Master Thesis

Exploring the Adoption of AI-Driven Business Valuation Technologies: The Drivers of the Adoption Intention

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Abstract

This study investigates the factors influencing the adoption of Artificial Intelligence (AI) in the business valuation process for small and medium-sized enterprises (SMEs) in the Netherlands. It focuses on understanding what drives the intention to adopt AI in this context. To explore this, the research examines ten key factors influencing AI adoption, using a integrated framework that incorporates data from interviews and structured questions.

The study highlights several essential factors that can guide policymakers, business leaders and business valuators in promoting AI adoption. These include the perceived benefits of AI over current methods, its compatibility with existing systems, and the ease or complexity of its use. Additionally, the support from top management, the organization's ability to understand and implement new technologies, and the size of the firm play significant roles. Competitive pressure, unfamiliarity with AI, concerns about data safety and privacy, and trust in AI's reliability are also crucial considerations.

These findings provide a strategic roadmap for enhancing AI adoption in business valuation, potentially increasing the willingness of SMEs to integrate AI into their processes.

Table of Abbreviations

AI	Artificial Intelligence
BA	Business Analysis
BV	Business Valuation
CAPEX	Capital Expenditures
CV	Coefficient of Variation
DCF	Discounted Cash Flow
DOI	Diffusion of Innovation
DOI-TOE	Diffusion of Innovation – Technological, Organization, Environmental
EBIT	Earnings Before Interest & Taxes
ERP	Enterprise Resource Planning
FCF	Free Cash Flow
FCFE	Free Cash Flow to Equity
FCFF	Free Cash Flow to Firm
FSA	Financial Statements Analysis
GDPR	General Data Protection Regulation
HR	Human Resources
IS	Information Systems
ML	Machine Learning
MQ	Main Question
NCF	Net Cash Flow
NPV	Net Present Value
NWC	Net Working Capital
OEM	Original Equipment Manufacturers
ORE	Online Retailing
RBV	Resource-Based View
ROA	Return On Asset
ROE	Return On Equity
SA	Sensitivity Analysis
SME	Small and Medium sized Enterprise
TAM	Technological Acceptance Model
TOE	Technological, Organization, Environmental
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
WACC	Weighted Average Cost of Capital

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1. Introduction

Easy to imagine; a bright future of Artificial Intelligence (AI) in the daily life of a person. Autonomous cars that require no driver, electrical appliances that can order groceries when it notices a product has run out, seamless business integration of several different organizations. Some of those imaginations are not new, but already exist. AI is making its way into society and organizations where AI can revolutionize the way we work and live. Some organizations are already looking for ways to incorporate AI to optimize their processes or minimize costs, such as PwC and Deloitte (PriceWaterhouseCoopers, 2023; Schoot & Pols, 2024). People and organizations have a different view upon AI and the application of its emerging technology. There are also organizations that are asking doubtful questions such as: “Is it helpful to already invest in AI technology?” or “Is AI really worth it even though it is not yet accurate or reliable enough?” or “Why should we invest in a technology while it is still in its infancy phase?”. A lot of different views upon one emerging technology and all with understandable reasoning. Due to various perspectives and reasons, this paper will delve into the emerging technology of Artificial Intelligence and its adoption intentions within Small and Midsize Enterprises (SMEs) focused on Business Valuation (BV) firms.

The door has been opened for organizations to use AI, but will BV organizations use AI to their advantage, how can they adopt AI in such a way that it would benefit their cause, or when will the time be good enough for the BV organizations to invest in AI, and what kind of AI technology should they invest in if the future looks bright?

1.1 Current situation

According to Michael Chui (2023) from McKinsey, the situation in 2023 is that findings show that more than 40% of the respondents (C-suite Executives) state that their organization will increase the investment in AI overall, because of the advances in AI. Chui states that the expected business disruption from AI is significant, and respondents predict meaningful changes to their workforces.

AI's relevance today stems from its transformative potential across various industries. It offers unprecedented capabilities in processing and analysing large volumes of data, which can lead to more informed decision-making and strategic insights. In the context of business valuation, AI can provide numerous advantages, such as cost reduction, enhanced decision-making, improved customer experience, revenue growth, predictive analytics and forecasting, increased productivity and innovation, and risk mitigation (Moro-Visconti, Rambaud, & Pascual, 2023).

Because of previous adoptions of technological advances, such as big data and cloud computing, the next upcoming AI systems are being made possible to use in the valuation process (Boukherouaa et al., 2021). As AI technology continues to improve and evolve, it might become more and more part of the business valuation process. Organizations such as Black Rock, Vanguard, Bridgewater Associates, and many others use AI to analyse vast amounts of data, generate investment insights, formulate investment strategies and manage risk (Kalava, 2023).

Researching the intention to adopt AI in business valuation is crucial because it helps identify the factors that encourage or hinder its adoption. Understanding these factors can guide policymakers and business leaders in creating strategies to facilitate AI integration, ensuring that businesses can fully capitalize on its benefits. As AI becomes more embedded in business processes, knowing what drives its adoption will be key to maintaining competitive advantage and fostering innovation in the industry.

1.2 Research Goal

The research aims to identify and understand the key variables influencing the adoption of Artificial Intelligence (AI) within organizations. To reach this goal, the following output is being focused on: Assessing whether or not there is a feeling of priority to adopt AI and elaborate on the key drivers of Artificial Intelligence (AI) in the context of business valuation, determining their importance and relevance for the adoption of AI technologies.

1.3 The intention and (strategic) priority of AI adoption

The adoption intention of AI focuses on understanding the factors that influence whether an organization is willing to adopt AI technologies. This involves exploring a range of motivations, perceived benefits, and potential barriers that affect the decision to integrate AI into business processes. Organizations may be motivated by the promise of increased efficiency, cost savings, enhanced decision-making capabilities, and competitive advantage. However, they must also consider potential barriers such as high implementation costs, lack of technical expertise, data privacy concerns, and resistance to change within the organization. Understanding these factors is crucial for developing strategies that encourage AI adoption and address the specific needs and concerns of different organizations.

On the other hand, prioritizing AI adoption refers to the level of importance or urgency an organization assigns to implementing AI compared to other initiatives. This involves determining how AI fits into the organization's strategic goals and whether it is considered a focus area for resource spending and development efforts. Organizations must evaluate the potential impact of AI on their operations and weigh it against other strategic priorities. This prioritization process requires a clear understanding of the potential return on investment from AI initiatives, and the readiness of the organization to embrace technological change. The latter one will be discussed in this thesis.

In this thesis, both the priority and the intention of adopting AI are being researched and elaborated. By examining these two dimensions, the research aims to provide a comprehensive understanding of how organizations approach AI adoption. This includes identifying the key drivers and obstacles that influence adoption intention, as well as the strategic considerations that determine the prioritization of AI initiatives. The findings of this research will offer valuable insights for business leaders, policymakers, and technology developers, helping them to create more effective strategies for promoting AI adoption and integration in various sectors. By addressing both the intention and prioritization of AI adoption, this thesis seeks to contribute to the broader discourse on how AI can be leveraged to drive innovation and growth in the business world.

2. Research Questions

In this chapter, the central research question is stated. As a follow-up, the academic and practical relevance will be discussed and the thesis outline is displayed at the end of this chapter.

2.1 Research Question & Sub-questions

The following central research question has been established:

"Which key drivers influence the adoption intention of Artificial Intelligence in the SME segment of Business Valuation?"

The research question will be divided into the following sub-questions and will define the structure of the thesis:

1. "What does the Business Valuation process entail?"
2. "What is artificial Intelligence?"
3. "How to determine the Adoption Intention?"
4. "How is Adoption Intention interrelated with Business Valuation and Artificial Intelligence?"

2.2 Academic & Practical Relevance

Adoption usually starts with the recognition that a need exists and moves to searching for solutions (Wisdom, Chor, Hoagwood, & Horwitz, 2013). The first part of the sentence states that the priority of AI adoption. To determine the key factors that influence the adoption intention, the need for priority has to exist in the business field first. After the confirmation that a priority is present, the second part of the sentence of Wisdom, Chor, Hoagwood & Horitz (2013) is researched. This is where the search for solutions comes, the search for solutions relates to the openness (intention) of adopting an AI technology. Later on, when the intention of adopting AI is there (a solution has been found), the actual attempt to proceed with the right implementation of the correct solution is the desired outcome (Wisdom, Chor, Hoagwood, & Horwitz, 2013).

Adoption is a complex process and understanding the intention of adopting AI in the BV firms may provide insights for the development of strategies concerning the uptake of AI implementation (Wisdom, Chor, Hoagwood, & Horwitz, 2013). Two adoption theories will be used to understand the process of BV in combination with the adoption intention of AI. This thesis will significantly contribute to the collective knowledge concerning the adoption of AI in BV processes. It aims to uncover potential new factors influencing AI adoption, explore new relationships between these factors, and assess the relevance of existing factors within the context of AI adoption. By doing so, it not only enriches the understanding of AI implementation in BV but also sheds light on broader implications for emerging technology adoption in other domains or segments. The outcomes of the thesis can be generalized beyond this specific research topic.

This suggests that other scholars and practitioners can leverage the findings to assess the applicability of the identified factors and relationships in different contexts. The theoretical contribution involves synthesizing multiple theories to confirm and extend these theories. With the help of empirical support, this thesis generates new insights about the emerging technology AI in the BV process. Because this thesis offers a holistic understanding of the complex dynamics involved in AI adoption within the BV domain, an interdisciplinary perspective is offered.

These theories and empirical support are finite and studies mentioned so far an illustration of the diversity of resources that businesses must develop in order to realize a return on their investments in AI. However, theoretically valid research on how businesses might develop AI capabilities is lacking (Mikalef & Gupta, 2021) and thus, the key drivers that are needed to develop AI capabilities have not been researched. This critical gap can point to the main areas that organizations should focus on when AI projects are being implemented in order to increase their adoption intention, individually as well as organizational-wide (Perifanis & Kitsios, 2023).

In the current landscape from a practical point of view, AI is being increasingly integrated into business valuation processes, where it plays a role in handling and analyzing large volumes of data. Companies are utilizing AI to process financial statements, market data, and economic indicators, which helps in forming a more comprehensive view of a business's value. AI tools are being used to identify patterns and trends within these datasets, offering insights that contribute to more informed valuations.

AI is also being applied in real-time data processing, allowing businesses to update valuations as new information becomes available. This capability is particularly useful in industries where market conditions can change rapidly. Additionally, AI is being used to assess various risk factors by analyzing different scenarios, which aids businesses in understanding potential uncertainties associated with their valuations.

Even though there has been a lot of studies on the field of AI, there is a big knowledge gap when AI is being linked to a practical point of view such as the implementation of AI into the BV process. The research aim of this thesis is to minimize this knowledge gap of AI and its connectivity within the BV domain. Practitioners stand to gain valuable insights from this research, as it explores adoption intentions and provides a basis for strategizing around key drivers to potentially enhance the adoption intention. Thus resulting in practical guidance and recommendations on how to increase the adoption intention within an organization with a foundation of the existing theory and an established, grounded theory.

2.3 Thesis Outline

Below (Figure 1) is a schematic overview of the different steps that will be taken in order to reach the research goal: To discover which key drivers influence the adoption intention for BV organizations in the SME segment to adopt AI technologies and providing practitioners in BV an overview of the key drivers that influence the adoption intention of AI.

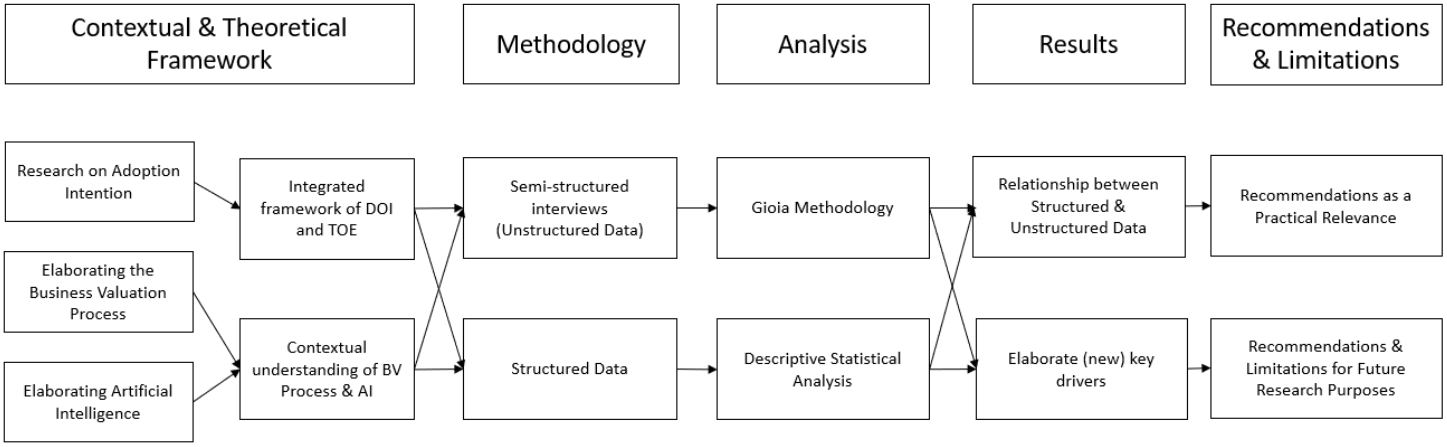

Figure 1: Schematic Overview of Thesis (Author's design)

In chapter 3, an extensive Contextual & Theoretical Framework will be presented, focusing on three pivotal subjects: Business Valuation (BV), Artificial Intelligence (AI), and Adoption Theories/Intention. This section will commence with an elucidation of BV and AI, providing a comprehensive understanding of these domains. Following this, an examination will be conducted into how adoption theories have been applied by other scholars in the context of emerging technology adoption. Secondly, the methodology will be split into two datasets existing out of unstructured data and structured data; unstructured data comes from open-ended questions, providing rich qualitative insights that require interpretation to identify themes and patterns. Structured data consists of responses to Likert-scale questions, which are quantifiable and easily analysed statistically. The retrieved data will be analysed using the Gioia Methodology for the interviews and a descriptive statistical analysis will be executed for the structured set of questions. After this, triangulation will be executed in order to compare and contrast the different findings to produce well-validated conclusions (Creswell, 2003).

