extreme degree of uncertainty. (Beckert, 2021; Beckert and Bronk, 2019) As the future is unknown, entrepreneurs cannot rely on past statistical information to identify ideal decisions (Beckert and Bronk, 2019) but previous research argues that there might exist indicators with regards to future opportunities (Ramoglou, 2021). However, start-ups often lack standardized procedures that liberate managers from time-consuming activities (Davila and Foster, 2007), which can hinder them from uncovering these indicators. Despite the aforementioned, the process of business planning and the creation of a viable business plan is the first main priority every founder must adhere to in the start-up of their new venture, which often includes a five-year forecast of the financials, i.e., revenues, costs, profits, capital expenditures and cash flows. (Blank, 2013) Yet there is an argument that few economic and technological forecasts are accurate and that the anticipated future rarely occurs (Beckert, 2016). It is further suggested that forecasts inherently are uncertain as they entail making assumptions that cannot be based exclusively on observable information (Beckert, 2021; Beckert & Bronk, 2019; Beckert, 2016). Consequently, on the topic of observable information, previous research has brought forward the concept of Knightian uncertainty (Beckert, 2021; Ramoglou, 2021; Beckert and Bronk, 2019; Wales et al., 2018; Beckert, 2016; McMullen and Shepherd, 2006;

Sarasvathy, 2001), a distinction between the concept of risk and the concept of uncertainty. The concept of Knightian uncertainty suggests that risk is measurable, while uncertainty is not. Through calculating probability of particular outcomes, risk can be quantified as it is based on observable information, which can guide us into the future, as opposed to uncertainty. In situations of uncertainty, we are subject to an absence of experience in gauging what is going to happen, or perhaps we are even unable to conceive or imagine the span of different outcomes. As start-ups encounter Knightian uncertainty, they must naturally test and iteratively learn and build upon their business plan as time goes by (Wales et al., 2018).

In terms of future technologies and uncertainty, the distinction between risk and uncertainty can also be coupled to the temporal dimension of the future, making an additional distinction between the near and the distant future. While the near future can be treated as a continuity of present and past experience, the distant future can be thought of as more of a leap in time, a discontinuity from present and past experience. (Augustine et al., 2019) In line with standard economics, forecasts in the near future are based on the probability of the occurrence of different known states and predictions are made based on the assessment of the present (Beckert and Bronk, 2019). In the distant future however, there is radical uncertainty of what might be and so fantasy and fictional hypotheticals stand as input for forecasting future states, as probabilities are unknowable (Beckert, 2016). When technologies are closer to being realized, they can be represented in a more experiential manner in terms of products, customers and markets. However, when the technology in mind is far from being realized, where products, customers and markets might not yet exist beyond an idea, the representations are more in the form of vivid but vague visualizations. (Augustine et al., 2019) Regardless, it is argued that forecasting includes fictional expectations of future states, which can provoke actors to behave as if the future will emerge as it is imagined. (Beckert, 2016) When presented to investors and stakeholders that start-ups are dependent on, these fictional expectations must be deemed convincing. Thus, organizations must present their business case in a manner where stakeholders are convinced that uncertainty can be managed, as if it were risk (Beckert, 2021), and that the envisioned future is not too distant.

Narratives can coordinate organizations in relation to an uncertain future

The very existence of a new venture is a fragile one, dependent on funding from investors that believe in the venture's vision and customers that eventually buy into the promised offering. Even if it can be problematic to demonstrate the value of a technology that is not yet developed (Doganova and Giraudeau, 2014), business plans can help demonstrate the economic potential of an organization, by being based upon both qualitative and quantitative information. (Beckert, 2021) In order to structure the organization and build conviction around fictional expectations and imaginaries, both in relation to stakeholders and internally, successful organizations make these come alive through a strong and

powerful narrative. Consequently, the business plan becomes a tool of imagination through which the narrative and its stories helps make sense of the world, providing meaningfulness to actions and inciting commitment to do more. The narrative paints the picture of the future and makes it visible to actors (Doganova, 2018), what it will look like, how the organization will be positioned and how it will get there. (Beckert, 2021; Beckert and Bronk, 2019)

Organizations use a wide array of cognitive technologies that can be understood as tools for creating these stories and support the company narrative. Beckert (2021) put forward three distinct and established tools, which help the narrative come alive by mediating the fictional expectations, namely strategic planning, capital budgeting and technology projections. The narrative, embedded in these tools, can guide organizational decisions and provide structure (Borup et al., 2006), and as such allow actors to gain confidence in spite of an unforeseen future by reproducing certain imaginaries. (Beckert, 2021) Strategic planning is one of the most widely used organizational tools for providing a framework that decisions can be anchored in when it comes to the deployment of resources. It is an intrinsically forward looking and future oriented process (Beckert, 2021; Patvardhan & Ramachandran, 2020) that, regardless of the type of planning instrument (e.g., SWOT-analysis, five-forces analysis, contingency planning etc.), tries to assess the current situation, anticipate how it will change, and uncover all strategic alternatives. Financial planning however, i.e., capital budgeting, is a separate part of the firm-wide strategic planning that revolves around estimating the financial effect of specific capital expenditures. Subsequently, it can facilitate decisions whether projects are viable from a financial standpoint and to help in the selection between different projects. (Beckert, 2021) The capital budgeting process is based upon the prediction of future cash flows and other figures of relevance, thereby relying immensely on future assumptions (Mouritsen and Pflueger, 2018). As such, realized cash flows are probable to deviate from those predicted in the models (Beckert, 2021; Doganova, 2018). In innovative contexts, technology projections also act as an important tool for imagining the future. Innovation projects have an inherent vulnerability to rejection due to organizational pressures, as innovations are simply existing as promises. These innovation projects are frail and there is therefore a need to protect these ideas (Bartel and Garud, 2009; Doganova and Eyquem-Renault, 2009) from early and impulsive rejection that may arise from misunderstanding and confusion. Technology projections therefore act as a tool to safeguard innovations through the creation of imagined futures. The creation of these projections is based on promissory stories, which can allocate roles to actors and objects within the imagined innovation, increasing coordination and overcoming internal resistance. (Beckert, 2021)

Innovative narratives can arguably guide the production of strategies (Flyverbom & Garsten, 2021) as they are jointly produced by actors through social practices (Thompson and Byrne, 2021). Organizational practices thus involve more than calculative activities

in their creation of innovative strategies (Flyverbom & Garsten, 2021), even if the assessment of strategies however is argued to be inseparable from calculative infrastructures, such as KPI's (Kurunmäki and Miller, 2013). The strategies can as such, through calculations and imaginations of the future be created and assessed over time (Kaplan and Orlikowski, 2013). Consequently, the strategic plan carries a narrative and stories of the organization's preferred present and future identity. (Beckert, 2021)

Narratives of innovation can act as promise for action

In previous research, the willingness to bear uncertainty in entrepreneurial acts is a function of knowledge and motivation (McMullen and Shepherd, 2006). Consequently, when knowledge is limited, motivation must be high, possibly induced by a strong narrative. The innovative narrative is thus arguably able to facilitate decision-making to position the organization for an imagined future. Although, to reach the imagined future, not only decisions but also actions will be required. The business plan can then be treated as, rather than a prediction of the future, a promise of future action. (Beckert, 2021) The accounting information in this sense is not a promise of results, but a commitment to do more (Mouritsen and Pfleuger, 2018). As such, obtaining information and analyzing it properly might be of less importance, but not completely without importance (Kaplan and Orlikowski, 2013), as fragile ideas of innovation have to be sustained (Doganova and Eyquem-Renault, 2009). Imaginary business plans, forecasts and other types of predictions can thus, as a promise of action, become a self-fulfilling prophecy (Beckert, 2016) as they both can sustain and incite actions towards innovation. Consequently, the narrative is a part of a promissory economy, an economy that is yet to come. (Beckert, 2021) As often in the case of innovation and technology projection, which arguably rarely are adopted but rather adapted (Mouritsen and Kreiner, 2016), it is possible for actors to be a co-creator of the world as it emerges (Patvardhan and Ramachandran, 2020). Hence, in the strive to arrive at the imagined future, organizations will have to be ready to take action.

The narrative as a promise of action can be described as a shift from causation to effectuation, implying a shift of focus from predictable aspects of an uncertain future to a focus on controllable aspects in light of an unpredictable future. (Sarasvathy, 2001) The tools of imagination direct the organization and its actions (Beckert, 2021) but rarely towards a predetermined future, rather towards a specific imagined future (Beckert, 2016). Thus, instead of moving towards a future that is predictable, the promise of action focuses on the learning process and the resources available in the development of innovation towards a future that is unpredictable (Mouritsen and Kreiner, 2016; Sarasvathy, 2001). The logic of effectuation thus builds upon the notion that even if the future is unpredictable, it is possible for actors to actively affect and shape it (Patvardhan and Ramachandran, 2020). Through achievements and progress in line with the organizational narrative, innovative commitment can be sustained (Bartel and Garud,

2009) and further incite action. When forecasts in turn are proven to be wrong, actors must have the ability to 'forgive and forget' (Mouritsen and Kreiner, 2016) to be willing to bear uncertainty in new decisions and actions undertaken. New investments will have to be made, new knowledge will have to be sought for and new financing might be required in light of unexpected developments (Mouritsen and Kreiner, 2016). Concludingly, the use of narratives and calculations can act as a catalyst for organizational action (Flyverbom and Garsten, 2021) towards the imagined future.

2.1.2. The role of accounting and incomplete information

Previous literature has covered the topic of the role of accounting and found that accounting information is inevitably incomplete (Mouritsen and Kreiner, 2016) and soft (Rowe et al., 2012) in its nature. In this section, we will give colour on the discussion on the general incompleteness and softness of accounting from the view of relevant scholars within the field.

Business planning for the future, where accounting information is at the core, is accompanied by some degree of uncertainty. When exploring the role of accounting, as a decision-making tool, research has pointed to the fact that accounting's role selldom operates to function under rationality, but rather under unrational conditions (Burchell et al., 1980). The role of accounting is principally functioning under conditions of uncertainty (Mouritsen and Kreiner, 2016) and so accounting can take many different roles depending on the situation it is being constructed for (Burchell et al., 1980). When the supposed decision-making is deemed to be a rational process, accounting assumes the role of an answering machine that gives accurate economic calculations. However, in other situations deemed less rational, accounting can transform into a learning machine, ammunition machine or even a rationalization machine (Mouritsen & Kreiner, 2016; Burchell et al., 1980).