Eventually, the data will be explained in the Analysis section that involves systematically examining and interpreting the retrieved data to whereas later on the results of the analysis will be explained in the Results section to: 1) Explain the relationships between the data and; 2) Elaborate the (new) key drivers. Followed by the limitations of the research, which will state the limitations of the research considering data collection, theoretical frameworks and methodologies. At last, recommendations for professionals and future research purposes will be stated based on this research to offer a clear pathway for navigating the complexities of AI adoption.

3. Contextual & Theoretical Framework

To get a good overview, an extensive framework will be stated to establish a clear context of the key subjects of the research question: The contextual subjects BV & AI, and the theoretical approach Adoption theories. The three paragraphs will be divided into the three sub-questions. The topic BV will be explained in comprehensive details given the adoption intention of AI will be researched in all different steps within the BV process and therefore forms the foundation of the thesis. At the end of the section, a short epilogue is disclosed.

3.1 What does the Business Valuation process entail?

3.1.1 Introduction

In the BV field, there are dozens of valuation models with all different theories and reasonings for a certain path to determine a value for a company. However, there are only two approaches in valuation: *intrinsic* and *relative* (Damodaran, 2011). Damodaran states that an asset can be valued on its intrinsic value, determined by the cash flows that is generated in the coming years and how uncertain these cash flows are. Damodaran (2011): "While the focus in principle should be on intrinsic valuation, most assets are valued on a relative basis". When talking about valuation on a relative basis, the value is determined on how the market prices similar assets, an example that the book states is that it can be compared to the house market. In this specific market, the value of the house is mostly based on the prices that similar houses have been sold for in the neighbourhood. The relative approach is founded on the principle of multiples, these are comparable metrics in which these metrics judge how one organization performs relative to another organization. Important to note, is the following statement by Damodaran: "While there are purists in each camp who argue that the other approach is useless, there is a middle ground. Intrinsic valuation provides a fuller picture of what drives the value of a business or stock, but there are times when relative valuation will yield a more realistic estimate of value."

In the previous paragraph, it was mentioned that there are dozens of valuation models which are all based on different thoughts, expectations and theories. One of the most traditional used models/methods are Net Asset Value, Discounted Cash Flow (DCF), Dividend-Based Valuation and Multiple-Based Valuation (Alemany & Andreoli, 2018). The list is not exhaustive, but the most commonly used methods are listed according to Alemany & Andreoli. As seen by researchers, there is one method that is widely accepted and used for valuation, which is the DCF method (Dittmann, Maug, & Kemper, 2004; Fernandez, 2007; Mukherjee, Kiymaz, & Baker, 2004; Pereiro, 2002). The Discounted Cash Flow method is based on the concept of discounting, meaning it introduces the time value of money (Pintaric & Kravanja, 2017). Demirakos, Walker and Strong (2004) provided evidence for analyst

preference of valuation models in the UK, where the Discounted Cash Flow was being used in 40% of the reports between 1997 and 2001 on the London Stock Exchange.

This research will focus on the DCF method (an intrinsic valuation approach) because it is the most widely used and accepted method for valuation. Therefore, the DCF method will be used as the basis for this research and will be set forth in this chapter.

According to Soffer and Soffer (2003), the valuation process can be distinguished in five aspects: business (strategy) analysis, accounting analysis, financial analysis, forecasting and valuation. These five aspects will be further explained with an in-depth summary of each aspect. The three aspects Financial Analysis, Forecast and Valuation will be linked with the DCF method. Figure 2 explains the relationships between the five aspects in a business valuation process.

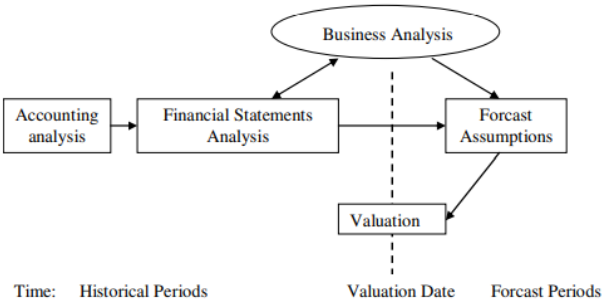

Figure 2: Business Valuation Process (Soffer & Soffer, 2003)

As asserted by Kramná (2016), the input variables significantly affect the calculation results. Hence, a Sensitivity Analysis will be conducted at the conclusion of the process to assess the impact of changes in input variables on Enterprise Value, given their substantial influence on calculation outcomes. The utility of a Sensitivity Analysis is illustrated by Koller, Goedhart and Wessels (2010), who argue that in cases of input uncertainty, it elucidates the consequences of variable alterations. See Figure 3: Business Valuation Process (Kramná, 2016) for the visual representation of the business valuation process according to Kramná (2016).

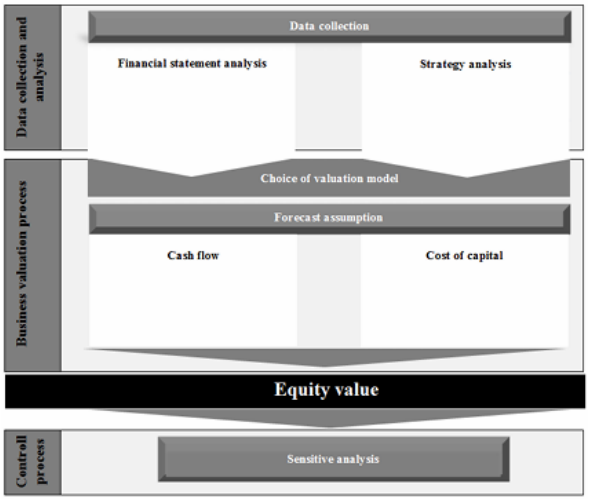

Figure 3: Business Valuation Process (Kramná, 2016)

In Figure 4: Combined BV Process (Author's design) is a diagram displaying the process of the business valuation process in a logical order with the combined insights from Soffer and Soffer (2003) & Kramná (2016). The five steps are stated with the following adaptations to combine the literature as one process:

1. The Accounting Analysis & Financial Statements Analysis from (Soffer & Soffer, 2003) has been combined as only the Financial Statements Analysis, proposed by Kramná (2016) in Figure 3.
2. Sensitivity Analysis has been added to the combined BV process because Soffer & Soffer (2003) do not mention this step, but Koller, Goedhart and Wessels (2010) & Kramná (2016) exemplify the importance of the analysis.

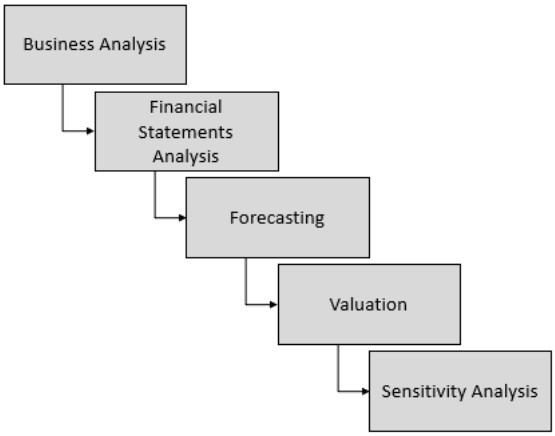

Figure 4: Combined BV Process (Author's design)

3.1.2 Business Analysis (BA)

The purpose of business analysis is identifying the key profit drivers and business risks, but also to examine the firm's potential profit level and understanding how these factors combined affect the organization (Kramná, 2016; Palepu, Healy, Wright, Bradbury, & Coulton, 2013). The business analysis is an essential first step because it enables the analyst to frame the subsequent financial analysis better. This analysis enables the analyst to assess the sustainability of the firm's current performance and make realistic forecasts of future performance. A firm's value is being determined by the firm's ability to earn a return in excess of the cost of capital, also called the profit potential. The profit potential is defined by its strategic choices which can be divided into three main strategy choices: industry choice, competitive strategy choices and corporate strategy choices (Palepu, Healy, Wright, Bradbury, & Coulton, 2013). The industry choice is the choice of the organization to enter a certain industry to determine its profit potential. The industry can influence the profit potential of the organization and therefore will have to be analysed, a common theory to analyse the industry is the "Five Forces" by M. Porter (1980). The second choice, competitive strategy, is the strategic actions the organization implements in order to cope with or change the industry's competitive forces. A popular and much used model to characterize a firm's competitive strategy is the "Three Generic Competitive Strategies" by M. Porter (1980), which includes the following three strategies: Cost Leadership, Differentiation and Focus strategies. The last choice, corporate strategy, is whenever the organization is a multi-business organization, an analyst has to not only analyse and evaluate the industries and strategies of the single business units but also the consequences of the combined businesses under one corporate holding. An example of this, is the General Electric corporation that has been very successful for using a diversified set of businesses which created a significant value, but several shareholders of different conglomerates, such as MAN and Siemens, pressured their organizations to improve profitability by spinning off their "noncore" divisions (Palepu, Healy, Wright, Bradbury, & Coulton, 2013). These are results of different corporate strategies among conglomerates which can be build upon or resulted in positive or negative economic consequences.

3.1.3 Financial Statements Analysis (FSA)

Firstly, the Financial Statements Analysis follows after the accounting analysis, stated by Soffer and Soffer (2003), has been conducted. The accounting analysis can be seen as an auditorial review of the financial statement details and is a part of the financial statement analysis as described by Kramná (2016). The accounting analysis evaluates the degree to which a firm's accounting captures the underlying business reality (Palepu, Healy, Wright, Bradbury, & Coulton, 2013). When analysing, the analyst has to be critical when reviewing the financial reports and should be able to understand how the reports have been established and what the possibilities of the organization's management influence on those reports are (Kramná, 2016). These audit reviews simplify the confirmation of the financial reports credibility, which will be of high value for the subsequent financial analysis due to an increase in the trustworthiness of the financial analysis (Kramná, 2016).

With the use of the business analysis and audit review, a solid financial statements analysis can be conducted. This analysis is where the importance of this research begins and where the previous mentioned DCF method will be shortly introduced. The goal of financial analysis is to assess the performance of a firm in the context of its stated goals and strategy (Palepu, Healy, Wright, Bradbury, & Coulton, 2013). This analysis has two principal tools that can be used: The ratio analysis and the cash flow analysis. Because the DCF method is used in this research, the cash flow analysis is of importance. However, due to the fact that the analyst should be able to forecast and, if chosen, use multiples or ratios to determine specific values in the DCF method e.g. Exit Multiple Method, the ratio analysis is of equal importance in the financial analysis. Therefore, both analyses will be explained shortly below.

The ratio analysis has its goal to assess the performance of the organization's policies in terms of ratios to compare these for an organization over several years (time-series comparison); to compare the organization to other organizations (cross-sectional comparison); or to compare to some absolute benchmark (Palepu, Healy, Wright, Bradbury, & Coulton, 2013). The performance of the organization in this context is expressed in ratios based on growth and profitability.

Figure 5: Drivers of a firm's profitability and growth (Palepu, Healy, Wright, Bradbury, & Coulton, 2013)

Given that the growth and profitability are drivers, managers will express influence on the organization in order to change these factors in a positive way using the following four leverage points:

1. Operating management
2. Investment management
3. Financing strategy
4. Dividend policies

These four leverage points will be the starting point to evaluate the effectiveness of the organization's policies which is in line with the objective of the ratio analysis. See Figure 5: Drivers of a firm's profitability and growth (Palepu, Healy, Wright, Bradbury, & Coulton, 2013)5 for a visual representation of the drivers' performance of the organization in relation to the four leverage points.

To compare the growth and profitability, ratios such as ROE (Return on Equity) and ROA (Return on Assets) are widely used for comparison of the performance of the organization using the financial statements. These ratios may not give all answers to the analyst, but it will help the analyst to frame questions for further probing. A lot of these framed questions can be answered using the cash flow analysis, which will be the second step in the financial analysis.

The cash flow analysis allows the analysts to examine and unfold the firm's liquidity status, and how the firm is managing its operating, investment, and financing cash flows. It will answer the questions that have been framed in the first step of the financial analysis, the ratio analysis. The cash flow analysis also provides a gross estimate of the quality of the information in the organization's financial statements. It follows the cash made by the business in three ways: the operations, investment, and financing cash flows, in which the sum of these three cash flows is called the net cash flow (NCF). Because the cash flow statement follows the cash made by the business in these three ways (Operations, Investment & Financing), it is considered the most intuitive of all the financial statements (Hayes, Mansa, & Schmitt, 2023). One important difference is that net profit differs from operating cash flows because revenues and expenses are measured on an accrual basis, meaning that there can be an increasing gap between a firm's reported profit and its cash flows in e.g. the operating activities by using a certain method of calculation in order to show a bigger profit, even though the cash flow remains unaffected.

In order to prepare the financial analysis for the forecasting and valuation using the DCF method, the Free Cash Flow (FCF) has to be formed. The FCF is an indicator of the financial health of an organization and the ability to invest in new business opportunities, but also the starting point of the valuation method Discounted Cash Flow (DCF). It is the net change in cash minus cash outlays for working capital, CAPEX (Capital Expenditures) and dividends. This free cash flow is also called the Free Cash Flow to Firm (FCFF; Unlevered Free Cash Flow), it is cash that is available to the stakeholders of the company e.g. the state, debtholders and shareholders. The other cash flow, the Free Cash Flow to Equity (FCFE; Levered Free Cash Flow), is cash flow available only to stockholders. This cash flow is the net change in cash minus CAPEX and investments in non-cash working capital from operations. In other words, $\mathrm{FCFE} = \mathrm{FCFF} + \mathrm{New\ Debt} - \mathrm{Interest} * (1 - \mathrm{tax})$. A small note: the discount rate that will be used is the WACC. However, the WACC is only used for unlevered cash flows, meaning it will only be implemented as the discount rate if the cash flow is unlevered i.e. Free Cash Flow to Firm (FCFF) wherein the Enterprise Value will be calculated. The Cost of Equity will be used as a discount rate when the Free Cash Flow is levered (FCFE), wherein the Equity Value will be calculated. Because the FCFF is the used cash flow in this research results in an FCFE that will not be used and further discussed in this research.

3.1.4 Forecasting (Fore)

Both, the assessment of financial wealth (Accounting & Financial Analysis) and the assessment of the business strategy (Business Analysis) enables a valuation expert to forecast a company's future economic performance that forms the fourth aspect of the business valuation process (Kramná, 2016). The financial predictions obtained by financial statement analysis are undervalued if compared to the value of the growth potential of an organization. The advantage of measuring future performance on the growth potential is being able to see in providing better explanation of the valuation as compared with theories that rely on accounting based measures of performance (Kramná, 2016). Therefore, the DCF method, which uses the future growth potential and other measurements, is one of the methods being used mostly by practitioners. Forecasting is not so much a separate analysis as it is a way of summarizing what has been learned in the previous two aspects of the business valuation process. Palepu et al. (2013) defines forecasting as follows: "Forecasting can be seen as performing a reverse financial analysis, primarily addressing the question of what the effect will be of anticipated changes in relevant economic factors on the firm's future performance and financial position, conditional on the historical relationships identified in the financial analysis". Meaning that a lot of generated information of the two preceded aspects are used when going through the steps of the forecasting process.

When considering forecasting in relation with the DCF method, the cash flows for a certain number of years are being forecasted. It involves predicting the inflows and outflows of cash within a specific time frame. By accurately forecasting the cash flows, it allows the analyst to calculate the present value of future cash (NPV) by discounting them back to their current value using a discount rate (FasterCapital, 2023). The DCF method follows a principle whereas a dollar or other currency received in the future, is less than a dollar or other currency today due to the time value of money. With the discounted cash flows, after a predetermined certain number of years, the terminal value has to be added to the value of the organization. The terminal value is the value of the organization at the end of the forecast, when it begins to grow at a low, constant rate and at infinitum (Coulon, 2021). Considering this when the organization no longer grows faster than its competitors at the end of the explicit time horizon when it normalizes and stabilizes. With this in mind, a correct forecasting of the cash flow with the right discount rate and terminal value are vital for a correct and explainable valuation of an investment.

3.1.5 Valuation (Val)

When all the preceded aspects of the business valuation process have been analysed and executed, the final assessment is the valuation aspect. In this, the four aspects of the valuation process will be elaborated: the cash flow, the discount rate, the terminal value and the number of years forecasted in order to get a viable valuation for an organization using the Discounted Cash Flow (DCF) method. However, the terminal value and number of years forecasted are intertwined subjects.

The Discounted Cash Flow Formula

$$EV = \sum_{i=1}^{n} \frac{FCFF_i}{(1+WACC)^i} + \frac{TV}{(1+WACC)^n}$$

Where:

EV = Enterprise Value
$FCFF$ = Free Cash Flow to Firm
TV = Terminal Value
$WACC$ = Weighted Average Costs of Capital
i = The specified year
n = The number of years

Derived from this formula, four components can be stated as important for the DCF method: the Free Cash Flow to Firm, WACC (the discount rate), the number of periods and the Terminal Value (Demetris, 2013).

The Cash Flow

The Cash Flow used in the DCF method is in this research the Unlevered Free Cash Flow, or Free Cash Flow to Firm (FCFF), because the FCFF is used to remove the impact of capital structure on a firm's value and to make organizations more comparable (Vipond, n.d.). The FCFF is used to determine the Enterprise Value of an organisation in order for it to be compared to the Enterprise Value of other organizations. The Free Cash Flow to Firm formula is as follows (Vipond, n.d.):

$$FCFF = EBIT - Taxes + Depreciation\ \&\ Amortization - CAPEX - increase\ in\ NWC$$

Where:

EBIT = Earnings Before Interest & Taxes
Taxes = Taxes recalculated without deducting interest expense
CAPEX = Capital Expenditures
NWC = Net Working Capital

The Discount Rate

The discount rate being used in the DCF method is in this research the Weighted Average Cost of Capital (WACC) (Brealey, Myers, & Allen, 2011). The WACC incorporates the average rate of return that shareholders of the organization are expecting for the given year.

WACC formula:

$$WACC = \frac{E}{V} \times R_e + \frac{D}{V} \times R_d \times (1 - T_C)$$

Where:

E = Value of Equity
D = Value of Debt
V = E + D
R_e = Cost of Equity (Capital Asset Pricing Model can be used)
R_d = Cost of Debt

Number of Periods

A critical point for the formula is the number of years given to the organization in the calculation of the Terminal Value and the Enterprise Value. The answer to this critical decision is the time the firm requires to reach the competitive equilibrium on its investment projects (Palepu, Healy, Wright, Bradbury, & Coulton, 2013). The competitive equilibrium is an assumption in which the reasoning involves around the forces of competition. The competition can constrain an organization's ability to identify growth opportunities that generate supernormal profits, meaning that after enough competition, the organization's margins, and therefore its returns, will be driven down to a normal level after a certain period of time. After this period, or after the last year/terminal year, normal growth can be assumed and an equilibrium will be reached. Under plausible economic assumptions, meaning the competitive equilibrium assumption, analysts often do not need to assume the growth of an organization after the terminal year. Historically seen, a five- to ten-year forecast horizon should be more than sufficient for most organizations, however exceptions exists and organizations can generate supernormal returns after ten years (Palepu, Healy, Wright, Bradbury, & Coulton, 2013).

The Terminal Value

The Terminal Value is done to compensate for uncertain future returns (i.e. future cash flows cannot be estimated up to infinity). There are different Terminal Value models, but the one used in this research is the Stable Growth Model. It is one of the most common and uses a specific growth rate (defined as *g*) in order to forecast the organization's growth.

$$TV = \frac{FCFF_{n+1}}{(WACC - g)} = \frac{FCFF_n \times (1 + g)}{(WACC - g)}$$

Where:

TV = Terminal Value
n = Number of years
$WACC$ = Weighted Average Cost of Capital (the discount rate)
$FCFF$ = Free Cash Flow to Firm
g = Growth rate

3.1.6 Sensitivity Analysis (SA)

Sensitivity Analysis is the study of how uncertainty in the output of a model can be distributed to different sources of uncertainty in the model input (Iooss & Saltelli, n.d.). It may be used to determine the input variables that contribute to an output behaviour or to ascertain some interaction effects within the model. The importance of the Sensitivity Analysis is measuring each uncertain, or assumed in this case, input variable on the response variability which provides a deeper understanding of the modelling in order to reduce the response uncertainties in the most effective way. Kramná (2016) describes it as follows: "The analysis tests the impact of changing one variable while assuming all other variables are constant to the company's value". The analysis tells what consequence on the Enterprise Value is, if there is a variation in the input. How important this may look like, according to Dluhosova (2012), the sensitivity analysis is missing in business valuation despite of the fact that it should be an important part of the business valuation process because of reliability and precision of the input data.

3.2 What is Artificial Intelligence?

3.2.1 Introduction

Artificial Intelligence is an umbrella term for the simulation of human intelligence that can be simulated by computer systems. Kaplan and Haenlein (2019) define AI as: “a system’s ability to correctly interpret external data, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation”. Poole and Mackworth (2010) define AI as “the field that studies the synthesis and analysis of computational agents that act intelligently.” As stated by Bartneck, Lütge, Wagner and Welsh (2021) the definition of AI is quite volatile and it has changed over time. AI is a multifaceted field that contains a range of technical components, each contributing to the development and functionality of AI systems. At its core, AI relies heavily on mathematical foundations, particularly in areas such as statistics, probability, and linear algebra. These mathematical principles are crucial for developing algorithms that can learn from data.

Machine learning and deep learning are central to AI, where systems learn patterns from data. Machine learning involves training algorithms to make predictions or decisions without being explicitly programmed for specific tasks. Deep learning, a subset of machine learning, uses neural networks with many layers to model complex patterns in data. This is particularly useful in applications like image and speech recognition (Snasel, Kromer, Safarik, & Platos, 2020).

Natural Language Processing (NLP) is another critical area of AI, focused on the interaction between computers and humans through natural language. It involves the development of algorithms that can understand, interpret, and generate human language. This is exemplified by AI models like ChatGPT, which use large-scale language models to process and generate text (Abu-elezz, Hassan, Nazeemudeen, Househ, & Abd-alrazaq, 2020)

Computer vision is an area of AI that enables machines to interpret and make decisions based on visual data from the world. Techniques in computer vision include image recognition, object detection, and video analysis, which are used in applications ranging from autonomous vehicles to facial recognition systems (Ardabili et al., 2023).

AI is also applied to big data to extract meaningful insights and patterns. This involves using AI algorithms to process and analyze large datasets, which can be used in various fields such as healthcare, finance, and marketing. As AI systems become more integrated into society, understanding the ethical and legal implications is crucial. This includes ensuring AI systems are transparent, fair, and accountable, particularly in sensitive areas like healthcare and surveillance.

The above are several models sub-sets mentioned, which are all part of the umbrella term Artificial Intelligence. Given the fact that AI will be used as a sub-term in this research, the most common and well-known type is Machine Learning, which will be further explained below.

Machine Learning is used to analyse data and enabling an algorithm to train and learn from its interpretations. Machine learning focuses on developing the algorithms that allow a computer to use experience and its learning abilities with new data to improve its performance on well-defined tasks (Bartneck, Lütge, Wagner, & Welsh, 2021). The training or learning of a particular AI model is the ultimate foundation for a steady and well performing algorithm. The learning process involves determining the optimal settings of the knobs to coerce the desired behaviour from a Machine Learning model (Bartneck, Lütge, Wagner, & Welsh, 2021). Simple summarized: the Machine Learning model gets trained by using data to learn from experience and using new data to enhance its performance. In the schematic diagram Figure 6: A simplified training process (Jons, 2020), a simplified training process is displayed.

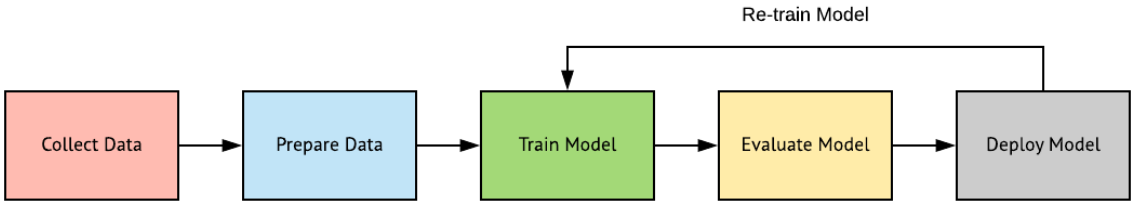

Figure 6: A simplified training process (Jons, 2020)

3.2.2 Drawbacks of AI

Today's artificial intelligence still faces major challenges, a much heard challenge is the lack of development in data privacy & security (Yang, Liu, Chen, & Tong, 2019). Already in the 1970s, Germany (at that time West Germany) created the first modern Data Privacy Law in reaction to computing advancements and privacy in the processing of personal data (Freude & Freude, 2010). A more modern Data Privacy Law is the GDPR (General Data Protection Regulation) installed by the European Union (EUR-Lex, 2016). This regulation protects the personal privacy of users and their data. Organizations are obliged to use simple language and clear information about what happens with the users data and gives the users the ability to control their data when collected by organisations. The traditional procedure of data collection and storing is where one party collects data and transfers this to another party and the other party is being responsible for cleaning and fusing data. This other party will work with a third party to integrate the data and build models for other parties to use. Because of this traditional procedure and the announcement of the GDPR, the traditional procedure to collect, store and fuse data is faced with challenges.

Also other researchers noted that there are other drawbacks considering AI and not just the challenge described by Yang et al. (2019). Preece, Harborne, Braines, Tomsett & Chakraborty (2018) highlight that Machine Learning models are increasingly being employed in various market segments but the demand for transparency (or 'complexity') is also increasing from various stakeholders in the AI world itself. In this, the term transparency is being interchangeably used with 'explainability' or 'intelligibility'. These terms refer to the inner workings of an AI model and means that system developers want to know how the system is working, but end-users also want to know if the output can be trusted (Preece, Harborne, Braines, Tomsett, & Chakraborty, 2018). This transparency is also intertwined with the previous statement of data privacy and security by Yang et al. (2019). Transparency and data privacy & security are both relating to the trustworthiness of an AI model and the trustworthiness of the collection, storage and fusion of (personal) data. By using regulations such as the GDPR, the trustworthiness of users should increase (EDPB, n.d.).

More concrete examples can be found as well. Looking closer to the infamous ChatGPT, it poses several cybersecurity risks and concerns (Alawida, Mejri, Mehmood, Chikhaoui, & Abiodun, 2023). One of the main concerns is the potential for generating fake news, spreading disinformation or impersonating individuals. These malicious purposes are easy to pursue if wanted, due to the ability of ChatGPT to generate human-like texts which can make it difficult to distinguish real and fake content. This phenomenon of being unable to distinguish fake from real can increase the risk of misinformation and deception. The model has access to confidential information, e.g. the published data of users, which can be sensitive information and can be misused if compromised.

These drawbacks of AI are also comparable to the business valuation process nowadays. When diving into the explainability or transparency (or 'complexity') of the AI model, a comparable example is the Real Option method versus the Net Present Value (DCF) method. The Real Option method is highly advanced because of its flexibility value, however it is not as common to use than the NPV due to the difficulty of communicating the valuation due to its higher technical complexity (Fernández, 2002). When using AI, the same exists for the comparison of business valuation with AI – it is a complex and technical story which could lead to a lower degree of explainability and lower transparency.