In the process of innovation and transformation, where there is constant maneuvering, reported accounting information says little about the future. It can certainly help with the monitoring of cash and other metrics but when 'venturing into the unknown' it does not tell us a lot (Mouritsen and Pflueger, 2018), and thus the traditional view is that accounting should only be limited to bookkeeping in start-up companies (Davila and Oyon 2009). However, it is argued that in this setting, accounting can become a way to communicate opportunities for actions and change rather than being a prediction of the future (Mouritsen and Pflueger, 2018). It is not a description of the world but merely an aggregate of selected future problems and solutions, and as it does not describe the world, it cannot reduce uncertainty. Accounting is in this sense frequently introduced in literature as being weak and in need of repair. (Mouritsen and Kreiner, 2016) As there are many elements of the future that we cannot grasp, accounting information is inescapably

incomplete (Andon et al., 2021). In other studies, it is also mentioned as being inherently 'soft', needing to be agreed upon by actors through concurring on the quality or 'objectiveness' of the information in order to use it as a foundation for decisions (Rowe et al., 2012). In order to arrive at a consensus and agree on the accounting, it has to undergo a process of 'hardening' (Rowe et al., 2012) to make it persuasive (Kadous et al., 2005; Huikku and Lukka, 2015) and usable, which will be elaborated on in section 2.1.3 surrounding comfort creation.

Kadous et al. (2005) furthermore express that accounting encompasses the process of matching numbers to events in attempting to quantify the reality. Consequently, quantification constitutes a major role in accounting's role as a foundation for decision-making (Kadous et al., 2005). Even so, given incomplete information, decision-makers cannot optimize but only look to cope with the uncertainty surrounding this quantification, in creating credible future scenarios and possibilities (Andon et al., 2021). As such, accounting information is from a calculative standpoint unsatisfying and frustrating to decision-makers, but in the end also of paramount importance to them (Mouritsen and Pflueger, 2018; Doganova and Eyquem-Renault, 2009). Consequently, more recent research has described the weakness and incompleteness of accounting information to be a positive and generative force by facilitating engagement with uncertainty and helping the organization make sense of their situation (Andon et al., 2021).

2.1.3. Finding comfort in the accounting information

While the emerging field of imaginaries (Section 2.1.1) offers a perspective for analyzing how organizations structure themselves in relation to the distant future, a vast extent of previous research has explored how organizations create comfort in relation to soft accounting in general. To describe the research field around comfort creation given incomplete accounting, we must first dive into the concept of comfort before we delve further into the discussion on the particular creation of comfort.

The concept of comfort

In previous research, Pentland (1993) brought the concept of comfort as a social product into the discussion when researching the roles and rituals performed by auditors. *"How would it feel to own stock in a corporation whose annual financial statements were never audited?"* Accordingly, the rituals, as a term, are all the collective activities performed by actors to establish comfort and social order. The rituals can be calculative and rational as accounting practices often are, but they also inherit meaning and emotions for the social context beyond their explicit purposes. These collective activities consist of routine interactions and can be anything from greetings to meetings, from informal conversations to presentations that create comfort. (Pentland, 1993) Conventional research has

attributed comfort to the absence of discomforts. Consequently, Carrington and Catasús (2007) and Kolcaba and Kolcaba (1991) adds to comfort theory by, instead of treating comfort as a binary concept, researching it from the perspective of how it is created, defined and changed in relation to discomforts. Moreover, when applying comfort theory, three technical senses of comfort can be used as a classification scheme (Carrington and Catasús, 2007), that draws upon Kolcaba and Kolcaba's (1991) initial contribution to the concept of comfort:

- **The relief sense of comfort** relates to the actions that dissolve uncomfortable situations. In this sense, relief functions to eliminate discomfort and objectify the situation.
- **The state sense of comfort** entails the presence of both comfort and discomfort, hence in the sense a non-binary state. In a given situation, the presence of both comfort and discomfort might be present as it is affected by various conditions.
- **The renewal sense of comfort** revolves around how actors' perception of comfort is changing over time and with conditions. Discomforts are not dissolved as in the relief sense of comfort, but as the future unfolds new perceptions of the state decides whether actors feel comfort or discomfort.

In the production of comfort, the actors cannot establish comfort alone, but it is rather an interplay between several actors (Carrington and Catasús, 2007). Comfort can thus be treated as a commodity that is socially constructed among the actors involved, which can be passed on between persons or groups, both internally and externally. The emotional state of comfort can then eventually, through the social context, lead to accounting information being perceived as objective. (Pentland, 1993)

Persuasiveness and procedures for comfort

With regards to section 2.1.2, surrounding the discussion of accounting information being weak, soft and incomplete in nature, previous research has introduced various mechanisms for creating comfort in the numbers.

In the agreement on objectiveness, the discourse has often implied that decision-makers are more easily influenced or persuaded by the use of quantified information rather than non-quantified, but according to Kadous et al. (2005) there is a lack of research evidence behind this statement. As suggested, when there is a disagreement between the preparer(s) of information and the decision-maker(s), quantification does not add to the persuasiveness of the proposal unless the information can be proven objective (Kadous et al., 2005). Even so, actors do try to calculate in order to uncover alternatives and so reach decisions (Mouritsen and Kreiner, 2016). Rowe et al. (2012) argues that soft (unagreed upon) accounting information needs to be 'hardened' (i.e., agreed upon) in order to guide organizations into the future. As such, in the social contexts of organizations, accounting

information needs to pass through certain hardening mechanisms, where actors through different social "games" together agree on its objectiveness. Hence, actors can through these mechanisms socially construct consensus so that soft accounting can be hardened (Rowe et al., 2012), and as such be perceived persuasive enough to act on (Rowe et al., 2012; Kadous et al, 2005). This is in other words leading to the establishment of comfort in the accounting information.

The study of Rowe et al. (2012) presents four different 'hardening games': 1) The faith game entails that actors by default believe that experts, for example accountants or consultants, will have the technical accounting knowledge to implement the appropriate accounting practices. However, Goretzki et al. (2021) argues that in light of high perceived uncertainty, the faith in experts is not a default rule of the game but that it becomes more of a "face game" where the assumed experts must certify and strengthen their credibility in a convincing way. The faith game seems to rely on even softer means for hardening numbers, in the way that actors must prove their engagement competence as a part of the business when contributing to the creation of the future in numerical form (Goretzki et al., 2021). The comfort created thus rather lies in the accounting practices implemented and the credibility of actors than in the accounting information itself. In this perspective, the work performed by credible actors with technical expertise can function in the same way as rituals do in the creation of comfort. The comfort created through accounting practices, as a faith game or a ritual, highlight the importance of the purpose and emotion actors attach to the social context of work (Pentland, 1993). 2) The power and politics game revolves around managers' authority and power to decide based on their own agendas. Accounting information is constructed to frame discussions and promote the positions of actors involved. During periods of uncertainty, when there is much at stake in terms of distribution of organizational resources, the game of power and politics is common (Burchell et al., 1980; Rowe et al., 2012) 3) The practical arguments game is characterized by high participation among actors and democracy in agreeing upon the information. Actors are highly involved to jointly fill in information gaps and find comfort in the accounting information through discussions and player triangulation. (Rowe et al., 2012) In addition to this game, related to an uncertain future, it has been argued that cross-functional planning meetings use accounting information to develop common understanding in the organization, later serving as the foundation for coordination and decision-making (Goretzki and Messner, 2016). 4) The statistics game however relies on the triangulation of information through statistical analysis. In this game, there is an independence between actors and information, with many comparisons and high standardization of accounting data, allowing actors to harden accounting through replication and verification. Independence signifies the actor's inclination to not convolute the information during the analysis except for removing outliers or correcting errors. (Rowe et al., 2012)

Rowe et al.'s (2012) interpretation is that practical arguments constitute the game through which social groups most likely will find comfort in the accounting information, since information naturally is subject to social pressures and scrutiny. The common theme, whether the discussion regards persuasiveness, objectivity or quality, is the aim to agree on the quality of information as a foundation for decision-making. Concludingly, the social procedures prevalent in the organizations can be seen as a cornerstone in creating comfort in the information.

2.1.4. Synthesis of literature and identified gap

The research revolving around the subject of soft accounting information argues that actors need to agree upon the quality of numbers, in order for them to act as a foundation for decision-making and organizational action. As such, comfort in the information can be achieved in the social context when actors agree that the accounting has been hardened. However, in light of uncertainty, which is unmeasurable, the use of accounting for decision-making is argued to become more complex. This is in particular the case for start-ups as they are developing their business towards an unknown future. The field of imagined futures is thus introduced by Jens Beckert (2021), as a means to guide organizational planning into the future. The business plan can as such be perceived as, rather than a tool to predict the future, a tool to incite commitment in the promise of future action. Beckert (2021) however, does not go into detail as to how comfort can be created with regards to the social context. While research on soft accounting shed light on how actors within a social context jointly can create comfort in relation to incomplete information in general, it does not account for the uncertain future. Hence, we want to contribute by integrating the fields of soft accounting and the field of imagined futures to answer the earlier stated research question: *How do innovative start-up firms create comfort in their business plan when accounting for an uncertain future?* Concludingly, this paper thus aims to explore how an innovative start-up creates comfort in their business plan by drawing upon the work of Beckert (2021; 2016) and Rowe et al. (2012) which will be introduced in more detail in the next section (2.2).

2.2. Theoretical Framework - Creating comfort in the business case

In this section, we develop a theoretical framework by integrating the tools of imagination (Beckert, 2021) and previous theory on comfort creation (Rowe et al., 2012) within the field of soft accounting. As actors in the case company refer to the business plan as the 'business case', this study will hereinafter adopt this terminology.

Scholars have during recent years laid the foundation for an emerging field, imagined futures (Beckert, 2021; Beckert and Bronk; 2019; Beckert, 2016), focusing on uncertainty with regards to future innovations. It is in fundamentally innovative sectors that uncertainty is most extreme (Beckert and Bronk, 2019), categorized by external factors

such as fast changing market environments, regulatory considerations as well as internal factors such as rapid growth. Consequently, in this context, future-oriented accounting information is inherently soft. The field of imaginaries facilitates understanding of the empirical setting and suggests that the narrative and the tools of imagination can guide the organization and provide structure for the future. However, it does not explain how actors within the organization can feel comfort with regards to the business case, given soft accounting numbers. By integrating the tools of imagination with social procedures for agreeing on accounting information, we can explore how TransportCo creates comfort in intrinsically soft forward-looking accounting numbers (i.e., in their business case).

2.2.1. Planning tools for the future

In terms of strategic business planning there are some widely used and established planning tools. These tools are used to motivate stakeholders and structure the firm with regards to the future. Strategic planning, capital budgeting and technology projections are such tools, presented towards investors and in the organization internally. The planning tools can then effectively tell a story of how the organization will strategically position itself within a market environment, how it allocates resources internally and how technology will develop. (Beckert, 2021) In our theoretical framework, the business case is the company-wide tool that consolidates the aforementioned strategic planning tools into a single document. Furthermore, the business case is the document that stipulates the company-wide targets that will guide the organization into the future. However, in order to effectively motivate stakeholders and be a guide for the organization, the business case needs to be presented with conviction that the targets can be reached (Beckert, 2021). The business case consists of mobilized accounting information; however, this information is inherently soft (Rowe et al., 2012) as the future is unknown to us. As such, the business case becomes populated with numbers of a more imaginary nature, transforming it into a tool of imagination (Beckert, 2021).