3.2.3 Benefits of AI

According to Damodaran (2011), the more a person knows about an organization or the closer it is to the management/owners of the organization, the more biased a valuation will become. One of the greatest benefits of AI in the BV process is that bias may be mitigated by increasing the fair, transparent and explainable AI model in the processes and operations (Sattel & Sutton, 2019). However, Sattel and Sutton do warn about the cautious that needs to be taken when implementing AI models to mitigate bias. Whenever an AI model gets trained with e.g. biased data, the AI model will get biased through the data that has been affected by human bias (Sattel & Sutton, 2019).

However, Geertsema & Lu (2019) discussed that AI can establish the value of a company more accurately if the value is being biased by the valuator itself. Geertsema & Lu (2019) concluded that traditional methods are affected by bias, but if the process will be automated by the use of AI, the bias of a valuator will be less present than when using traditional methods. Keeping in mind, Geertsema & Lu (2019) do state the following: "Even with advanced machine learning models, valuations still require substantial human judgement because many important drivers of valuations, such as network effects or a culture of innovation, are not readily observable in the historical data."

Next to mitigating biases, AI is also able to identify patterns in data originating from disparate and often contradicting sources and AI can "look through" several layers of complexity (Parry, Cohen, & Bhattacharya, 2016). Human cognitive processes can often overlook patterns that would be of central importance in regular business processes. In BV, overlooking patterns due to a lack of human cognitive performance or not being able to comprehend data due to the complexity, can influence the valuation of an organization drastically.

Note: The AI drawbacks & benefits enumeration are not exhaustive and can be expanded, however the most considerable ones have been stated.

3.3 How to determine the Adoption Intention?

3.3.1 Introduction

In this section, an overview of the theoretical framework will be presented. The goal of this section is to act as a guide for the relevant methods and theories used in this research. To get a well-defined and structured overview, the Diffusion Of Innovations Theory (DOI) (Rogers, 1962) will be used in combination with the T-O-E framework (Tornatzky & Fleischer, 1990). The justification for selecting the theories will be stated in 3.3.2. Both the theories, TOE and DOI, will be explained and justified, respectively, in sections 3.3.3 & 3.3.4. After 3.3.4, section 3.3.5 will show the integrated theory model combining both DOI and TOE frameworks which will be referred to hereafter as "DOI-TOE framework".

3.3.2 Selecting DOI & TOE theories

A various range of models and theories are used to evaluate and test the acceptance of (emerging) technologies. One of the most empirical research adoption theories used is the TRA (Theory of Reasoned Action; (Fishbein & Ajzen, 1975)) model and applies to a variety of fields such as psychology, education, marketing, management, medical treatment, and technology. This model, but also the derived versions such as TAM (Technology Acceptance Model; (Davis, 1989)) and TPB (Theory of Planned Behavior) are all focused on the individual level and not on the organizational level (Lippert & Govindarajulu, 2006; Wu, Lin, & Yang, 2010). Wu, Lin and Yang (2010) state that the TRA and TAM models assume that when someone forms an intention to act, that the individual will be free to act without limitation, but in practice limitations do exists such as limited capability, time, environmental and organizational resources, and unconscious habits. Thus, to get a good understanding of the individual, organizational and environmental limitations in adoption of a new emerging technology, a different model should be looked at. When reviewing the TPB model, it also discusses a particular behaviour based on a causal process and ignores other essential factors such as the above stated factors (Yuzhanin & Fisher, 2016). Besides the TAM, TRA and TPB models, the RBV (Resource-Based View) was inspected to consider the framework as an applicable theory. However, a lot of criticism and implications are mentioned, in which the RBV being tautologic is considered to be the main critical point (Collis, 1994; Priem & Butler, 2001). Meaning the model can be true in every possible interpretation, thus resulting in a possibility of not getting the correct results. Therefore, this model was no longer considered an option anymore.

After considering various models and frameworks, the following two theories will be used in this research: The Technical-Organizational-Environment (T-O-E) Framework (Tornatzky & Fleischer, 1990) and the Diffusion of Innovation Theory (Rogers, 1962). The T-O-E framework has been chosen because it covers the organizational context in particular the structure and the processes in an organization that constrain or facilitate the adoption and implementation of innovations (Alkhalil, Sahandi, & John, 2017). It is therefore superior to the above stated models (TPB, TAM & TRA) that have not been chosen due to its focus on the organizational structure and its processes, thus more relatable to the central research question in this thesis. Another feature of the T-O-E framework is that, according to Lippert and Govindarajulu (2006), the T-O-E framework has shown consistent empirical support in varies studies in different contexts. This means that the key limitation of the RBV model (being tautology) has been avoided by using the T-O-E framework. The T-O-E framework is being supported by the DOI theory, because it enhances the understanding of adoption of innovative new technologies (Alkhalil, Sahandi, & John, 2017). The reason for using the DOI theory is as follows: The TOE framework aids in pinpointing pertinent categories for determinants, while the DOI model assists in pinpointing precise variables within the Technological aspect of the TOE framework. Consequently, integrating these two frameworks will synergize, offering a more comprehensive understanding of adoption processes (Alkhalil, Sahandi, & John, 2017).

3.3.3 T-O-E Framework

Many of the various studies that investigate the adoption intention of technological innovations are employing the T-O-E framework by Tornatzky & Fleischer (1990). Awa et al. (2016) states the following: "T-O-E framework emerges as a widespread theoretical perspective specific to IS (Information Systems) domain; therefore, its variables have been severally tested on the adoption of several other technologies – EDI, KM, e-business, RFID, e-commerce, enterprise systems, and e-procurement". All of the previously mentioned innovative technologies are comparable innovations to AI. All of these ground-breaking technological innovations were unfamiliar to the broader public when invented but rapidly gained popularity as the public foresaw the substantial magnitude and widespread appeal these innovations were destined to attain. The T-O-E framework is an organization-level theory which explains different elements of a firm's context influence adoption intention (Baker, 2011). The framework has three different dimensions: the technology context, the organizational context and the environmental context. According to Webster and Watson (2002), research frameworks have to be justified using theoretical explanation, practice from past empirical findings and/or empirical findings from related research areas. Unlike other adoption theories, the TOE framework does not have a set of predetermined factors that has an influence on the adoption of an innovation (Aboelmaged, 2014). Therefore, the factors chosen in the TOE framework are based on previous experience and empirical findings from related research area, following the guidelines of Webster and Watson (2002).

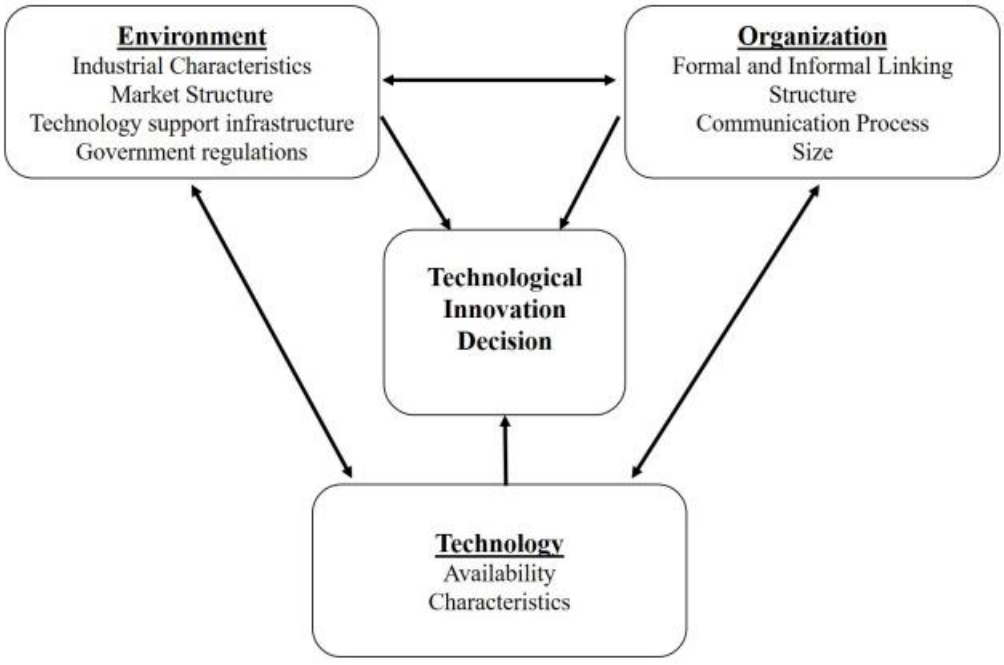

Figure 7: The TOE framework by Tornatzky and Fleischer (1990)

The Technology Context

The Technology context refers to all the existing technologies in the firm and not used by the firm but available on the market technologies (Baker, 2011). The internal technologies matter to an organization due to those technologies can set a broad limit on the scope and pace of technological change that a firm can undertake (Collins, Hage, & Hull, 1988). The external technologies also influence the adoption intention – both by demarcating the limits of what is possible as well as by showing firms ways in which technology can enable them to evolve and adapt (Baker, 2011). In this context, the TOE theory overlaps with the DOI theory, namely the five perceived attributes that explain and interpret the technology context: Relative Advantage, Complexity, Compatibility, Trialability & Observability. Following Zhu and Kraemer (2005), the TOE framework can be extended by using the DOI theory by Rogers (1962). Because the five perceived attributes of innovation are generic, several authors state that the most consistent factors are *Relative Advantage, Complexity and Compatibility* and therefore will be used in this TOE framework (Damanpour & Schneider, 2009; Dearing, 2009; Oliveira, Thomas, & Espadanal, 2014). Other studies reflected on those factors and decided to not use Trialability and Observability because these two factors do not emphasize the different aspects of how Artificial Intelligence is perceived and are therefore not forthcoming in the Technology Context (AlSheibani, Cheung, & Messom, 2018; Neumann, Guirguis, & Steiner, 2024; Pumplun, Tauchert, & Heidt, 2019). These articles imply that previous research is leading for the TOE framework, because it does not have a predetermined set of factors, which results in picking the most reliable and relatable factors from previous experiences in order to apply factors to the TOE framework (AlSheibani, Cheung, & Messom, 2018; Webster & Watson, 2002).

The Organizational Context

The Organizational context refers to the resources and characteristics of the organization (Amini, 2014; Baker, 2011; Harfoushi, Akhorshaideh, Aqqad, Janini, & Obiedat, 2016). Many studies have used different factors based on previous studies and research to describe the organizational context, however some factors do have an overlap with other studies. Because of a wide and broad interpretation of the organizational context, a literature review was completed to discover the most used factors in different studies. The first most common factor used to describe the organizational context is *Top Management Support* (Chiu, Chen, & Chen, 2017; Harfoushi, Akhorshaideh, Aqqad, Janini, & Obiedat, 2016; Lin, 2014; Low, Chen, & Wu, 2011; Stjepić, Bach, & Vuksić, 2021). The second factor many studies see as an important factor within the organizational context is *Absorptive Capacity* (i.e. organisational readiness for the emerging technology about the emerging technology) (Chiu, Chen, & Chen, 2017; Lin, 2014; Lippert & Govindarajulu, 2006). A third factor is *Firm Size* (Baker, 2011; Lin, 2014; Lippert & Govindarajulu, 2006). The rate of adoption in various scenarios in an organizational context for emerging technologies is influenced by the consideration of the presented three factors.

The Environmental Context

The Environmental Context is defined as: "all pressures and changes in the industry environment where firms operate and the pressures of stakeholders, legislation, laws, and pressures of competitors, and customers, which change firms' strategy toward adopting new technology." (Al-Khatib, 2023). In this study, the following two factors are being used to explain and interpret the environmental context: *Competitive Pressure* (Harfoushi, Akhorshaideh, Aqqad, Janini, & Obiedat, 2016; Lin, 2014; Stjepić, Bach, & Vuksić, 2021) and *Business Partner* (Baker, 2011; Chiu, Chen, & Chen, 2017; Harfoushi, Akhorshaideh, Aqqad, Janini, & Obiedat, 2016; Lin, 2014; Lippert & Govindarajulu, 2006).

The eight (in *cursive)* stated factors are generic factors, meaning that these are not developed and researched specifically for the Business Valuation process in combination with AI. However, these variables will be used meaningful in developing the methodology in Section 4 because of their similarities and relations with innovative technologies such as AI, Cloud Computing or Blockchain.

The TOE framework used in existing literature

Authors + Title	Context	Results	Justification & Selection
Schaefer et al. (2021): "Truth or Dare? – How can we Influence the Adoption of Artificial Intelligence in Municipalities?"	The study conducted semi-structured expert interviews in twelve German municipalities to examine perceived challenges of AI adoption from employee's perspective using the TOE framework and the Gioia Methodology.	The study extends and confirms the found perceived challenges in the literature and empirical research, but also the extension of the TOE framework has been formed by the researchers regarding further perceived challenges. By using a Grounded Theory (Gioia Method), the researchers discovered new perceived challenges for adopting AI and modelled these using the TOE framework. One of the three variables from the Technology aspect used in this thesis has been discovered by inductive reasoning in this research: Compatibility.	Schaefer et al. (2021) used the Gioia Methodology with the use of the TOE framework. For methodology reasons, this article will be used as a reference in this thesis and for its linkage with AI in a TOE framework. Its discovery of the variable Compatibility in an inductive approach confirms the importance of this variable for the adoption of AI. Therefore this article was used for the discovery of one of the Technology (and also DOI) factors. It also shows perceived challenges of AI from the employee's perspective using a qualitative explorative study, they expanded the TOE framework for AI adoption and reflected their identified aggregated dimensions in the existing literature. Selection this paper, contributed to the confirmation of the Compatibility variable in the specific segment of an employee's perspective in the adoption of AI.

Harfoushi, Akhorshaideh, Aqqad, Janini and Obiedat (2016): "Factors Affecting the Intention of Adopting Cloud Computing in Jordanian Hospitals"	The purpose of this study is to examine the different factors that are expected to influence the intention of hospitals in Jordan to adopt cloud computing.	Results of this research proved that the three factors of this framework (Technology, Organization and Environment) significantly influence the decision of organizations, particularly hospitals, to adopt cloud computing. The statistical analysis of this research showed that the Technology aspect from the TOE framework is the most important one in the adoption of cloud computing in Jordan hospitals. Considering this, the Technology variables are similar to the DOI theory, namely: Complexity, Relative Advantage and Compatibility.	The two variables from the Environmental Context have been derived from this article to be used in the TOE framework. These have been backed by and built upon several other studies (Chiu, Chen, & Chen, 2017; Harfoushi, Akhorshaideh, Aqqad, Janini, & Obiedat, 2016; Lin, 2014; Lippert & Govindarajulu, 2006; Low, Chen, & Wu, 2011; Stjepić, Bach, & Vuksić, 2021). Also, the confirmation of the use of the three DOI variables are stated that these are the most important for the adoption of cloud computing in Jordan hospitals, which might also be applicable to AI in BV processes. It pursues the understanding of the TOE framework and declines other research papers from different researchers because of the found evidence that the TOE framework and its stated variables do influence the adoption of cloud computing.
Chiu, Chen and Chen (2017): "An integrated perspective of TOE framework and innovation diffusion in broadband mobile applications adoption by enterprises"	This study is exploring the critical factors for enterprises to adopt broadband mobile applications using the TOE framework & DOI theory.	Eleven factors have been explored to bring critical insights into the integration of information communication technologies where each of the eleven factors have been explained whether or not they influence the adoption of broadband mobile applications in enterprises.	The study from Chiu et al. (2017) has been used to establish two factors for the Organizational Context that have been backed by several other studies, e.g. (Lin, 2014; Oliveira, Thomas, & Espadanal, 2014). Using these factors, a proper foundation of the used factors can be confirmed given the direct evidence it states. The variables are: Management Support and Absorptive Capacity.
Baker (2011): "The Technology-Organization-Environment Framework"	Baker (2011) explains how the TOE framework can be used and provides a review of studies that have used the TOE framework in different ways and the adaptions. Using this information, directions for future research have been described.	Different point of views are stated which contributes to the objectivity of the paper, which states different studies using the TOE framework. Baker (2011) states that several studies use different factors in different industries for the context of the TOE framework. Baker (2011) states that competing theories will need to be addressed an the ideas within those theories will need to be incorporated into the TOE framework.	The chapter from Baker (2011) has been used to establish a third, important factor for the TOE framework Organizational Context, backed by other studies, e.g. (Lin, 2014; Lippert & Govindarajulu, 2006; Ramdani, Kawalek, & Lorenzo, 2009). In this, the Firm Size is being investigated and is also backed by several research articles, meaning there is a direct evidence in multiple sources that Firm Size is an important factor in the adoption of an emerging technology. By selecting this research paper, a factor has been chosen backed by several researchers of its importance.

Table 1: The TOE framework used in existing literature

3.3.4 Diffusion Of Innovations Theory (DOI)

The Diffusion of Innovations model was developed by Rogers (1962) in order to describe the process by which an innovation is communicated through certain channels over time among the members of a social system. This theory is selected due to the many studies that investigate innovation adoption, employ the Diffusion of Innovations Theory or use the DOI theory in other successful contexts (Chiu, Chen, & Chen, 2017; Greenhalgh, Robert, Macfarlane, Bate, & Kyriakidou, 2004; Zanello, Fu, Mohnen, & Ventresca, 2016). In this theory, five different attributes of innovations are stated. Each of these are empirically interrelated with the other four attributes, however all of these attributes are conceptually different. Rogers (1962) states that the selection of these five characteristics are based on past writings and research as well as on the desire for maximum generality and succinctness. The five attributes of innovations are:

I. Relative Advantage
    - Relative Advantage is the degree to which an innovation is perceived as being better than the idea it supersedes (Rogers, 1962). The degree of relative advantage is often expressed in economic profitability, status giving, or in other ways.

II. Compatibility
    - Compatibility is the degree to which an innovation is perceived as consistent with the existing values, past experiences, and needs of potential adopters (Rogers, 1962). The compatibility of an innovation can be determined
        i. with sociocultural values and beliefs;
        ii. with previously introduced ideas in the organization, or
        iii. with needs for innovations.

III. Complexity
    - Complexity is the degree to which an innovation is perceived as relatively difficult to understand and use (Rogers, 1962). If an innovation is too complex, as perceived by members of a social system, the rate of adoption will be negatively affected.

IV. Trialability
    - Trialability is the degree to which an innovation may be experimented with on a limited basis (Rogers, 1962). New innovations that can be divided for trial, as perceived by members of a social system, is positively related to its rate of adoption. An innovation that is able to divide for trial, will be adopted more rapidly.

V. Observability
    - Observability is the degree to which the results of an innovation are visible to others (Rogers, 1962). The results of some ideas are easily observed and communicated to others, whereas some innovations are difficult to describe to others.

These five variables are generic variables, meaning that these are not developed and researched specifically for the Business Valuation process. The variables are intertwined with the TOE framework, in the Technology segment of the TOE framework. The variables used in the thesis, will therefore be explained in the Technological Context section of 3.3.4 TOE Framework.

The DOI theory in existing literature

Authors + Title	Context	Results	Justification & Selection
Zanello, Fu, Mohnen and Ventresca (2016): "The Creation and Diffusion of Innovation in Developing Countries"	Review of research in the diffusion of innovation in the private sectors in low-income countries for evidence of obstacles and channels of innovation diffusion.	Collection of evidence on what the barriers are to innovation creation and diffusion such as: weak education systems, unstable political powers, fragile legal systems etc. The study used Compatibility and Complexity as the variables from the DOI in order to conduct a literature review. These variables are heavily used in other research studies and provided the foundation for nature and characteristics of Innovation in the literature review.	Zanello, Fu, Mohnen and Ventresca (2016) used Rogers' (1962) framework (DOI) to integrate and contextualize the found literature evidence. This review was used to familiarize and discover the purposes of Rogers' framework and to view how other studies have used the variables of Compatibility and Complexity. Using a literature review with a focus on the DOI variables can be a good starting point to discover what has been discovered about the DOI theory and how other researchers have been using the theory.
Greenhalgh, Robert, Macfarlane, Bate and Kyriakidou (2004): "Diffusion of Innovations in Service Organizations: Systematic Review and Recommendations"	Summary of an extensive literature review addressing the diffusion of innovations in health service organizations	The study conducted a literature review and checked what the results were for the DOI variables used in the different studies. All five variables are studied and each variable is discussed whether it is direct or indirect evidence for the variable and its influence on the adoption intention. An example: One study said that innovations who have a clear advantage have a higher adoption rate (Dirksen, Ament, & Go, 1996), while another study said that relative advantage is just not a guaranteed variable for adoption (Denis, Hébert, Langley, Lozeau, & Trottier, 2002).	The literature review has been used to discover more about the background of the three factors mentioned by Rogers (1962). By using and selecting this literature review, an objective point of view can be seen, but also because by discussing the different results from different perspectives, a clear understanding can be formed for the use of the DOI variables. The studies used in the literature review are discussed and rated to the point where a variable/study has a high/moderate/low direct evidence class or a high/moderate/low indirect evidence class.

Table 2: The DOI theory in existing literature

3.3.5 DOI-TOE Framework

It is suggested by Oliveira and Martins (2011) that future studies should incorporate multiple theoretical models to enhance understanding and explainability of the adoption of innovative technologies. Accordingly, this research integrates the three most relevant variables from the Diffusion of Innovations Theory (DOI) with the researched variables from the Technology-Organization-Environment (TOE) framework, presented as an integrated research model, which has been pre-empted by the following researchers AlBar and Hoque (2017); Chiu, Chen and Chen (2017); Oliveira, Thomas and Espadanal (2014); Piaralal, Nair, Yahya and Karim (2015); Sharma and Sharma (2023). This integrated research model will help as a guideline for the development of the methodology together with the five Business Valuation steps. Multiple studies have combined the two theories as one to enhance understanding and get a better overview of the factors enhancing the influence on adoption of emerging technologies and to discover whether or not the priority for its adoption is apparent. These studies will be elaborated on the next page.

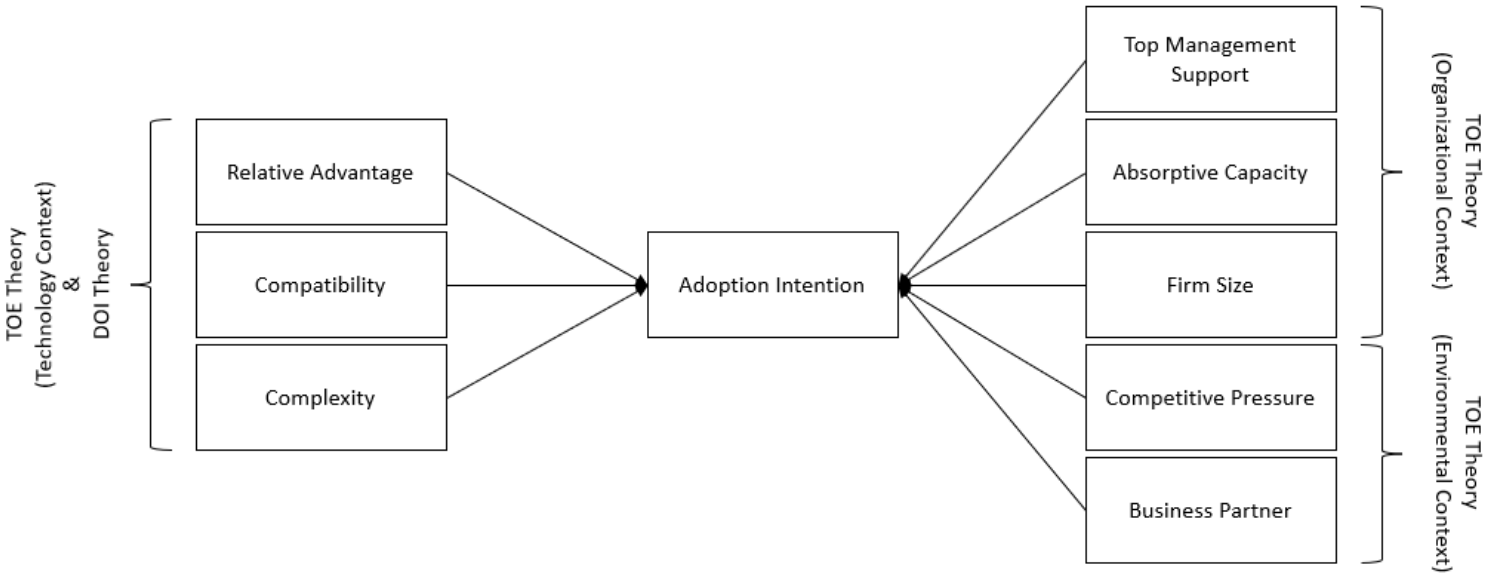

Figure 8: Integrated DOI-TOE model (Author's design)

The integrated DOI-TOE framework in existing literature

Several studies in the past have utilized the DOI-TOE framework to integrate the Technology-Organization-Environment (TOE) framework with the Diffusion of Innovation theory, offering insights into both organizational and individual perspectives. This approach enhances understanding of the internal and external factors influencing the adoption and diffusion of innovative technologies (Hsu, Kraemer, & Dunkle, 2006; Tornatzky & Fleischer, 1990). The following studies have successfully used the DOI-TOE framework and are focused on the adoption of an emerging technology.

Authors + Title	Context	Results	Justification & Selection
Oliveira, Thomas and Espadanal (2014): "Assessing the determinants of cloud computing adoption: An analysis of the manufacturing and services sectors"	Oliveira, Thomas and Espadanal (2014) explored the key factors of cloud computing adoption in the service industry and manufacturing industry by the use of the DOI-TOE framework.	The study highlights the importance of assessing the innovation characteristics against the TOE context of the organization before adopting cloud-computing solutions. This study has empirically validated the indirect effects of the determinants of cloud computing adoption, which means the research model provides a sound basis for understanding the determinants. The approach of using an integrated DOI-TOE framework is been verified in reliability, validity and discriminant tests, thus can be adopted for use in other innovation studies.	The use of this article can be seen from the point of its emerging technology background. Cloud technology was new, upcoming and in its infancy. During the research, cloud computing was little researched. These characteristics are highly comparable to the current state of AI nowadays, which can be useful for this research. The variables used are comparable to the variables used in this this thesis, 6 out of the 8 variables have been used in this research paper. Meaning the integrated DOI-TOE framework from this thesis shares a lot of similarities with the integrated DOI-TOE framework from Oliveira, Thomas and Espadanal (2014). By selecting this paper for guidance, a founded research paper has been used as a guidance for using the integrated DOI-TOE framework.