The business case consists of numbers, however, in light of an uncertain future there is limited information available. The numbers are thus an integration of soft accounting information, and the organizational narrative of an imagined future. The narrative is the organization's own story about its present identity, but also its desired future identity. It conveys stories about how the future will look like, how the organization will position itself within this future and by which means the future can be reached (Beckert, 2021). Depending on information available about this future state, the accounting numbers in the business case will be more or less imaginary, balancing the emphasis of observable information and the narrative of the future. Nonetheless, the accounting numbers will always be soft in their nature given the innovative context. Beckert (2021) argues that this tool of imagination can facilitate agreement of how to organizationally structure the firm by decision-making, on for instance the allocation of resources and which stakeholders to target and influence. However, for organizations to make these sorts of decisions, there

needs to be social consensus and agreement that the information at hand is credible enough to act on (Rowe el al., 2012). Thus, actors in the organization need to be convinced and feel comfort in the numbers constituting the business case in order to make decisions and act upon them.

2.2.2. Social procedures and the narrative embedded in the business case

The business case can as aforementioned guide the organization if actors feel a sense of comfort in the numbers. The concept of comfort in this paper draws on the notion that the agreement around accounting numbers occurs within the social context (Pentland, 1993) and that both discomforts and comforts can exist concurrently (Carrington and Catasús, 2007) within an organization. Furthermore, creating comfort in the targets stipulated in the business case regards two aspects: 1) having comfort in that the business case is credible, i.e., substantiated in a forecasting sense, and 2), having comfort in the organizational capacity to deliver upon and actually fulfil the business case. In previous literature, it has been explored how actors come to agree on the quality, i.e., hardening, (Rowe et al., 2012) and the persuasiveness (Kadous et al., 2005; Huikku and Lukka, 2015) of numbers. In this study, coming to agreement on the quality of numbers is a collective organizational effort equivalent to feeling comfort in the numbers. However, previous literature of creating comfort is based on the notion that the future is "a statistical shadow of the past" and that it can be predicted through a statistical procedure with historical data points (Beckert and Bronk, 2019). To explore how comfort can be created in relation to an uncertain future, the theoretical framework expands on Beckert's (2021) notion of the narrative by taking the organization's internal accounting procedures into consideration (Rowe et al., 2012).

According to Rowe et al. (2012), an organization and its actors can employ different procedures in their pursuit for agreement on the quality of soft accounting information (i.e., the hardening of numbers). These procedures can take different forms, depending on information available, how information has been processed or constructed, and the degree of involvement amongst actors in the organization. For example, when there are large samples of observable information available, an organization can create comfort through statistical procedures dependent on high degrees of standardization. (Rowe et al., 2012) Moreover, depending on the information available, the narrative can support accounting numbers to various extents, and vice versa, the accounting numbers can support the narrative if deemed "objective". Although, in the context of innovation, when uncertainty is high, the imagined future creates "fictional expectations" (Beckert, 2016) that can be indefinitely soft in their nature. These fictional expectations take the form of an organizational narrative that, if deemed credible, can facilitate decision-making when trying to shape the envisioned future (Beckert, 2021; Flyverbom and Garsten, 2021). The business case can then, if the narrative is well-anchored in the organization, give life to the imagined future by inciting action and commitment amongst actors. Concludingly,

the theoretical framework will, by integrating the narrative (Beckert, 2021) and accounting procedures (Rowe et al., 2012), act as foundation for this study for exploring how comfort is created with regards to an uncertain future.

3. Method

In this section, the research design, data collection and data analysis for this study's applied research methodology will be the point of discussion.

3.1. Research Design

In order to answer the research question of how an innovative start-up creates comfort in their business plan when accounting for an uncertain future, the authors of this study have decided to conduct a qualitative study founded upon interviews with employees from a single case company. Deciding to explore this research question, a single case study will aid in the depiction of the social context at this study's case company (i.e., TransportCo). This will allow the authors to conduct interpretivist research to achieve an emic understanding of intersubjectively experienced events in the highly specific context of the case company (Lukka and Modell, 2009). Hence, a single case study is deemed most appropriate as it lets the authors delve into the specific problem scope and get a sense of the social context at hand. The iterative process of moving back and forth between empirical data and the theory contributed to the development of the research question (Bryman and Bell, 2015). This type of case study allowed the authors to explore the social context of creating comfort in soft accounting numbers and the company's business case. It furthermore facilitated an honest view of the context and allowed interpretation of the actors perceived feelings and perspectives in the creation of comfort. Both formal processes and personal experience of actors within the company were considered in the interpretation. In conducting interpretive research, emphasis is put on the actors' meanings in trying to convey an intricate view of the social phenomena in a highly context- and time-specific setting (Lukka and Modell, 2009). Thus, emphasis was put on what the interviewees actually mean in their expressions during interviews.

3.2. Data Collection

See Appendix for a full list of interviews and meetings

The collection of data for this study is founded upon semi-structured interviews. Through the semi-structured interviews, the authors were able to absorb insights into answering the research question as questions could be modified and improved upon over time. This flexibility allowed the authors to understand actor perception in different roles throughout the organization, which contributed to recognition and formulation of sound and reasonable interpretations. As the aim of the study is to understand how actors within the case company creates the feeling of comfort in their business case, the perceived feelings and opinions of the interviewees were of interest. As a consequence, interviewees were allowed to go beyond the interview guide in communicating their own experiences as a

way to provide nuance to the authors interpretations. Follow-up questions were regularly used to facilitate this nuance and the understanding of inherent perspectives of interviewees. Interviewees were as well asked in the start of each interview to expand upon their role and background to understand their work environment. Comparability between interviews is affected by the flexible adaptation of questions (dependent on interviewees with different roles in the organization), as well as the encouragement of personal perspectives. Despite this, initiating each interview with regards to the business case through asking similar questions as per the guide supported comparability. This assisted in making comparisons, with regards to similarities and differences, between each interviewee while still allowing for specifics with respect to the organizational role. In the hope of uncovering the true meanings and feelings of interviews, anonymization of the case company and interviewee responses was communicated already at initial contact and at the start of each interview (Bryman and Bell, 2015).

All included, 12 interviews were held with employees from TransportCo. In order to achieve a good understanding of how the organization as a whole creates comfort in the business case, it was essential to interview a broad range of roles to uncover different perceptions of both comfort and discomfort. The sample of roles within TransportCo includes actors from sales, business development, strategy, operations, deployment, manufacturing, accounting, and finance. This was perceived as essential for the study, to be able to answer the research question, as different roles might have different concerns in relation to the business case. Furthermore, this was considered important for the study as the authors wanted to understand how actors perceive the wider social context within the organization as well as how the organizational units interact with each other. Moreover, the interviews were conducted formally over appropriate digital platforms in compliance with TransportCo's policy during the period from October to November 2021. The average interview length was 45 minutes and was with interviewee permission recorded as well as subsequently transcribed. All interviews were held in Swedish, but for one that was held in English. Thus, most of the quotes used in this study's empirical analysis have been translated by the authors. One of the authors had prior knowledge of TransportCo from spending a shorter period of time working for the company during a two-month internship. However, this is perceived to have only aided in facilitating general understanding for the empirical setting, as the author in question had no involvement with regards to either the creation or follow-up of the business case of the organization. The limited knowledge about the business case was in fact one of the starting points for researching this topic, as some of the themes covered in this study was recognized within TransportCo and deemed interesting to research further. This is also perceived to have facilitated the understanding of technicalities so that the authors' focus could be directed towards the interpretation of the meaning of actors' expressions. Both authors have attended all interviews to ensure reliable and sensible interpretations (Bryman and Bell, 2015) as well as avoiding statement-related discussions that may affect the interviewees, as a way to combat 'expectation' and 'confirmation' biases.

3.3. Data analysis

Through moving back and forth between empirical data, previous research and theoretical concepts, the theoretical framework and research question could be produced to offer nuance to previous research (Ahrens and Chapman, 2006; Lukka and Modell, 2009). Data analysis was as such conducted in an abductive way, where empirical themes were identified while the authors repeatedly went back to existing literature on imagined futures, soft accounting and comfort theory. The authors throughout the study refined interpretations of the empirical data to reveal the intersubjectively 'true' meaning of actors' feelings and expressions within TransportCo. As validation is a challenge in explanatory interpretive research, the authors during the process of data collection and subsequent analysis focused on the notion of plausibility, i.e., understanding if an explanation or interpretation makes sense and if it can be accepted as plausible (Lukka and Modell, 2009). The theoretical insights and empirical interpretations that have surfaced during the research process have been used to iteratively develop the research question as well as the theoretical framework to explore the research question.

Throughout the empirical data analysis, the authors undertook an iterative thematic approach to the material in organizing the transcribed interviews into distinct empirical themes that were refined and improved upon during the research process. As expressed by Ahrens (2021), the achievements and inherent weaknesses of existing literature will become clearer after an author has gotten the opportunity to think about the data, by trying to fit it into perspectives and arguments from the literature. As such, the process of abduction entails developing informed theoretically guided explanations to new observations in the empirical data (Lukka and Modell, 2009). The theoretical framework was designed to explore the social context of creating comfort in the business case of the case company, with regards to soft accounting and imagined futures. Previous research had pertained to the creation of imagined futures without the consideration of the social context surrounding accounting information, and vice versa, not included the notion of an uncertain future when researching the social context around soft accounting numbers. Consequently, the thematic approach of distinguishing between empirical cases (i.e., the two business lines of TransportCo) and empirical themes within these, facilitated the understanding of the identified research gap and the subsequent contribution to the fields in previous literature.

4. Empirical Analysis

4.1. Background and context of the case company

TransportCo, based in Northern Europe, is a technological transport company specializing in electric and autonomous transportation that was founded a few years ago by entrepreneurs. The technology and sustainability emphasis surrounding transportation has developed significantly, which has allowed TransportCo to gain and grow interest at a rapid pace in international markets. TransportCo has during the last couple of years been in the process of scaling their organization and operations immensely due to increasing demand from customers, which has led to an increased emphasis on planning and forecasting for resource distribution internally. Their geographical markets as of now include Northern Europe and North America. The company is backed by both reputable domestic and international investors, including venture capital and private equity firms, fund managers, sovereign wealth funds and industrial players. Naturally, there is an external pressure on growth, which according to the business case is the main objective of TransportCo. On the topic of rapid growth, the Head of Strategy uses the analogy; *"We are building the rocket after it has already been launched"*.

As mentioned, TransportCo operates in two lines of business that have widely unique market characteristics and are in different phases in terms of technology. Following are brief descriptions of said characteristics (Section 4.1.1 and 4.1.2), to paint the picture of the empirical setting and TransportCo's market environment.

4.1.1. E-trucks

In 2021, TransportCo has signed several contracts with customers for upcoming deployment of their electric trucks (E-trucks) while already running operations at a handful of lead customers. The technology is well developed, and customers are signed with a full-service level agreement (SLA) in place. There is an emphasis on growing the number of signed and deployed customers, and consequently the number of trucks in operation. Due to the fact that the operations are transformative in nature and have not been implemented before, signed contracts lead to a distinctive pressure on planning to ensure that the organization will be ready to operate on behalf of customers.

4.1.2. A-trucks

As of 2021, TransportCo has conducted pilot programmes with a few lead customers surrounding their autonomous trucks (A-trucks). The work in the business line surrounds testing under stepwise pilot programmes with clearly defined scopes, to possibly in the future be able to exchange a normal truck for an A-truck. In terms of technology,

TransportCo has shown that their A-trucks are feasible from a practical standpoint. However, due to the innovative nature there are still questions that need to be answered before regulation will be adapted. As a result, pilot testing is limited to mainly fenced enclosures and private logistics areas. Furthermore, the regulation is varying between different regions, which makes planning activities difficult even for pilot testing. Concludingly, the technology is feasible, but there are still large regulatory barriers that affect TransportCo's growth expansion.

4.1.3. Summary of the two lines of business

Table 1. *Summary of the two lines of business*

Market Considerations	E-trucks	A-trucks
Technology	Proven technology	Feasible technology
Customers	Several reputable customers with SLA	Few reputable customers for pilot testing
Regulation	No regulatory issues	Existing regulation hinders establishment of technology

4.2. Creation of TransportCo's company-wide business case

During the time of this study, TransportCo was in a whirlwind of operational scaling and ramp-up in order to match the almost exponentially increasing demand. To be able to match this demand with supply, TransportCo has needed to plan for organizational considerations such as recruitment and the procurement of hardware (in terms of trucks) in order to meet all client deliverables. In order to position the organization for this growth through capital expenditures, overall SG&A (Selling, General & Administrative costs) and COGS (Cost of Goods Sold), an immense amount of strategic and operational planning is, and has been, required. This planning has its foundation in the company business case, a document that entails forecasted financials and other strategic content. This business case, including the combined projections of both business lines, was initially created at company foundation, with a new current version created last year.

4.2.1. Origins of the company-wide business Case

On the process of building a business case, Schumacher (Finance Manager) says that there are largely two ways of creating such a document, either through a top-down or bottom-up approach. You can either set a target top-down and then plan for what you have to do to get there, or you can try to project your trajectory based upon the present situation. In

the case of TransportCo, according to Thorner (Sales Manager) there have been quite ambitious targets placed upon the organization by reputable investors that want to see revenue growth. As such, the founders' vision and investors' expectations have influenced the business case in terms of this growth ambition. However, Schumacher (Finance Manager) explains that to build comfort in the business case within the organization, it needs to be anchored in something that everyone understands:

When we built our business case, we took a very bottom-up approach to the process, which in my view is the essential key to building confidence in a future plan. By building our business case on something like started sales processes, which is something super concrete and really has nothing to do with either electric or autonomous vehicles, everyone can understand it. Personally, I feel confident in our business case and our projections, our best guess, because it is rooted in something that we already do, namely sales. (Schumacher, Finance Manager)

Consequently, TransportCo tries to understand how many of their ongoing sales processes they can actually win, i.e., how many pitches they can turn into signed contracts. After that they try to estimate how many trucks each of these contracts will result in. As such, the model of the revenue breakdown is the foundation for the company business case, driving estimations when it comes to COGS, SG&A and CAPEX in 1-5 years' time. According to Rickardsson (Director, Strategy and Development) it is important to show that the business case is well substantiated and that TransportCo must be able to show that their projections are reasonable. In order to show that this ambitious plan is well thought through and that it is realizable, the revenue models are essential. Nevertheless, McQueen (Head of Strategy) states that the business case is more about the long-term potential rather than what TransportCo can perform in terms of sales in the short term. As expressed by Thorner (Sales Manager), this is also the principal view of the company's investors as: *"investors only talk about the future"*.

The company-wide business case in the short term (approx. 1-2 years ahead) is based on recently signed customers that will initiate operations or pilot programmes during the next year. Hence, interviewees are interpreted to feel comfortable that estimates for this period are accurate due to the long lead times of hardware. However, when forecasting beyond this period, it becomes more complex.

4.2.2. Long-term forecasting of the different business cases

When trying to forecast several years into the future, the market development is a key variable. Given the innovative nature of the company's operations, Toretto (Business Development Associate) says that *"[TransportCo] is dependent on that the market situation will be completely different in 2023"*. Since TransportCo is catering to emerging markets, Alonso (Business Development Director) explains that *"the market is always the most difficult in a sense. [...] But a company like us need to have a feeling of 'how*

much will we be able to sell?'". Traditionally, there is economic and financial data on the total addressable market with many reports available. With this in mind, McQueen (Head of Strategy) expresses that through this documentation companies usually tries to segment their market, finding their addressable market, and finally estimate a reasonable market penetration. However, in the case of a startup like TransportCo, this is not possible in the same sense. McQueen (Head of Strategy) continues to state that in startups it always takes more time and costs more than planned but there is a potential hockey stick trajectory long term, if you are successful. *"The good thing about being a startup is that you are very driven by vision, so people are more sympathetic to that timing and cost issue in comparison to mature companies"* (McQueen, Head of Strategy). However, as a startup, you need to demonstrate that the company will be able to grow its revenue sufficiently enough in the meantime.

In the estimation of future revenue, Alonso (Business Development Director) explains that they try to assess possible volumes in each regional market, revolving around possible use-cases and application areas for both lines of business. However, this relies heavily on assumptions. Interviewees explain that even though they could try to figure out what percentage of the total transportation market (in their segment) they could potentially take, it is not relevant to think in these terms as this percentage will be so incredibly small. As such, these forecasts are a mix between where they want to be in five years and where they think TransportCo can reasonably be in terms of revenue. Interviewees describe the difficulty with forecasting but are interpreted as hesitant to refer to the business case projections as stretch targets. In regard to this, Rickardsson (Director, Strategy and Development) elaborates on the contrast to more mature markets:

"In a new company [such as TransportCo] with pioneering technology, you are forced to set [long-term] targets based on ambition. Where should you otherwise start? [...] For example, the market for autonomous trucks does not exist yet." (Rickardsson, Strategy and Development Director)

The accounting numbers in TransportCo's business cases can thus be seen as a mixture of their ambition and their statistical reasoning around their revenue breakdown. Nevertheless, there are more intricate details, surrounding the different business lines, to consider in order to create comfort in the long-term targets.

4.3. Creating comfort in the business case of E-Trucks

4.3.1. Customer dialogue as a leading indicator of the revenue forecast

As TransportCo's business case, regarding E-trucks specifically, is based on the breakdown of revenue, and thus sales processes, interviewees describe that naturally the customer dialogue is a leading indicator of the revenue forecast. Thorner (Sales Manager)

explains that there is a clear potential in revenue growth for the E-trucks, as many of the large customers have set targets surrounding emission reduction and are pressured to show progress: *"The strongest selling point is super clear, it is 95% Co2 reduction through switching [from diesel transportation] to electric"*. Interviewees further describe that it is more expensive to buy an E-truck but with effective planning, TransportCo can ensure keeping the price of their offering on an attractive level. Although demand is perceived as high, since benefits are clear with a switch to electric and that large potential customers have a pressure to invest in renewable energy, interviewees explain that customers do not want to pay for it. *"[Customers] want sustainability but they don't want to pay more than for their current transports"* (Ricky, Head of Customer Operations). Consequently, in terms of the pricing consideration, future prices are expected to be on par with the traditional transport industry and little deviation is expected compared to the business case of E-trucks. When it comes to volume considerations interviewees point to a similar line of reasoning as with pricing considerations. There are a selected number of large organizations targeted that are prepared and will be prepared for the transition to E-trucks. Thus, the addressable market is expressed as easy to define and is not expected to deviate much from the forecasts, *"even though there might be small volume variance over time"*. (McQueen, Head of Strategy)

As market conditions (i.e., price, cost and demand functions) are known and are perceived to be predictable, the possible discomfort in the forecast revolves more around the timing of future revenue. In the breakdown of revenue, Alonso (Business Development Director) says that they follow-up on actual sales in each region and on the type of deal format (i.e., the contract structure of each deal with regards to size etc.) to have as a reference point. *"This is more of a lagging KPI (Key Performance Indicator), in terms of what is actually happening. Upon this we build our forecast on how we think [it will develop]"*. (Alonso) Consequently, Alonso says that it is important in order to see where they have advanced dialogues which is why there is a strong focus on the pipeline of sales processes in each region. Alonso continues to say that they closely follow the defined measures of pipeline-velocity (i.e., what the expected close date of various deals is) and pipeline-size, as well as the reasonable conversion rate of these customer conversations. Charles (Deployment Manager) describes the use of a CRM system, where they track each customer lead along with the probability of deal closure. Rickardsson (Strategy and Development Director) says that to estimate revenue it is important that there is visibility on how many customers, contracts and so how many trucks that TransportCo have in their pipeline going forward. Norris (Accounting Manager) put forward the key performance indicators (hereinafter: KPIs) of ARR (Annual Recurring Revenue) as a way for TransportCo to create this visibility. TransportCo uses four distinct measures of ARR:

- **Actual ARR** - What they actually invoice
- **Contracted ARR** - What they are going to invoice (signed but not deployed)

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- **Incremental ARR** - What they will invoice incrementally with stepwise deployment of a customer
- **Electrification Percentage ARR** - What they will invoice through an agreement with customer to electrify a given % of truck fleet over a period of time

Actual and contracted ARR are perceived as easy to track in terms of invoicing, but the other two ARR measures (when deal structures are a bit different) can sometimes be difficult to translate into actual money terms, according to interviewees. *"Trying to estimate the revenue value of a contract that is accentuated in the form of electrification percentage can be quite difficult"*. (Norris, Accounting Manager) Nevertheless, this signals an effort in trying to overcome the complexity of forecasting when dealing with very different types of contracts.

In terms of estimating the pipeline, interviewees point to 'variance' as being the toughest part of forecasting the number of vehicles for a customer in one- or two-years' time, highlighting the trucking industry as one of the biggest victims of the pandemic in terms of supply chain disruption. As such, *"you are trying to figure out what is normal and what kind of fits right in terms of projections of how many trucks we would deploy with the customer"*. (Russell, Business Manager) In trying to arrive at a reasonable basis for forecasting the number of trucks deployed, interviewees describe customer momentum as a key input. Consequently, understanding the company sales cycle is expressed as important. TransportCo's sales cycle is traditionally around six months from initial contact with the customer to final signing of a contract. As such, Russell (Business Manager) says that *"we can look at our larger customer conversations and see how quickly they sign contracts, there is a big difference if they sign in two months from start relative to the more traditional six months"*. On the basis of that, TransportCo knows that they have a strong relationship with the customer and if there is an outspoken demand of 50 trucks for instance, interviewees express that they are confident that this will happen. Russell continues to say that they then can play a probability game, estimating the sales based on the perception of the customer relationship.