Piaralal, Nair, Yahya and Karim (2015): "An integrated model of the likelihood and extent of adoption of green practices in small and medium sized logistics firms"	Piaralal, Nair, Yahya and Karim (2015) used the combination of DOI-TOE framework which provided a useful framework for SME's logistics enterprises that wanted to adopt green technology (e.g. electric transport or vertical farming), but also explored external and internal factors by the use of another (Thong's) model.	The study resulted in the discovery of factors and guidelines useful for SMEs on the following four characteristics in green practices: Decision Maker Characteristics (Thong's Model), Technological, Organizational and Environmental Characteristics. However, it should be noted that the study has not been empirically tested, and can only be viewed as a literature review. The use of Thong's model hasn't been used before, but due to a lack of empirical evidence, the variables stated in the TOE segments can only be used a guidance for the confirmation/foundation of the DOI-TOE framework for this thesis.	The study does not only contribute theoretical advancements but also offers practical insights and guidelines for policymakers, industry practitioners and stakeholders using the DOI-TOE (and Thong's model) framework for SMEs. This can be useful for giving recommendations for practitioners in the SME segment of BV when using DOI-TOE framework, however there is no empirical validation meaning the research paper can only be viewed as a literature review. This paper has therefore been used as a guide for more research papers within the DOI-TOE framework research papers. Given its similarities of variables with other research papers, its valuable addition to the DOI-TOE framework and linked research papers has therefore been used as a main paper in the completion of the integrated DOI-TOE framework.
Sharma and Sharma (2023): "Digital marketing adoption by small travel agencies: a comprehensive PLS-SEM model using reflective and higher-order formative constructs"	A more recent study from Sharma and Sharma (2023) examined the vital factors that influence digital marketing adoption and the impact of digital marketing adoption on organizational performance in SME's.	This resulted in the identification of the factors of digital marketing adoption by small travel agencies in India. The paper is especially focused on the organizational context, which coincidently also states that all of the organization factors from the DOI-TOE framework are significant, as well as the Relative Advantage variable from DOI-TOE. The variable Competition from the Environmental context was also considered to be of importance in the prediction of adoption in this context.	This study found significant impact of technological factors, organizational factors, and environmental factors which correspond highly with the stated factors (variables) in this thesis. The main focus of the literature review and the research question is an emerging technology (Digital Marketing) in the SME segment. The research paper is especially focused on the organizational context within the TOE framework and is therefore an original paper within the applied DOI-TOE frameworks which makes it a more solid theoretical base for the foundation of this thesis. Besides this, an contribution to the DOI-TOE framework is the addition of "trust" as a crucial role that acts as a mediating construct between technological factors, knowledge (from Organizational context) and the adoption intention.

AlBar and Hoque (2017): "Factors affecting cloud ERP adoption in Saudi Arabia: An empirical study"	AlBar and Hoque (2017) examined the factors that influence the adoption of cloud ERP in Saudi Arabia by combining Diffusion of Innovation theory (DOI) and Technology-Organization-Environment (TOE) framework.	The findings and results offered practical guidelines for the adoption of ERP services in Saudi-Arabia. The results are that most of the stated variables are significant, however it did resulted in the variable Compatibility to not be significant for the adoption of ERP systems, as well as Trialability and Organizational Culture. The results provide further support for the utility of the DOI-TOE in technology adoption.	The use of this article can be seen from the point of its emerging technology background. Cloud ERP technology was new, upcoming and in its infancy. These characteristics are highly comparable to the current state of AI nowadays, which can be useful for this research. This paper has been selected given heavily tested background of the statistics and its agreeable conclusion that shares the same outcomes and variables with other research papers that have been reviewed.
Chiu, Chen and Chen (2017): "An integrated perspective of TOE framework and innovation diffusion in broadband mobile applications adoption by enterprises"	This study is exploring the critical factors for enterprises to adopt broadband mobile applications using the TOE framework & DOI theory.	Eleven factors have been explored to bring critical insights into the integration of information communication technologies where each of the eleven factors have been explained whether or not they influence the adoption of broadband mobile applications in enterprises.	Chiu et al. (2017) used the DOI and TOE theory to investigate firm-level adoption, built upon the study of Lippert and Govindarajulu (2006). This study has been selected because of its elaborate research on organizational perspective in combination with the use of the DOI-TOE framework. This study had contributed to the framework of using a integrated overview of DOI and TOE and developing this overview into a reference model for other follow-up research which could be used for other IS applications as well, such as AI.

Table 3: The integrated DOI-TOE framework in existing literature

3.4 How is Adoption Intention interrelated with Business Valuation and Artificial Intelligence?

With the help of the eight variables mentioned in Figure 8: Integrated DOI-TOE model (Author's design), the factors that determine the adoption intention of an innovative technology, a structured approach to the study of the intention of adoption of AI in the Business Valuation process can be executed. These variables are stated to guide the development of the semi-structured interview and structured set of questions.

The following figure shows the relation between the variables and the business valuation process:

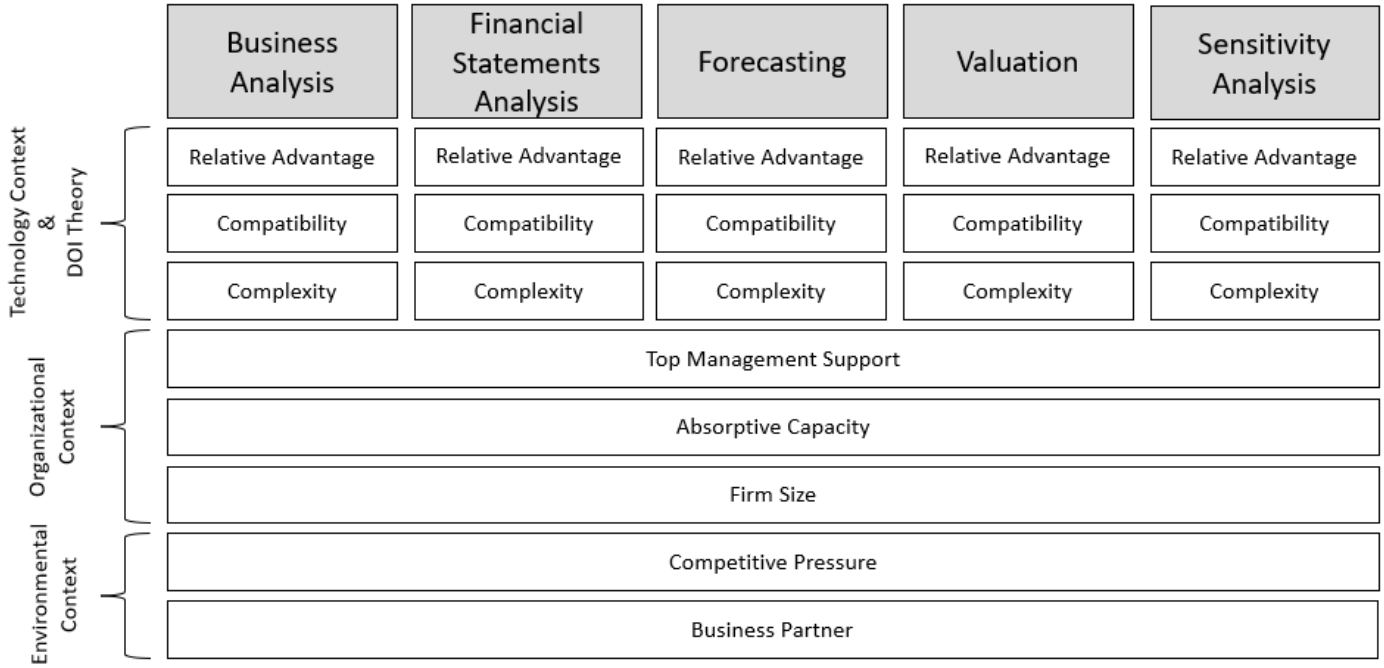

Figure 9: Relation between BV process and variables (Author's design)

The figure above (Figure 9) illustrates the relationship between variables and the business valuation process with the adoption of an emerging technology, in this case Artificial Intelligence. Variables within the Technology Context (or DOI Theory) are intricately linked to every specific step within the BV process and decisively determine the adoption of AI due to the technology itself. The influence of each variable on the decision to adopt AI technology is evaluated.

It is important to note that the adoption of AI within an Organizational or Environmental Context is not solely determined within the specific steps within the BV process. Instead, it is assessed from a broader perspective, considering external factors such as management support, firm size, and competitive pressures. Consequently, the sole steps within the BV process are not considered as so, but will be considered as a whole in the Organizational and Environmental contexts. These factors play a significant role in shaping the adoption landscape of AI for the process as a whole and will therefore be considered on the organisation or process as a whole.

Technological variables are intrinsic to the AI technology itself and play a crucial role in determining how AI is assessed and incorporated at every stage of the adoption process. These variables focus on the practical and technical aspects of implementing AI solutions within a business context. Relative advantage examines the perceived benefits and improvements that AI offers over existing methods or technologies. It influences decision-making at each step by highlighting potential gains in efficiency, accuracy, and productivity, which can justify the investment in AI. Compatibility refers to the degree to which AI technology aligns with the existing systems, processes, and values of the organization. It is critical at each stage of adoption, as it ensures that AI can be seamlessly integrated without disrupting current operations, thereby facilitating smoother transitions and reducing resistance from users. Complexity assesses the perceived difficulty associated with understanding, implementing, and using AI technology. It impacts each step of the adoption process by affecting the learning curve and the level of training required for successful implementation.

Environmental and organizational variables encompass the broader contextual factors that influence the overall environment in which AI adoption takes place. These variables shape the strategic landscape and determine the organizational readiness for adopting AI, impacting the process as a comprehensive initiative rather than as isolated steps. Top management support is crucial for driving AI adoption, as the commitment from senior leadership provide the necessary strategic direction, resources, and motivation for the organization to embrace AI. The size of the organization can significantly influence its capacity to adopt AI. Larger firms may have more resources, such as financial capital and skilled personnel, to invest in AI initiatives. Competitive pressure from competitors to adopt AI can drive organizations to innovate and maintain their competitive edge which creates a sense of urgency and strategic necessity, prompting firms to explore AI solutions to enhance their market position and operational efficiency. Absorptive capacity is considered from a broader organizational perspective because it encompasses the entire process of recognizing, assimilating, and applying external knowledge and innovations, such as new technologies. This capability is crucial for effectively integrating new technologies across the organization, as it influences strategic decision-making, facilitates change management, and supports continuous learning and innovation. By enhancing an

organization's ability to adapt and leverage new technologies, absorptive capacity impacts the overall readiness and success of technology adoption initiatives. Business partner relationships are considered from a broader organizational perspective because they provide essential external resources, knowledge, and support that influence the strategic environment in which technology adoption occurs. These partnerships can facilitate access to new technologies, offer insights and expertise, and create collaborative opportunities that enhance an organization's ability to adopt and integrate innovations like AI. By shaping the external pressures and incentives for technology adoption, business partners impact the overall readiness and strategic direction of the organization, affecting the adoption process as a whole. Together, the specific factors (Organizational & Environmental) enhance an organization's readiness and capability to successfully adopt and leverage new technologies, driving long-term growth and competitive advantage.

In summary, the Environmental and Organizational variables such as business partner relationships and absorptive capacity influence the broader context and strategic environment; these variables require a different approach, focusing on organizational readiness, strategic alignment, and external influences. By segmenting the technological variables, organizations can ensure that they address the specific technical and practical aspects of AI adoption, while also considering the broader organizational and environmental factors that impact the overall process.

3.5 Epilogue

With the clarification of Business Valuation (BV), Artificial Intelligence (AI) and the adoption theories Diffusion of Innovations (DOI) and Technology-Organizational-Environmental (TOE) framework, a clear theoretical foundation has been developed. This section explored these theoretical underpinnings, providing a diverse range of perspectives on the three topics. Additionally, the relationship between the BV process and the variables identified in the literature is articulated, with key literature and research articles supporting all of the aforementioned information and findings cited in this section. This comprehensive approach ensures that important insights from relevant sources are integrated into the theoretical framework. The insights gained in this section will serve as a guiding framework for the subsequent methodology.

4. Methodology

4.1 Introduction

In this study, a mixed methodology approach is used to obtain suitable (new) insights into key drivers for adoption of AI in the business valuation process. The method being used for the data collection to answer the research question is a mixed methods consisting of structured data & unstructured data that will be conducted simultaneously to gain both structured and unstructured data, which will be further explained in paragraph 4.6.1 Semi-Structured Interview & Structured set of Questions. The semi-structured interview will adhere to the framework developed by Kallio, Pietilä, Johnson and Kangasniemi (2016) & Akter, Kummer and Yigitbasioglu (2024) while the structured set of questions will be developed using the research studies of Chittipaka, Kumar, Sivarajah, Bowden and Baral (2022) & Nguyen, Le and Vu (2022). The data will be analysed according to the Gioia methodology & a descriptive analysis. The eight variables (Figure 7) & the five steps in the BV process (Section 3.1) are the foundation for the structure of the methodology.

4.2 Justification & Limitations

Firstly, the reason for conducting interviews is to obtain both retrospective and real-time accounts by those people experiencing the phenomenon of theoretical interest (Gioia, Corley, & Hamilton, 2013). Using qualitative data collection, the researcher is offered more opportunities to observe a phenomena under study more closely and its ability to bring in diverse perspectives of a phenomenon (Schaefer et al., 2021). Besides, using semi-structured interviews is appropriate when participants have a low level of awareness of the subject, which in this case is the emerging technology Artificial Intelligence (Kallio, Pietilä, Johnson, & Kangasniemi, 2016).

Using the Gioia methodology is appropriate when little is known about the area of study (Birks & Mills, 2011), in this case the adoption of the emerging technology Artificial Intelligence. Collecting and analysing the data allows the researcher to generate a deeper understanding of the evaluation process and to identify strong categories to lead to a core category in the study (Corbin & Strauss, 2008). An example of successfully integrating the Gioia methodology in an emerging technology, is the research of Xu, Tatge, Xu and Liu (2022). Xu et al. (2022) explored the potentials and existing challenges of blockchain technology-based applications in the German automotive industry using the Gioia methodology with guidance of the TOE framework.

However, a limitation of the Gioia methodology can be the state of knowledge of the researcher itself. The researcher is never completely uninformed about prior work, so one might term this stance as witting ignorance of previous theorizing in the domain of interest. However, some combination of knowing and not knowing amounts to another fine balancing act that allows for discovery without reinventing the well-ridden wheels (Gioia, Corley, & Hamilton, 2013). In order to minimize the risk of the knowledge of the researcher, all the interviews will be conducted and transcribed before the interviews are analysed to guarantee the researcher's bias will be minimized and the researcher does not judge interviews that come in last differently as the first conducted interviews.