In terms of the attitude of the customer you can never be completely sure about what they are thinking. You can only kind of assume, sometimes they are more open about their thoughts and ambitions. You just kind of need to make educated guesses. It is the small stuff, some are very open, transparent and are close to signing whereas with others you just notice that it takes a little bit more time for them to respond to emails and calls etc. In that situation you just need to guess whether they are really interested or just stringing us along. The more you get to know a customer through interacting with them, it transforms into less of a guess. (Russell, Business Manager)

As such, Russell continues to say that it is a kind of communication game, and that they are willing to be agile and adjust as needed if they need to either increase or decrease their forecast on a specific customer. *"I mean they are forecasts right so they will never be 100% accurate, but we do our best to make sure we are getting as close to reality as we*

can" (Russell, Business Manager). Accordingly, actors in TransportCo are perceived to build comfort in their revenue forecasts by keeping their ears to the ground in monitoring their customer dialogues, utilizing the use of pipeline estimation with a probabilistic approach of conversion rates. However, they also seem to emphasize agility in that they want to be able to adjust quickly if forecasts appear to become too inaccurate.

4.3.2. Cross-functional teams as a basis for information sharing

Regarding the forecast of E-trucks revenue, interviewees are interpreted as rather confident in TransportCo's probabilistic approach based on customer dialogue. Although it is technically possible to operationally deliver upon the forecast, Torretto (Business Development Associate) expresses that people in general tend to underestimate how much operational planning the transition to E-trucks requires: *"You cannot just pick up an E-truck and start transportation tomorrow. Transportation management [for E-trucks] is extremely complex given that you have to charge and optimize the flows"*. Furthermore, Hamilton (Operations Director) supports this view and also expresses concerns when it comes to operational aspects: *"It is about transformational change, it permeates the whole process from the sales division in the beginning. It's not just 'here is a set of keys' and switch [an E-truck] 1-1 with a regular truck"*. Consequently, interviewees describe that precise forecasting of revenue is of no practical use if they do not consider TransportCo's operational capacity to deliver on contracts and where in the planning process the different teams and regions are. Hamilton elaborates further on this matter:

We are a very goal-oriented company in our essence. We have a target that we should have 'this many customers' or 'this many trucks' in operation by next year. Then we build the whole organization with the purpose to get there through breaking down the target in every team. We work with a process called OKR (objectives & key results) [...] where every team writes down what key results they need for the organization to get there. Then we execute according to these and follow up on a quarterly basis. (Hamilton, Operations Director)

Interviewees describe the importance of tightly interconnected teams as a foundation for creating comfort in the forecasting process. *"You know that you will never be completely right in your forecasts, but it is possible to have either better or poorer predictions. This is a huge strategic undertaking that we do cross-company"*. (Hamilton, Operations Director) As described by Charles (Deployment Manager), TransportCo has implemented cross-functional meetings, amongst them a status update meeting each week where they report on existing customers and on new projects. Representatives from the sales, procurement, deployment and technology teams are involved in these meetings, forwarding information regarding ongoing sales processes, supply considerations and capabilities surrounding the transport offering into the leadership meeting. Alonso (Business Development Director) continues to explain that the leadership meeting is the

most formal meeting (except for the board meeting) and includes the CEO, COO, CFO, CCO, Head of Supply and Procurement as well as the CPO. It is described that the information coming bottom-up regarding the current situation and outlook of the company is important as it constitutes the basis for projections and strategic decisions. Alonso continues to say that there is another meeting called *"The Forum"* where they do a weekly follow-up on how they are tracking their short-term targets, escalating any disturbing issues upwards. *"We have uniform meetings, but in general we want to emphasize close interaction between all parts of the company on a daily or at least weekly basis"*. (Alonso, Business Development Director)

Several interviewees express the significance of having readily available information in the right place at the right time. Charles (Deployment Manager) states that the company software platform is used frequently with regards to planning, consisting of consolidated data with regards to TransportCo's customer operations. However, the sample size of data has up until now been considered small: *"You have to remember that up until this summer we have only operated for a handful of customers, adding several more now during the fall. So, we have not had that many cases to base our relevant predictions on"*. (Charles, Deployment Manager) In the E-trucks case, Alonso (Business Development Director) put forward the electrification planning tool (to see what is doable flow-wise and estimate how many trucks will be needed for specific customers) and the 'Cost and Environmental Model' (to calculate CO_2 savings and price structures for specific customers) as supporting tools to the overall platform.

Interviewees nevertheless call for even more standardization as a way for TransportCo to streamline their information processes. *"Startups are characterized by undeveloped routines and processes, so you have to work with process improvements and alterations to define and build the processes of the company. We put a lot of time into that"*. (Hamilton, Operations Director) Charles (Deployment Manager) expresses that TransportCo wants to find some sort of balance for standardization to improve upon their process quality but not lose speed and agility. It is interpreted that due to standardization of information procedures, actors feel that more precise forecasting can be achieved. Consequently, comfort is created in the sense that TransportCo has appropriate information in a timely manner, in turn helping the organization to set up operational capacity and deliver on their E-truck contracts.

4.3.3. Predicting how to allocate resources internally

Through the revenue forecast and information sharing procedures regarding operations, TransportCo perceives that they improve the ability to predict how resources should be allocated internally to be able to deliver against set targets. Several interviewees describe the process of planning and ensuring that every team can deliver according to the ambitious targets, where recruitment of expertise is one of the main aspects highlighted.

Interviewees describe that TransportCo has recruited several experienced professionals from both the transportation sector and from consultancy firms. Hamilton elaborates on the overall recruitment plan:

We have common company-wide targets that gets broken down into every team from sales, marketing, tech and product to really see how many people we need to reach the target, and then we base our recruitment plan upon that. Of course, it will be adjusted depending on how sales perform, if sales perform [above expectations] then we might need to adjust but at least we have an idea then. (Hamilton, Operations Director)

In addition, when setting the recruitment plan for the company, Alonso (Business Development Director) points to regional differences in terms of expansion velocity as a complicating factor. However, the accuracy of forecasting personnel is not perceived to be crucial, only being there for support. While the issue of planning and forecasting personnel is there more as a roadmap, predicting future CAPEX is a more critical issue and of utmost importance to TransportCo. To be able to execute upon the revenue targets, TransportCo cannot afford to be underinvested in terms of trucks available. To build comfort, TransportCo would rather have leeway due to some overcapacity according to Ricky (Head of Customer Operations). Although, having a large fleet of trucks not being used is not efficient either. This dilemma arising within the predictions of CAPEX is expressed to be on account of the long lead times related to procurement. In order to avoid the operational risk of not being able to meet future demand, TransportCo has implemented the use of a push-strategy: *"We try to mitigate it through pre-ordering trucks"* (Hamilton, Operations Director). Nevertheless, Charles (Deployment Manager) describes the process of placing a speculation order so far in advance as challenging. However, as TransportCo grows in volumes, this will be less of an issue as it will not be as big of a percentage of total outstanding trucks in the company. The worst scenario then, would be that the customers do not end up signing orders and TransportCo ends up with the possibility of being more dynamic towards existing customers (Ricky, Head of Customer Operations). For this to be an efficient strategy, it requires the procurement, product and sales team to collaborate very closely. The push-strategy consequently facilitates in the creation of operational comfort, but the procedure of forecasting is still a pressing issue as of today:

It is very tricky. Our big takeaway from our summer's forecasting and monitoring project was that our forecast and projections were always way off base. Both from a spending (CAPEX) and a revenue perspective. (Russell, Business Manager)

It is interpreted that interviewees in TransportCo have faith that industry expertise will guide them in the task of allocating resources. As the future is perceived to be predictable, TransportCo can consequently through information sharing and expertise predict when and in what units' resources must be allocated to ensure operational capacity for the future.

4.4. Finding comfort in the business case of A-Trucks

4.4.1. An effort to forecast revenue through pilot programmes

TransportCo's short term revenue forecast for A-trucks is perceived to be more predictable due to the long lead times of components, similar to the E-trucks. Although, since the sales processes revolving A-trucks are for now only limited to pilot programmes, interviewees feel that this is a poor estimation of future potential revenue. As such, longer term forecasts become more difficult to estimate, interviewees describe. McFly (Head of Manufacturing) explains that the estimation of how many A-trucks to build in the coming years is similar to classical project management, in that they must query stakeholders on what is a reasonable requirement or need in terms of fleet size. Nevertheless, in the longer term, the narrative around the selling point for A-trucks is strong, as expressed by both Thorner (Sales Manager) and Schumacher (Finance Manager), alluding to the immense cost reduction when removing the driver. They continue to describe that in traditional diesel transportation, the driver constitutes around a third of the total cost base, with fuel another third and the last part adhering to general overhead in terms of distribution costs. Toretto (Business Development Associate) conveys confidence in the long-term outlook of the A-trucks, saying that TransportCo's offering will become very cheap when achieving this roll-out in the future. Schumacher (Finance Manager) however, expresses some worry in becoming too comfortable:

If we can eliminate the cost for the driver and the fuel, you do the math, but it is far away in the future. [...] How sure are we that it will look like we in the models, how realistic are we? Are we nothing but engineers with our head in the sky or is this really feasible? (Schumacher, Finance Manager)

In the future, the main target is to sign customers with an SLA (Service Level Agreement), just as with the E-trucks, to execute on the promises regarding cost reduction. The pilot programmes are thus described by interviewees as being critical until then, to show progress and sustain confidence in the technology. These pilot programmes, however, are as of today limited in their scope due to strict regulatory frameworks when it comes to pilot testing of autonomous trucks. The different scopes are divided into below segments by the Transport Authority in TransportCo's local market, Thorner (Sales Manager) describes:

- **A-truck 1** - Fenced enclosures (No permits needed)
- **A-truck 2** - [Large] Private logistics areas (Permits needed)
- **A-truck 3** - Highway (Not allowed)
- **A-truck 4 & 5** - Urban and inner city (Not allowed - far off in the future)

As seen in the different segments, and as explained by several interviewees, pilot programmes are today limited to mainly fenced enclosures but also to larger industrial logistics areas (used professionally, lacking private persons). *"If you can find an 'A-truck 2' flow, it is very advantageous [as it benefits the testing sample a lot]"* (McFly, Head of Manufacturing). Russell (Business Manager) put forward another concern, relating to regulation not being uniform with regards to the different targeted regions (or even within a specific region). Numerous interviewees have been interpreted to display some discomfort in the large impact the external factor of regulation has on the overall business case for A-trucks. Thorner (Sales Manager) stresses that there is a risk that TransportCo falls behind if they do not push for permit standardization together with Transport Authorities. *"How are you supposed to comply with rules on breathalyzers if your vehicle does not even have a steering wheel and driver's cabin?"* (Thorner, Sales Manager). Regulation adjustments from TransportCo's side is explained to be a demanding and time-consuming process with *"Transport Authorities easily getting stuck on details"* (Charles, Deployment Manager). Russell (Business Manager) elaborates on the issue with regulation as a complicating factor to the A-trucks case:

To be honest, I think the easiest way to get it done is to do it and figure out what the pain points are, because there always will be, but you will not realize what those pain points are until you actually go ahead and get started. (Russell, Business Manager)

This attitude shows a reconciliation with the fact that there will be several discomforts along the way, but that the important thing is to learn as they move forward. Norris (Accounting Manager) highlights that TransportCo now has proven that their A-truck can drive with normal speeds on real roads, but that *"the outside world is not ready for us yet"*. Interviewees express the need to make continuous progress to maintain a strong belief in the potential of the case. Rickardsson (Strategy & Development Director) says that *"we [TransportCo] are breaking new ground every day"*. However, given that regulation is limiting technology development and the outstanding use-cases, interviewees express a difficulty in forecasting the timing of potential revenue in the business case for A-trucks.