Another limitation of using the Gioia methodology is the bias that might be applicable to this thesis' research (Magnani & Gioia, 2023). The researcher is solely responsible for the coding of the data, which means that the coding emerges not as an iterative process conducted by multiple researchers because only the author of this thesis is responsible for the coding. The structure and the codes are impossible to discuss, due to the one person coding the data. This could increase the risk and existence of bias that emerges in the coding process and concept development.

Secondly, a descriptive statistical analysis will be performed on the retrieved structured data from the structured set of questions. The structured data answers will be used to compare information and to corroborate with the unstructured data findings as the answers from the structured data can be useful confirmation tools when corroborated with other findings (Roopa & Rani, 2012). Another statistical analysis will be executed on the characteristics of the sample group (the respondents) in order to justify whether there is saturation or not, as discussed in paragraph 4.4 'Selection of Respondents'. Both the comparison of structured and unstructured data, and the justification of saturation will be elaborated and executed in the next chapter.

The purpose of this study is to compare the structured data and unstructured data results, both structured data and unstructured data are collected and analysed separately. The mixing of the two methods occurs at the data interpretation stage, when the results from two data sets are compared (Heigham & Croker, 2009). The data interpretation stage is also referred to as the Results section. The descriptive analysis in this triangulation method can result in well-validated and substantiated findings because it off-sets the weaknesses of one method with the strengths of another method (Creswell, 2003).

However, there are two significant challenges: it requires a lot of effort to collect and analyse two separate sets of data simultaneously and it is sometimes technically difficult to compare different structured data sets and unstructured data sets, especially if there are two sets of results who do not converge (Heigham & Croker, 2009). However, the benefits are that it can be helpful to gain in-depth understanding of trends and patterns; generating and testing theories (DOI-TOE) or developing new insights, in this case the new possible variables that can be discovered. Using the mixed methods is in this case the best option because it can understand more of the research problem when one of the two methods is a stand-alone method (Heigham & Croker, 2009).

Lastly, a notable limitation of the interviews that will be conducted could be the challenge of generalizability. With a small sample size, it becomes difficult to extend the findings to a broader population. The diversity among the participants can introduce significant variability in the data, making it challenging to draw conclusions that are representative of a larger group. Each participant's unique background, experiences, and perspectives can lead to a wide range of responses, which, while valuable for understanding individual cases, may not provide a comprehensive picture applicable to all potential stakeholders or contexts. This limitation necessitates caution when interpreting the results and suggests that further research with larger and more diverse samples may be needed to validate and generalize the findings.

4.3 Previous studies using DOI-TOE frameworks and similar methods

Existing literature which can be related to the methodology that are in this thesis' interests are amplified below and have been used to develop the methodology section.

Authors + Title	Context	Results	Justification
Xu, Tatge, Xu and Liu (2022): "Blockchain applications in the supply chain management in German automotive industry"	This paper combines collective case study and in-depth interviews to explore the potentials and existing challenges of blockchain technology-based applications at German Original Equipment Manufacturers (OEMs).	The results suggest that blockchain applications have advantages in aggregating product information, securing trans-action information, and establishing a reliable supply chain.	Xu, Tatge, Xu and Liu (2022) used the TOE framework together with the Gioia Methodology to discover the challenges for the blockchain technology. Their methodology structure can be used as a reference for this research. The use of this article can be seen from the point of its emerging technology background. Blockchain is new, upcoming and still in its infancy. These characteristics are highly comparable to the current state of AI nowadays, which can be useful for this research.
Guest, Bruce and Johnson (2006): "How Many Interviews Are Enough? An Experiment with Data Saturation and Variability"	Guest, Bruce and Johnson (2006) systematically document the degree of data saturation and variability over the course of thematic analysis and discuss the number of interviews is necessary to get a decent amount of saturation and variability.	Saturation occurred within the first twelve interviews, although basic elements for themes were present as early as six interviews.	The research of Guest et al. (2006) can be used to determine the amount of interviews needed (selection of respondents) to determine the concepts (or: variables/factors) on scientifical evidence.
Kallio, Pietilä, Johnson and Kangasniemi (2016): "Systematic Methodological Review: Developing a framework for a qualitative semi-structured interview guide"	Kallio, Pietilä, Johnson and Kangasniemi (2016) aim to produce a framework for the development of a qualitative semi-structured interview guide.	Their analysis resulted in a guide existing of 5 phases that are requisites for developing a semi-structured interview.	Rigorous development of a qualitative semi-structured interview guide contributes to both trustworthiness as well as objectivity which makes the results more plausible, therefore this guide was used for the development of the semi-structured interview questions and procedure.

Akter, Kummer and Yigitbasioglu (2024): "Looking beyond the hype: The challenges of blockchain adoption in accounting"	Akter, Kummer and Yigitbasioglu (2024) highlights the potentials and challenges of blockchain adoption in accounting using factors that influences the organizations' intention to adopt blockchain technology by the use of the TOE framework.	This exploratory study provides empirical insights into the organizational-level adoption of blockchain in accounting. Grounded in the TOE framework, the findings provide a rich account of nine factors that directly influence the blockchain accounting adoption intention of organizations and the possibility of interactions and impacts of these factors.	The study of Akter, Kummer and Yigitbasioglu (2024) has been used for the development of the semi-structured questions and procedure. The questions of this thesis are based on the empirical evidence and methodology results of this study.
Chittipaka, Kumar, Sivarajah, Bowden and Baral (2022): "Blockchain Technology for Supply Chains operating in emerging markets: an empirical examination of technology organization-environment (TOE) framework"	Chittipaka, Kumar, Sivarajah, Bowden and Baral (2022) is researching the adoption intention using the technology-organization-environment (TOE) framework to examine the technological, organizational, and environmental dimensions for adopting blockchain technology in supply chains.	The results show that all the eleven TOE constructs, including relative advantage, trust, compatibility, security, firm's IT resources, higher authority support, firm size, monetary resources, rivalry pressure, business partner pressure, and regulatory pressure, had a significant influence on the decision of blockchain technology adoption in Indian supply chains.	The study of Chittipaka, Kumar, Sivarajah, Bowden and Baral (2022) is used to establish a structured set of questions and its related 7-point Likert scale. This study applied the questionnaire & the Likert scale to get 525 respondents to answer the questionnaire and provides fruitful insights and empirical evidence for various firms to remove barriers and challenges. Using this study to develop the structured set of questions, is a solid foundation to use due to its high and successful empirical results.
Nguyen, Le and Vu (2022): "An Extended Technology-Organization-Environment (TOE) Framework for Online Retailing Utilization in Digital Transformation: Empirical Evidence from Vietnam"	Nguyen, Le and Vu (2022) aims to pinpoint the motivations for online retailing (ORE) adoption and business performance among Vietnamese businesses in the formative digital transformation stage within an extended technology-organization-environment (TOE) framework.	The results posit that important factors of technological context (i.e., relative advantage, compatibility, and observability), organizational context (i.e., top management support, entrepreneurial orientation, and technological orientation), and the environmental context (i.e., perceived trend, government support, and legal framework) substantially boost ORE adoption. Additionally, firm age is an essential control variable that strongly influences firms' engagement in ORE.	The study of Nguyen, Le and Vu (2022) is used to complement the study of Chittipaka, Kumar, Sivarajah, Bowden and Baral (2022) to establish a well-grounded structured set of questions with the use of successful research studies. The study of Nguyen, Le and Vu (2022) followed the robust theoretical and strong psychometric base of TOE for the development of the research model which enhanced the foundation of the development of usable, empirical evidence and relates to a strong methodology approach.

Table 4: Previous studies using DOI-TOE frameworks and similar methods

4.4 Selection of respondents

The selection of the respondents are Managers/Directors/Professionals/Founders within the SME segment of Business Valuation. The interviewees need to know specifically the process of valuing a business, given the fact that the interview uses the business valuation process as the structure of the interview. Experience with or knowledge about emerging technologies, e.g. AI, is unnecessary given the fact that the interviewees will be given a presentation about AI and its influence to make sure every interviewee has knowledge about AI to a certain extent. For these interviews, an informed consent letter has to be signed by the participants. If this consent letter is not signed, the information retrieved from the interview cannot be used, because there has no permission granted to the researcher to use the information in this thesis. Consequently, the interview data will be deleted or the interview will not be executed. See Appendix A for the Informed Consent Letter.

However, the number of respondents is difficult to determine, considering the researcher has to conduct interviews until the researches senses that a certain point of saturation has been reached. Saturation can be defined as: "Saturation of knowledge", in which the researcher is surprised or learns a great deal from the first few interviews and is able to recognize a pattern in the interviewees' experiences which can result in interviews confirming what the researcher already sensed (Bertaux, 1981). Conceptually, saturation may be the desired end point of data collection. Operationally, the decision to stop interviewing is a function of a combination of factors, e.g. interview structure, heterogeneity of respondents, complexity of interviews or researcher's experience (Guest, Bruce, & Johnson, 2006; Ryan & Bernard, 2003). Because this research is about overarching concepts (variables) that influence the adoption intention of AI in BV and not about fine-grained themes, saturation will likely occur earlier in the process meaning less interviews have to be done compared to fine-grained and deep-sought variables (Guest, Bruce, & Johnson, 2006).

When researching the literature, Guest, Bruce and Johnson (2006) state that most of the results can be found within the first twelve interviews. For this, Guest, Bruce and Johnson (2006) used mathematics to gain an answer to how many interviews should be enough when coding textual material. The analysis suggests that data saturation was largely achieved after examining twelve interviews. By this point, 92% of the total codes for transcripts and 88% of codes for interviews across two countries had been identified. Additionally, most of the new codes found in the data were variations of existing themes. After the second round of analysis (twelve interviews), code definitions became stable, with over 75% of revisions clarifying specifics without altering the core meaning. Code frequency variability also stabilized by the twelfth interview, with subsequent batches yielding only marginal improvements. Overall, new themes emerged infrequently as analysis progressed after the 12th coded interview.

However, another study executed by Hennink, Kaiser and Marconi (2016) resulted in a code saturation after nine interviews. Hennink, Kaiser and Marconi (2016) state that the first interview conducted contributed more than half (53%) of new codes and three quarters (75%) of high-prevalence codes, with subsequent interviews adding a few new codes each until saturation. These results made it clear that, by using nine interviews, the range of common thematic issues was identified and the codebook had been stabilized. Hennink, Kaiser and Marconi (2016) state that the results are highly similar to those of the aforementioned results of Guest, Bruce and Johnson (2006). Based on the empirical results of the aforementioned studies, a range between nine and twelve interviews should be conducted in order to reach data saturation according to Guest, Bruce and Johnson (2006) & Hennink, Kaiser and Marconi (2016).

An important component of this study is the consideration of how the sample's composition affects data saturation. If the sample group is heterogeneous, meaning there is significant diversity among the respondents, achieving saturation with only nine to twelve interviews may be more challenging. This diversity can lead to a wider variety of responses, making it harder to identify common themes and patterns. Therefore, it is crucial to assess whether the sample group is heterogeneous or homogeneous. To do this, a closer examination of the respondents' characteristics will be conducted in the Analysis part of the study (Chapter 5). This analysis will involve evaluating factors such as demographic information, professional backgrounds, and other relevant attributes that could influence the diversity of responses. By understanding the composition of the sample group, the study can better assess the extent to which saturation has been achieved and acknowledge any limitations related to the diversity of the sample. This approach ensures a more nuanced interpretation of the findings and provides a basis for discussing the generalizability and applicability of the results.

4.5 Gioia Methodology

The Gioia methodology was developed concerning the traditional approach being used in research was simply this: Advances in knowledge are too strongly rooted in what we already know delimit what we can know (Gioia, Corley, & Hamilton, 2013). Therefore, Gioia et al. (2013) developed a methodology built upon the principles of the Grounded Theory but changed some main distinctive features of the approach; the Data Analysis and Grounded Theory Articulation steps (Gioia, Corley, & Hamilton, 2013). The Grounded Theory approach closely relates with the research question, because the approach is often chosen to study technological change (Artificial Intelligence) and socio-technical behaviour (Adoption Intention) in emerging research domains, according to Wiesche, Jurisch, Yetton and Krcmar (2017).

The process of the Gioia methodology is to analyse the data from the semi-structured interviews, akin to the notion of open/axial/selective coding of Strauss and Corbin (1998), and code this data into 1st order, 2nd order and aggregate dimensions (Gioia, Corley, & Hamilton, 2013). 1st order analysis tries to make little attempt to distil categories, loads of different categories will be stated and getting lost is not unusual. As Gioia (2013) stated: "You gotta get lost before you can get found". The 2nd order (similar to axial coding) reduces the enormous amount of categories to a more manageable number. After that, the dimensions will be stated, these 2nd order codes will get labels where dimensions will be formed. The 1st order codes, the more abstract 2nd order level of themes and the aggregate dimensions answer the important question: "What's going on here?" (Gioia, Corley, & Hamilton, 2013). The goal of this is to have a strong data structure in which the researcher not only sees whether what is being found has precedents, but also whether the researcher has discovered new concepts (Gioia, Corley, & Hamilton, 2013). Meaning, the goal is to find new concepts but also to connect the found concepts to existing literature.

After the data structure has been established, 2nd order concepts can be related to each other and a dynamic grounded theory model can be established in order to visualize/develop the aggregate dimensions. Afterwards, additional consultations with the literature can be conducted to refine articulation of emergent concepts and relationships (Gioia, Corley, & Hamilton, 2013).

After this, the concepts (i.e. factors/variables) that determine the adoption intention in the BV process are developed and can be used to give recommendations to practitioners and can be researched and/or used for further research purposes.

4.6 Data Collection

Semi-structured interviews & structured set of questions are conducted to collect data for answering the research question. The objective is to use unstructured & structured data to gain valuable insights into what business valuation organizations think about the adoption intention of AI in the business valuation process. The interview and structured set of questions will be split up in two sections but executed simultaneously: 1) questions related to the variables that have been developed using the theoretical framework using a structured set of questions and 2) questions related to the exploration of new concepts and testing of the theoretical framework using semi-structured interviews. See Figure 10 for a visualisation of the data collection process.