In terms of forecasting revenue, there are two additional variables that need to be considered, namely future volume and future price. Regarding volumes, Ricky (Head of Customer Operations) says that *"everybody knows that in the A-trucks case there are much more vague [imprecise] volumes as there are a lot of things that need to fall into place"*. It can hence be interpreted that future revenue numbers for A-trucks are perceived as soft. Rickardsson (Strategy and Development Director) says that you have to remember that there are real use-cases (mainly 'A-truck 1' regulation) now but as these are limited by regulation, it is difficult to forecast volumes on this basis. Furthermore, concerning

future prices of the A-truck offering, interviewees seem to be uncertain in the estimation of this development:

I have been thinking quite a lot about this. We say that we want to switch to A-trucks because it is cheaper but when that happens, will we lower the price on our transportation service then? (Thorner, Sales Manager)

Future prices of the transportation offering with A-trucks thus seems to be another variable that is difficult to predict. Norris (Accounting Manager) conveys that in this revenue forecasting process, they try to estimate the future price based upon what they have been able to charge previously in their pilot projects. Norris elaborates on the whole forecasting process:

For the A-trucks, we do not have the same modelling tools that we use for E-trucks, but instead we have to estimate the number of vehicles we can reasonably have out on roads at a specific point in time, finally putting a sum on what this will lead to in terms of invoicing each month. 2023, 2024 of course becomes much more difficult. (Norris, Accounting Manager)

Hence, three out of three variables (Future volumes, future prices, and timing consideration) that together constitute the basis for a revenue forecast, is interpreted to cause discomforts in TransportCo. Rickardsson (Strategy and Development Director) thus elaborates on how the business case and forecasts (for A-trucks) more reflect TransportCo's overall ambition:

In a new company [such as TransportCo] with pioneering technology, you are forced to set [long-term] targets based on ambition. Where should you otherwise start? [...] For example, the market for autonomous trucks does not exist yet. (Rickardsson, Strategy and Development Director)

It is interpreted that the interviewees more or less discard the business case as a proper forecast but realizes that the business case reflects TransportCo's vision embedded in the overall narrative. Thorner (Sales Manager) supports this interpretation: *"We have to say that this is going to happen, we cannot say it might. We have to believe in our future."*

4.4.2. Innovation focus needs to be sustained given a distant future

Several interviewees perceive that the A-trucks are the main objective, where TransportCo really can be disruptive in its offering. Although, since the A-trucks still are far away with several obstacles to overcome before they can be fully commercialized, interviewees express discomfort regarding the future. As of now, TransportCo is dependent on the sales of E-trucks for near term revenue generation, which Thorner express could be a potential dilemma:

There is a struggle within the organization since we have different targets upon us, marketing wants to display A-trucks, but we have to sell E-trucks. It can possibly be a problem that our focus is divided. (Thorner, Sales Manager)

In line with the interpretation that standardization of procedures has created a sense of comfort around the E-trucks, interviewees express the need to devote more attention to the organizational structure regarding A-trucks. *"We will need to standardize how we work with the A-truck projects"* says Charles (Deployment Manager). Although, since standardization is perceived to be far away in the future with the A-trucks, McQueen (Head of Strategy) express discomforts in the risk that E-trucks will get too much attention and the overall goal of A-trucks will fall behind:

What KPIs do we have in place, and do they benefit our long-term purpose? We are now talking very much about installed trucks, it pushes sales of E-trucks but that's not what we want [in the long term]. [...] There are two lanes, the long-term purpose [of A-trucks] and a supporting sidetrack [E-trucks]. We have to balance this all the time. (McQueen, Head of Strategy)

Several interviewees are interpreted to feel a discomfort around how the organization is set up for the future with regards to A-trucks and express the need to start implementing procedures for the upcoming years. Consequently, appropriate KPIs and procedures are perceived to be of utmost importance to maintain commitment surrounding the A-trucks. Ricky (Head of Customer Operations) explains that as the technology gets more mature, TransportCo will start to build the organization around the A-trucks but that there are many questions to be answered: *"where, how and when can a handover from R&D happen [to the operations team], and at what maturity level of the A-trucks?"* Nevertheless, McQueen (Head of Strategy) stresses that the company cannot afford to spend excessive amounts of time on planning, but that they must execute and implement all the time to sustain momentum. In line with this view, interviewees are perceived to feel hope since TransportCo has started to employ more people (in operations and sales) that will focus solely on the A-trucks. Charles (Deployment Manager) says that the operations team hopefully will become more involved as a result of this. Furthermore, Rickardsson (Strategy & Development Director), expands upon what could create comfort in the business case:

What will determine if this business case holds or not will be if we can deliver, commercially through sales but we need to ensure that we can deliver operationally as well. (Rickardsson, Strategy & Development Director)

Moreover, Alonso (Business Development Director) explains that to deliver operationally, they will need to employ a push-strategy for the A-trucks as well, due to long lead times of components. McFly (Head of Manufacturing) highlights that this procurement can concern a large part of the company budget and thus it is important that there is implementation efficiency in the operations. As such, it is interpreted that for

interviewees to feel fully comfortable in the business case of A-trucks, the operational capacity needs to be increased.

4.4.3. The narrative of customers as partners

Despite that interviewees express discomfort when it comes to both forecasting and operational aspects, the overall interpretation is that they are well motivated and have a strong conviction in the business case. When interviewees were asked what they think is the most important to fulfill the business case for the A-trucks, a common theme was the importance of signing customers. Historically, TransportCo has been very selective in the choice of customers, partly because they want customers to have the capability to undertake pilot programs and scale up incrementally. Hamilton (Operations Director) says that the case looks more promising now as TransportCo has signed large and reputable customers for their pilot programmes. However, to keep customers and attract new ones, interviewees explain that customers (and investors) want to see progress with regards to A-trucks; *"At the end of the day we are getting backed by customers and investors, they want to see some kind of tangible metric"* (Russell, Business Manager). McFly (Head of Manufacturing), expresses that with regards to the A-trucks, stakeholder management is incredibly important as customer satisfaction is key. It is therefore described as important for TransportCo to clearly define the scope of the pilot programmes and their deliverables. The deliverables are explained to be very process oriented, as they entail testing for a certain period of time (i.e., weeks or months) and for a set number of hours each day for a specific use case. *"The customer is very involved in dialogues when defining the pilot programmes, and that's how we must have it"* says Hamilton (Operations Director). After each specified pilot programme, evaluation together with the customer is described as critical to be able to expand the scope of the programme and set new deliverables in the next stages. Norris (Accounting Manager) says that the more specifications (i.e., use cases like light rain, different speeds, steep roads) TransportCo and the customer can fulfil, the more ready they will be for the future. However, as progress is dependent on several aspects (i.e., regulation, test conditions etc.) interviewees seem to feel uncertain regarding what the pilot programmes will actually result in and when. Consequently, it is interpreted that the key factor for creating comfort in that the business case eventually will be realized is the fact that TransportCo has signed long-term commitments with customers, which become more like partners during the learning process. Thorner explains: *"We realized that we had to sign customers for long transformational plans that stretch over approximately five years"* (Thorner, Sales Manager).

Interviewees describe how the narrative around the A-truck customers have changed, from being merely customers to becoming partners. Russell (Business Manager) explains that: *"Our customers become more of our partners on the A-truck side as we agree that we will be testing these vehicles out and obviously in the long run it is beneficial for both*

them and us." To find comfort around all the uncertainties surrounding the A-trucks, Hamilton (Operations Director) explains that *"we [TransportCo] are supposed to learn together with the customer, it is the foundation of this whole process"*. It is interpreted that Hamilton points to the ability for both sides to 'forgive and forget' during the process of learning. McFly (Head of Manufacturing) emphasizes that the transformation assessment has to be sufficiently attractive for the partners to undertake this change journey, but they cannot be led to believe that TransportCo will fix everything for them alone. Russell (Business Manager) seems to share this view when reflecting on the narrative around the partnership:

They [the partners] are quite aware that there will be some learnings along the way for both sides, and so coming in with that kind of messaging and understanding from the start makes it much easier. (Russell, Business Manager)

Interviewees further emphasize that if they have failed to mediate this in the beginning, the risk is that it becomes a much more turbulent journey. Relieving discomforts is thus interpreted to already begin during the initial discussions with potential partners and as McQueen (Head of Strategy) points out: *"Everyone who invests in this project is aware that in the worst case, it does not work out"*. McFly (Head of Manufacturing) highlights the "golden triangle" of time, technology and cost, which is important to communicate to partners initially. However, Rickardsson (Strategy and Development Director) is perceived to feel that the sense of comfort grows with the partnerships: "*The further we get the more credibility we get, then you can point to the earlier success stories with previous customers and that it works"*.

It is perceived that comfort is found through achievements that further strengthen the narrative, where TransportCo frames their customers as partners with shared accountability in the promise of innovation. TransportCo evidently have process-oriented deliverables, but it is up to both the organization and its customers to shape the future technology through collaborative pilot-testing, and as they make progress commitment can be maintained. To establish the narrative of a shared promise, Thorner (Sales Manager) articulates the key question in the dialogue with customers: *"Do you want to be a part of this and shape the future [technology] with us?"*. As such, it is interpreted that the main comforting factor in realizing the long-term business case, given future uncertainties, are the achievements of committing to partnerships with key customers: *"They [our partners] believe in this journey that we have started and are, while we are on our way there, willing to support us in the beginning"*. - McQueen, Head of Strategy

5. Discussion

The following section includes a discussion around the empirical findings in connection to the theoretical framework presented in section 2.2. We interpret that the accounting numbers in both business cases of TransportCo are a combination of soft accounting (Rowe et al., 2012) and the organizational narrative (Beckert, 2021) in the form of ambition, however with different weights. When there is proven technology, available information on pricing and volumes, and an existing market, (section 5.1) the creation of comfort will possess certain characteristics as opposed to when these variables are reversed (section 5.2). As a consequence, with widely different characteristics, the process of creating comfort in the business cases of E-trucks and A-trucks will take different forms.

5.1. Creating comfort in the business case through standardized procedures

As stated in the theoretical framework of this paper, creating comfort in the business case regards two aspects, namely having comfort in the substantiation of the forecasting, as well as having comfort in the organizational capacity to fulfil the business case and deliver on the forecasts. In this section (5.1), there will be a focus on the E-trucks business case, where comfort will be discussed based upon these two aspects.

5.1.1. Forecasting and coordination through standardized procedures

The business case and sales targets for E-trucks can be viewed to be constructed by a combination of calculations and the narrative of the future (Beckert, 2021). With regards to the E-trucks, there is a general perception that targets stemming from the business case are quite ambitious, resulting in a sense of discomfort. However, actors mention the revenue breakdown (sales processes) as a leading indicator for future revenue and are interpreted to be comfortable in this as a foundation for the business case. Prices are expected to be stable, the outlook for possible volumes is perceived as clear, the technology is proven, and the market consists of a large number of companies with demand for E-trucks. The accounting information derived from the revenue breakdown can as such be seen to have undergone hardening (Rowe et al., 2012), in the sense that actors agree on its quality. This is also in line with the reasoning that quantification adds to the persuasiveness if proven 'objective' (Kadous et al., 2005). Since the projections are based upon perceived 'concrete and tangible' sales processes, it is difficult to argue against them. The accounting numbers for future revenue are by actors perceived as being more anchored in observable information, rather than in the narrative and the company's ambitions. The revenue predictions for E-trucks are as such regarded by actors to be substantiated through the models using a probabilistic approach to customer relationships,

bearing resemblance to the statistics game of hardening (Rowe et al., 2012). Previous research has described that when dealing with startup ventures, accounting information from a calculative standpoint is often frustrating and unsatisfying (Mouritsen and Pflueger, 2018; Doganova and Eyquem-Renault, 2009). However, in TransportCo's business line of E-trucks, this does not seem to be the experience. A possible explanation could be the interpretation that TransportCo have used a simplistic analytical model to create their forecasts. By basing the business case on tangible accounting information such as sales processes, it does not proclaim to account for the entire world but may exclude other important yet uncontrollable factors (Mouritsen and Kreiner, 2016). Thus, it can be questioned if the approach adopted by TransportCo truly reflects a statistical approach or if it is more of a facade (Beckert, 2021), since a statistical game would entail having a large sample of historical data, with many available comparisons (Rowe et al., 2012). This is not illustrated in TransportCo, where they in their startup phase have small samples of signed and deployed customers, limited historical data, and at times low degrees of comparability between customer contract formats.

The source of comfort in the business case of E-trucks seems to be rooted in the procedures and organizational structure that actors perceive can produce hard accounting information. In previous research, actors can perceive information to be hard if they have faith in that accounting practices have been appropriately implemented by other actors with expertise (Rowe et al., 2012). It is interpreted that actors have faith in the implementation, by experienced personnel and newly recruited experts (Goretzki et al., 2021), and application of the organization's CRM-system, where customer leads are tracked along with estimated probability of deal closure (conversion rate). The information from the CRM-system then acts as a foundation for decision-making in high-collaborative, cross-functional team meetings (Goretzki and Messner, 2016). During these meetings, it is interpreted that a sense of either comfort or discomfort is established, as actors jointly assess on the quality of information and how operationally prepared the organization is to deliver on the sales targets. Within this social context, it is furthermore possible that actors experience a sense of involvement and democracy, which according to Rowe et al. (2012) facilitate reaching an agreement in the process of hardening. Actors thus seem to be comfortable in how the business case has been constructed and that targets are possible to reach given the expectations of future demand for E-trucks. Although, with regards to operational capacity, actors within TransportCo are interpreted to sense some discomfort in relation to the high set targets and ambition in the business case.

The state of comfort is not interpreted to be binary (Carrington and Catasús, 2007); comfort is created in the financial models and organizational procedures (Andon et al., 2021), but discomforts are then instead directed towards operational capacity to meet future demand. The discomforts mainly revolve around matching the timing of demand with that of recruitment and the procurement of trucks. However, as actors have agreed upon the overall narrative of future demand for E-trucks, predictions are deemed to be

comfortable enough to act on (Andon et al., 2021) and as such, implement a push-strategy along with standardized procedures to create comfort. The logic of statistics suggests that actors create comfort in the calculative and statistical approach to the business case of E-trucks, even if it holds true or is more of a facade (Beckert, 2021). Despite the efforts of TransportCo to create comfort in their business case of E-trucks through standardized procedures, proper financial models and statistics, it is interpreted by the empirical findings that this does not hold in the other business area. In the business case of A-trucks, actors are interpreted to express a sense of discomfort since the addressable market is not yet defined, future prices and volumes are difficult to project, and the technology is still under development. The efforts of quantification in the A-trucks business case are not perceived to add to its persuasiveness (Kadous et al., 2005). Consequently, the business case of A-trucks is not interpreted to be perceived as a proper forecast, but rather consists of fictional expectations and a narrative (Beckert, 2021; Beckert and Bronk, 2019).

5.2. Finding comfort in promises of the future

In contrast to the business case of E-trucks, the business case of A-trucks is perceived to be less objective from a calculative standpoint, that is the information is interpreted to be too soft, overly resistant to thorough hardening (Rowe et al., 2012). There are calculative attempts (Kadous et al., 2005) but due to lack of information about the future market conditions, the business case of A-trucks is perceived to become more imaginary in its nature. The imagined scenario thus becomes filled with promises around the proposed innovation, guided by fictional expectations and the organization's narrative of the future. Consequently, actors are perceived to look beyond standardized procedures of calculative accounting and resource coordination to find comfort, rather than create comfort.

5.2.1. The promise of innovation and action

In the business case of E-trucks, actors are interpreted to find comfort in how they perceive that TransportCo has adopted standardized procedures for forecasting and coordination of resources. However, with regards to A-trucks, there is a general perception that actors feel that there is a lack of standardization. It is interpreted that there is an aspiration of quantification but that actors are aware that the business case reasonably cannot be described as a proper forecast. There is a perception that the forecasting cannot exclusively be based on known facts or observable truths (Beckert and Bronk, 2019). As there are noticeable doubts regarding the estimation of future prices, expected volumes and the timing of potentially addressable markets, revenue prediction reflects more of an ambition. For instance, actors express a discomfort surrounding the realism of pricing models as a variable for revenue. The narrative towards customers is placed upon the disruptive innovation surrounding the ability of TransportCo to reduce their costs when transferring to A-trucks. However, as a cost reduction is promised, there is uncertainty regarding who will get the anticipated margin improvement, the customer

or TransportCo. Regarding the timing and size of future volumes, regulation limits testing, slowing down the perceived market adoption while also constraining the available number of use-cases. As such, actors find it difficult to know when, and if, regulation will open up for additional use cases. Irrespective of the difficulties with quantification, TransportCo do try to formulate alternatives (Mouritsen and Kreiner, 2016) to how many A-trucks they can have on the road for each month over the upcoming years. The business case, hence, rather than being an objective representation of an accurate future, becomes the starting point of means to anchor the narrative of a desired future within the organization (Beckert, 2021). Thus, the imagined business case becomes an anticipation of a future state of the market environment and how the organization will be positioned in it. The calculative picture of this future state becomes more than a data visualization or a mere computational exercise, but a point of influence for decision-making and long-term planning, if 'made to stick' in the minds of actors. (Flyverbom & Garsten (2021)

The business case for A-trucks, filled with imaginary numbers, can be seen as a promise for action, which TransportCo and its actors will commit to in creating a desired future (Beckert, 2021). However, given aforementioned discomforts in relation to uncertainty, and in light of technological novelty, the narrative seems to be less of a guiding force in itself. In conditions of uncertainty, we perceive that it is vital that the narrative is well-anchored in organizational tools (Beckert, 2021) and procedures before it can provoke action. The narrative of A-trucks as a future disruptive force to the transportation industry has created a business case and a strategy (Flyverbom and Garsten, 2021) to initially guide the organization. It is interpreted that there is a tension between the short-term focus on E-trucks and the long-term focus on A-trucks, as TransportCo has high near-term sales targets with regards to E-trucks. The business case becomes the starting point, but as perceived by actors there is a need for continuously safeguarding the technology projections (Beckert, 2021) and focus on fulfilling the strategy. In line with that a strategy's continuation often is dependent on calculative metrics (Kurunmäki and Miller, 2013), a concern is expressed by actors that the KPIs currently in place might benefit other purposes than the commercialization of A-trucks. To realize the business case of A-trucks, the organization constantly needs to execute and show progress, and KPIs are thus called for. Furthermore, it is perceived that the only way that follow-up metrics actually will generate actions towards the long-term ambition regarding A-trucks, is if TransportCo ensures that the narrative is anchored in appropriate KPIs.

As A-trucks are not yet fully commercialized, it is difficult for TransportCo to find appropriate KPIs to anchor the narrative. Financial KPIs highlighting productivity or follow-up on market shares (Kurunmäki and Miller, 2013) are not deemed to be practical since the offering is under development. There are several external uncertainties, such as regulation, that make it problematic to use rigid result-oriented KPIs. Such KPIs could in our perception lead to arising discomforts around the business case of A-trucks, since these results are far away in the minds of actors. As future results for now are

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uncontrollable aspects of an unpredictable future, comfort might be more easily created by focusing on controllable aspects of today (Sarasvathy, 2001). Hence, in order to highlight progress and support the narrative of the imagined future, we perceive that actors in TransportCo utilize process-oriented KPIs. The evaluation of particular test-focused KPIs in pilot programmes are thus a way for the organization to show incremental progress in the case for A-trucks. By using process-oriented metrics, the organization feels that progress is made, which supports the narrative of the long-term business case. This consequently incites action within the organization to keep striving towards the imaginary future (Beckert, 2021), which can continuously lead to comfort in that the business case will manifest.

Actors are interpreted to be aware that predictions of the future, with regards to the A-truck business case, are imaginary and that results are dependent on external factors. For the narrative to continuously incite actions, this awareness is important as actors need to engage with the world as it unfolds to fulfill the promise of action. Therefore, when predictions are wrong or actions result in unintended outcomes, the ability to "forgive and forget" (Mouritsen and Kreiner, 2016) is essential for actors to feel comfort in their commitment and actions towards the unknown future. We see several examples of this in our study. Firstly, actors are aware that the business case is based on ambition, but express that they need to believe in their future and act like it will happen, even if results are delayed at times. Secondly, in the case of pilot programs, the results of testing are difficult to predict, but the organization will have to go through trial and error, and continuously change the scope of the programs along the way. Technology projections are as argued not adopted but rather adapted (Mouritsen and Kreiner, 2016). The need for continuous execution and learning, are thus interpreted as being closely associated with forgiving and forgetting as actors absorb new information and are willing to adapt their actions accordingly. Hence, finding comfort in the accounting numbers in conditions of high uncertainty seems to be less about reaching an agreement that the information is accurate, but rather about coming to an agreement that accounting information will be soft and inaccurate. The ability to forgive and forget is therefore the main source of relieving discomforts, as actors realize that the aim is not to predict the future but rather engage with as it emerges. Thus, in the A-trucks business case, actors can relieve discomfort and possibly find comfort through their promise for action, which in conditions of high uncertainty can be widely separated from the promise of results (Mouritsen and Kreiner, 2016).

5.2.2. Sharing the promises through partnerships

As TransportCo's innovative quest to commercialize their A-trucks is characterized by conditions of high uncertainty, making promises of results can be difficult to uphold. In the E-truck case, actors focus on trying to predict the future with more of a result-driven focus. In contrast, with regards to the business case of A-trucks, we interpret that actors

are more focused on exploiting contingencies and learn from the process, as there is a lack of pre-existing knowledge. This is perceived evident in the empirical analysis on regulation adjustments and the importance of iterative pilot testing. It is perceived that it is apparent to actors that the business case is in fact more of an imaginary nature and not a credible prediction, which consequently removes the promises of results. Instead, actors seem to focus on aspects that are controllable, i.e., adopting a push strategy to secure future supply in light of unpredictable future demand. This bears resemblance to the process of effectuation, where actors start by focusing on available resources rather than trying to predict the future (Mouritsen and Kreiner, 2016). For example, why should an organization engage in the prediction of future price considerations when price, cost and demand functions are unknown? Similar to an organization's ability to forgive and forget, the process of effectuation can, if adopted, thus relieve discomforts for actors, as the need for prediction is greatly reduced or perhaps even eradicated. (Sarasvathy, 2001)

While the logical thinking of effectuation can relieve discomforts related to prediction, it is perceived in TransportCo that it also can contribute to a sense of comfort by achieving certain process-oriented milestones. These specific milestones are in the business case of A-truck mainly related to pilot-testing with long-term customers. Through the signing of key customers to long transformational plans that span over several years, TransportCo emphasizes that they together with the customer are going to shape the commercialization and creation of this new market together (Sarasvathy, 2001). The narrative of a future market and product are consequently not only dependent on the action of TransportCo, but also dependent on the action of other actors, the customers who choose to invest. As such, these key customers become more of TransportCo's partners with shared accountability for reaching the envisioned future. Through sharing the accountability with large reputable companies, actors within the organization can be more confident that the business case for A-trucks can conceivably materialize. Actors can as well be more comfortable when confronted by surprises, as they will engage them jointly with the partners (Mouritsen and Kreiner, 2016). Effectuation can by emphasizing strategic alliances and pre-commitments from stakeholders, according to previous research, reduce or eliminate uncertainty (Sarasvathy, 2001), but we also notice that it can aid in the creation of comfort when dealing with innovative technologies. Furthermore, when discussing stakeholders and not only customers as partners, we perceive TransportCo's efforts in dealing with the local Transport Authority to also be an effectuating emphasis on partnerships. Traditionally, transportation organizations and transport authorities have distinct hierarchical roles, however, when confronted with new technologies, these two parties must collaborate in order to develop standardized permit processes for autonomous transportation together. We recognize this as a cooperative strategy (Sarasvathy, 2001) that TransportCo employs to further their interests in the development of the new market.

Through positioning themselves as a partner towards customers, TransportCo can alleviate concerns related to result-oriented promises, such as the promised margin improvement large customers are interested in. Instead, the promise towards customers is a commitment to invest and adjust (Mouritsen and Kreiner, 2016), emphasizing that they will learn together in these conditions of high uncertainty. Consequently, the A-trucks business case becomes an imaginary tool that praises doubt and leads actors to ask questions, and search for possible explanations and courses of action (Mouritsen and Kreiner, 2016; Mouritsen and Pfleuger, 2018). In TransportCo, these discussions mainly revolve around subjects such as operational capacity, process-oriented KPIs and regulation adjustments. Through sharing this doubt, and searching for ways forward, with their reputable partners, comfort is perceived to be increased within TransportCo. The business case in itself is perhaps never meant to create or give actors a sense of comfort. Concludingly, the forming of strategic alliances (Sarasvathy, 2001) and sharing accountability is perceived to be the main source of comfort, while the imaginary business case acts as a catalyst for continuous discussions on the issues and concerns worth considering (Mouritsen and Kreiner, 2016).

6. Conclusion

The aim of this study was to shed light on how accounting numbers are constructed in relation to future uncertainty and how comfort can be created through social procedures within the organization. This has consequently been accomplished by adhering to the posed research question: *How do innovative start-up firms create comfort in their business plan when accounting for an uncertain future?* The empirical study identifies differences in how accounting numbers are constructed dependent on the presence of the perceived context surrounding two cases. In line with previous research on the subject, accounting numbers become and are perceived by the social environment as more imaginary in relation to an uncertain future. Consequently, differences are interpreted in how the social context creates comfort around accounting numbers in the two business cases. Firstly, when future market conditions are perceived to be predictable, actors can engage in statistical procedures and relate to the business case as if it indeed is a prediction of the future. Comfort can thus be created, regardless of if it is truly a statistical approach or more of a facade (Beckert, 2021), where actors have faith in that the appropriate accounting procedures have been implemented to produce "objective" accounting information. However, when it is apparent to actors that future market conditions are unknown (i.e., there are no price, cost or demand functions) and the business case is populated with imaginary numbers, the strategic tool can become more of a guide in the promise for action. Secondly, actors' perception of the business case, whether it is a forecast or based more on ambition, seem to have implications for how comfort is created within the organization. When the business case is viewed as a forecast, actors seem to create comfort through information-sharing, in cross-functional teams and standardized procedures, to ensure organizational capability for the "predicted" future as if it will indeed materialize. In contrast, when the business case is regarded as a promise, i.e., influenced by a narrative rather than prediction, the organization's ability to forgive and forget may relieve discomforts as it is not perceived to be a promise of results. The promise is a promise of action towards an unknown future and as the future emerges, actors can instead find comfort in progress and achievements, i.e., process oriented KPIs and forming strategic partnerships, by adopting a logic of effectuation.

Further, this paper aims to contribute to the research of imaginaries and the research of comfort creation in relation to soft accounting information, by integrating the two fields. The contribution to the research fields of this paper is moreover divided into two propositions as follows. Firstly, we propose:

If narratives are well-anchored in the organizational planning tools, comfort can be found in the means to reach an uncertain future if actors adopt a logic of effectuation

This study suggests that actors cannot create comfort in that accounting numbers have been objectively constructed from a forecasting perspective if they are indefinitely soft or perceived as excessively imaginary. Furthermore, actors cannot find comfort in the narrative alone even if it is well-anchored within the tools of imagination. The narrative can act as a promise and an initial starting point for action (Beckert, 2021) but to keep actors committed, failure must be acceptable in a process of continuous learning. The ability to "forgive and forget" (Mouritsen and Kreiner, 2012) is thus necessary to relieve present discomforts within an organization, by reducing the importance of prediction. However, in order to essentially find comfort, not only relieve discomfort, we suggest that an organization needs to adopt a process-oriented focus and a logic of effectuation (Sarasvathy, 2001). Through making progress, actors can feel that they are coming closer to the future and through initiating partnerships, they can jointly share accountability in forming this future. Concludingly, in relation to the uncertain future, it is not about creating comfort through prediction but rather about finding comfort through the means to get there. Secondly, we propose:

Comfort can be created through standardized procedures if future market conditions are perceived to be predictable

Previous research within the field of comfort creation in relation to soft accounting (Rowe et al., 2012) highlights the importance of a high level of involvement among actors and organizational scrutiny of information. Our empirical analysis suggests that comfort in a business case can be created through a combination of different "hardening games". As start-ups are conventionally characterized by the absence or lack of formal structures (Davila and Foster, 2007), actors will have to have faith that appropriate procedures are put in place. These standardized procedures then act as a foundation for comfort creation in that actors perceive that critical information is absorbed in organizational planning tools. However, in the light of uncertainty, we interpret that in order for actors to be able to create comfort with regards to forecasting and organizational capacity, actors must first perceive that uncertainty is reduced by framing the future as predictable through a statistical approach (Beckert, 2021). Consequently, for actors to feel a sense of comfort in a forecasting perspective, information needs to be agreed upon as "objective" (Kadous et al., 2005) in the social context by basing quantification on input that is understandable for users. Furthermore, for actors to create comfort in the organizational capacity, we interpret that there is an emphasis on high-collaborative, cross-functional teams to coordinate activities and resource allocation. Concludingly, the perception of a calculative approach acts as a foundation for comfort, but for comfort to be created, both in terms of forecasting and with regards to operational capacity, there is an emphasis on cross-functional teams to harden information as the future is predictable.

Limitations

The study is based on a single case study involving a company that is in a fast-changing growth phase. As a result, the empirical setting therefore can be assumed to change constantly with regards to recruitment, operations and financials, affecting the perception of actors involved in the company. Consequently, due to the specific context of the case company, comparability to other similar studies may be affected as it is difficult to generalize the analysis (Bryman & Bell, 2015). Furthermore, the study is based on interpretations and the perception of actors' feelings of comfort and discomfort with regards to the business case and is as such prone to misconception. With regards to the emic view and the interpretive research approach there is no assurance of convergence between individual interpretations, thus the plausibility of explanations needs to be inter-subjectively agreed upon to be reasonable (Lukka and Modell, 2009). A drawback of interpretive research is as such that there is an indefinite span of interpretations to be made, which can cause validation issues. In addition, the fact that one of the authors had prior knowledge of the empirical setting may affect interpretations. However, this is both a strength and a limitation of the study, as explained in more detail under the method section. Moreover, the sample of data could be extended with even more employees and perspectives that could further bolster the discussion.

Future research

During the course of this study, themes that could be of further research interest have been identified. The first proposal for further research entails studying how actors effectively create and reproduce organizational narratives over time in relation to accounting numbers. Especially with regards to innovations, this could add to the research on how narratives in organizations change with technological progress as well as with stagnation. The second proposal to further research suggests investigating the struggle between distinct business areas with regards to innovation, to uncover tensions concerning technology projections and to explore how these fundamentally are safeguarded in the social context. Lastly, in order to understand if the findings and suggestions of this study are pervasive with regards to other industries and companies, it is suggested that future research could undertake a comparable study by exploring the research question in a new and different innovation context.

7. References

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8. Appendix

Interviewee	Role	Number of interviews	Interview Context	Length of interview	Interview date
Finance & Accounting					
Schumacher	Finance Manager	1	By video	45 min	21st Oct
Norris	Accounting Manager	1	By video	45 min	9th Nov
Strategy & Development					
McQueen	Head of Strategy	1	By video	60 min	12th Nov
Richardson	Strategy Director	1	By video	45 min	17th Nov
Alonso	Business Development Director	1	By video	45 min	27th Oct
Toretto	Business Development Associate	1	By video	45 min	22nd Oct
Operations					
Ricky	Head of Customer Operations	1	By video	35 min	9th Nov
Hamilton	Operations Director	1	By video	45 min	29th Oct
Charles	Deployment Manager	1	By video	45 min	2nd Nov
Sales					
Thorner	Sales Manager	1	By video	35 min	18th Nov
Russell	Business Manager	1	By video	45 min	28th Oct
Manufacturing					
McFly	Head of Manufacturing	1	By video	45 min	19th Nov
	Total interviewees:	**12**	**Average:**	**45 min**	