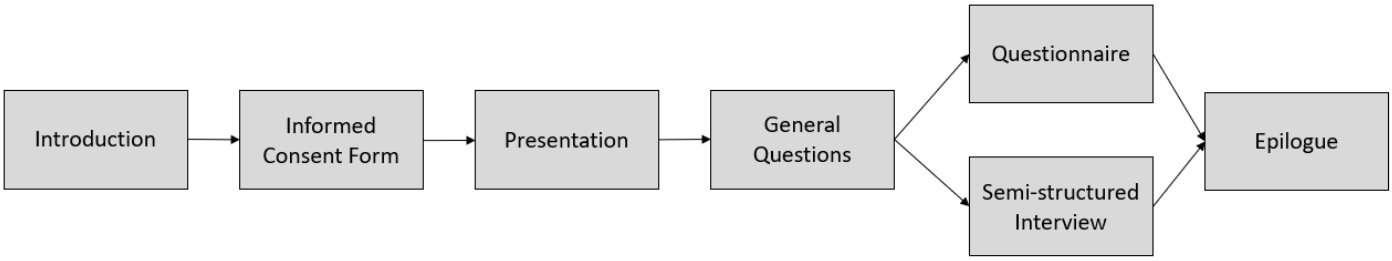

Figure 10: Data Collection Process (Author's Design)

4.6.1 Semi-Structured Interview & Structured set of Questions

The interviewee gets questioned about the variables stated in DOI-TOE framework in a structured set of questions about if and how much these variables can possibly influence every step within the business valuation process or on the business valuation process as a whole. The structured questions for three variables of the DOI theory will be asked in specifically every step within the BV process, because the DOI theory has been developed on an individual level, and not on an organizational level, like the TOE framework (see Section 3.3.4). Therefore, the three variables from DOI will be structured on every step within the BV process and the TOE framework variables (Environmental & Organizational) will be asked on an organizational/environmental level. The three variables have each one question about every one of the five steps in the process, while the remaining variables each have a different amount of questions as executed in the studies of both Chittipaka, Kumar, Sivarajah, Bowden and Baral (2022); Nguyen, Le and Vu (2022). A total of 29 questions were developed to accumulate structured data about the adoption of AI in the BV process. The questions are developed using a 7-point Likert scale based on the questionnaire of Chittipaka, Kumar, Sivarajah, Bowden and Baral (2022) & the questionnaire of Yakubu, Kassim and Husin (2023). These 29 questions will discover if and how much influence the variables from the literature have on the adoption of AI in the BV process.

The semi-structured interview questions consists of open-ended questions based on the interview questions of Akter, Kummer and Yigitbasioglu (2024). Akter, Kummer and Yigitbasioglu (2024) researched the adoption of an emerging technology (blockchain) in the Accounting industry. Within these questions defined in Section 4.7, the participants are encouraged to speak freely about their perceptions and experiences given the open-ended structure (Kallio, Pietilä, Johnson, & Kangasniemi, 2016). These questions could be about issues that are familiar to the participant yet central to the study subject (Kallio, Pietilä, Johnson, & Kangasniemi, 2016). The interviewees will be asked a question in which the interviewees can answer the question with a lot of freedom.

The semi-structured interview will be conducted simultaneously with the structured set of questions. This has been executed for the reason that the structured set of questions is based on the literature review and tests the variables while the semi-structured interview will have its target to uncover different variables or to give the respondents the freedom to emphasize a certain variable that has been researched in the structured set of questions. The structure of the interview/structured set of questions can be found in Appendix B. Section 4.7.1 states the general questions, while Section 4.7.2 and 4.7.3 follow the structure of relevant literature where the questions are ordered by the relevant variables as this would also be the structure in the Analysis in Chapter 5 (Chittipaka, Kumar, Sivarajah, Bowden, & Baral, 2022; Nguyen, Le, & Vu, 2022; Oliveira, Thomas, & Espadanal, 2014; Piaralal, Nair, Yahya, & Karim, 2015; Sharma & Sharma, 2023).

The structured data questions will be printed on paper given the fact that the collection of data is numerical. The single-answers multiple-choice questions based on the 7-point Likert scale, based on both formats of Chittipaka, Kumar, Sivarajah, Bowden and Baral (2022); Yakubu, Kassim and Husin (2023), will undergo a descriptive analysis (Likert, 1932). The descriptive analysis will include the median given the fact that the Likert-scale will be treated at the ordinal level.

The structured set of questions and semi-structured interviews will be conducted among the same respondents, because of the purpose to compare structured and unstructured results. This particular design is triangulation, in which the phenomenon (AI and its adoption in BV) is being researched and its data is being collected at the same time in order to compare and contrast the different findings to produce well-validated conclusions (Creswell, 2003). The outcomes of the semi-structured interviews will be compared with the structured set of questions to prove if and how much the variables from the theoretical framework are similar to the answers of the semi-structured interviews with the possibility to the discovery of new variables. See Figure 11 for the triangulation procedure of Lopez and Tashakkori (2006) used as an example in this thesis for the structure of the data collection and analysis procedure.

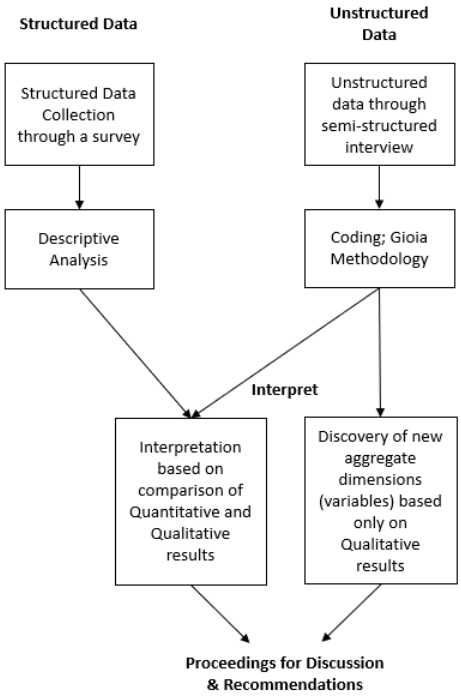

Figure 11: Triangulation Design based on study of Lopez and Tashakkori (2006) (Author's design)

4.7 Structured Data

4.7.1 General Questions

Age:

A. 18 – 30
B. 31 – 40
C. 41 – 50
D. Above 50

Education Level:

A. High school qualification/Undergraduate
B. Graduate
C. Postgraduate

Job title:

A. Manager
B. Financial Analyst
C. Chief Information/Technology Officer
D. Managing Director/CEO/Founder
E. Other: _____

How many years of experience do you have in Business Valuation?

A. 1 - 5 years
B. 6 - 10 years
C. 11 - 15 years
D. 16 - 20 years
E. 21 years or more

Firm Age:

A. <3
B. 3 - <5
C. 5 – <10
D. 10 – <20
E. >20

Number of Employees:

A. <5
B. 5 – <50
C. 50 – <150
D. 150 – <300
E. >300

Average value of valued businesses:

A. <€100.000
B. €100.000 - <€500.000
C. €500.000 - <€1.000.000
D. €1.000.000 - <€2.000.000
E. >€2.000.000

Average number of valued businesses within one year:

A. <3
B. 3 - <5
C. 5 - <10
D. 10 - <20
E. >20

Most typical reason for purpose of business valuation:

A. Transaction valuation
B. Tax valuation
C. Financial reporting valuation
D. Regulatory valuation
E. Dispute resolution
F. Other: _____

Most common valuation method:

A. Relative Valuation (Comparables/Multiples)
B. Discounted Cash Flow (DCF)
C. Option Pricing Models
D. Asset-Based Valuations
E. Dividend-Based Valuation
F. Other: _____

4.7.2 Structured set of Questions Technology Context

Below the questions are formulated based on the theoretical framework where the first three variables from the Technology Context (Relative Advantage, Compatibility & Complexity) will be researched if and how these variables influence the adoption of AI in every step of the BV process.

Relative Advantage

Nr.	Question	Interest in Knowledge	Sources
1.1	Using AI in the Business Analysis will be an advantage to me and the organization compared to the traditional methods.	Business Analysis	(Chittipaka, Kumar, Sivarajah, Bowden, & Baral, 2022; Ghobakhloo, Arias-Aranda, & Benitez-Amado, 2011; Moore & Benbasat, 1991)
1.2	Using AI in the Financial Statements Analysis will be an advantage to me and the organization compared to the traditional methods.	FSA	
1.3	Using AI will be an advantage to me and the organization when I try to forecast compared to the traditional methods.	Forecasting	
1.4	Using AI will be an advantage to me and the organization when executing the valuation when compared to the traditional methods.	Valuation	
1.5	Using AI in the Sensitivity Analysis will be an advantage to me and the organization compared to the traditional methods.	Sensitivity Analysis	

Compatibility

Nr.	Question	Interest in Knowledge	Sources
2.1	Ensuring compatibility between AI and the current procedure of Business Analysis is important.	Business Analysis	(Chittipaka, Kumar, Sivarajah, Bowden, & Baral, 2022; Moore & Benbasat, 1991; Premkumar & Roberts, 1999)
2.2	Ensuring compatibility between AI and the current procedure of Financial Statements Analysis is important.	FSA	
2.3	Ensuring compatibility between AI and the current procedure of Forecasting is important.	Forecasting	
2.4	Ensuring compatibility between AI and the current procedure of Valuation is important.	Valuation	
2.5	Ensuring compatibility between AI and the current procedure of Sensitivity Analysis is important.	Sensitivity Analysis	

Complexity

Nr.	Question	Interest in Knowledge	Sources
3.1	AI is too complex to be used in the Business Analysis.	Business Analysis	(Yakubu, Kassim, & Husin, 2023)
3.2	AI is too complex to be used in the Financial Statements Analysis.	FSA	
3.3	AI is too complex to be used in Forecasting.	Forecasting	
3.4	AI is too complex to be used in Valuation.	Valuation	
3.5	AI is too complex to be used in the Sensitivity Analysis.	Sensitivity Analysis	

4.7.3 Structured set of Questions Organizational & Environmental Context

Below the questions are formulated based on the theoretical framework where the final five variables (Top Management Support, Firm Size, Competitive Pressure, Absorptive Capacity, Business Partner) will be researched if and how these variables influence the adoption of AI on an Organizational & Environmental level.

Top Management Support

Nr.	Question	Sources
4.1	Top management considers AI adoption as important to the organization in digital transformation.	(Nguyen, Le, & Vu, 2022)
4.2	Top management effectively communicates its support for the use of AI.	
4.3	Top management is likely to invest funds in AI-related technologies.	

Firm Size

Nr.	Question	Sources
5.1	Larger firms are more benefited from this new technology because they have capacity to invest.	(Nguyen, Le, & Vu, 2022; Premkumar & Roberts, 1999)
5.2	Smaller firms avoids to use this technology.	
5.3	The capital of my company is high compared to the industry.	

Absorptive Capacity

Nr.	Question	Sources
6.1	Technological infrastructure as well as human resources are needed to support adoption of AI in the firm.	(Hooper, 2008; Nguyen, Le, & Vu, 2022)
6.2	The firm seeks out new ways to do things in AI.	

Competitive Pressure

Nr.	Question	Sources
7.1	It is a strategic requirement to utilize AI to compete in the market.	(Nguyen, Le, & Vu, 2022; To & Ngai, 2006)
7.2	I believe the firm will lose market share if the firm does not adopt AI in the digital transformation.	
7.3	It is necessary to adopt AI as it allows to have accuracy in the BV process.	

Business Partner

Nr.	Question	Sources
8.1	I would utilize AI to improve coordination among the business partners.	(Jöhnk, Weissert, & Wyrtki, 2021; Lin & Lin, 2008; Makena, 2013)
8.2	My organization is willing to facilitate intraorganizational collaboration between different business partners through new formats and tools.	
8.3	Our business partners are against the adoption of AI.	

4.8 Unstructured Data (Semi-Structured Interview)

The semi-structured interview will be conducted simultaneously given the opportunity to discover new variables that might not have been researched in the structured set of questions and gives the respondent the possibility to emphasize a certain variable's importance. The questions are based on the questions established by Akter, Kummer and Yigitbasioglu (2024). Sections 4.8.1 and 4.8.2 will be used to get a good grasp on the understanding and thoughts of the interviewee in the beginning of the interview.

4.8.1 Fundamentals of Artificial Intelligence and Business Valuation

- Could you please share your views about AI?
- To what extent do you think your organisation or colleagues are aware of Artificial Intelligence?
- In your opinion, what are the benefits and risks of AI over existing technology for business valuation services?
- How familiar are you with AI?
- What do you think about AI and its impact on the business valuation process?

4.8.2 Adoption of Artificial Intelligence

- What would happen if you implemented AI in your business process?
- Why have or haven't you adopted AI in your business process?
- What is missing in the organization for you to adopt AI?
- What challenges do you believe organizations face in adopting AI?

5. Analysis

5.1 Introduction

First of all, the sample characteristics will be displayed in paragraph 5.2, whereas later the structured data will be explained. The structured data will be analysed using the median, standard deviation, range, and coefficient of variation (CV) to understand trends and variability. The median reflects the typical experience by identifying the middle value, even in skewed data. The standard deviation shows how much responses vary from the average, indicating consistency or diversity in the data. The range highlights the spread by measuring the difference between the highest and lowest values. The coefficient of variation (CV), calculated as the ratio of the standard deviation to the mean, provides a standardized measure of variability, making it easier to compare across datasets. Together, these metrics offer a comprehensive view of central tendencies and variability. After elaborating the meaning of the structured dataset, the unstructured dataset will be stated where the variables are stated that were being discovered using the Gioia methodology. Newly found variables will be discussed and the existing variables from the literature will be examined. After separately examining the unstructured data and structured data, the data will be triangulated in order to find the underlying reasons of the structured data using the unstructured data. See Figure 12: Process to the RQ for a visualisation of the process.

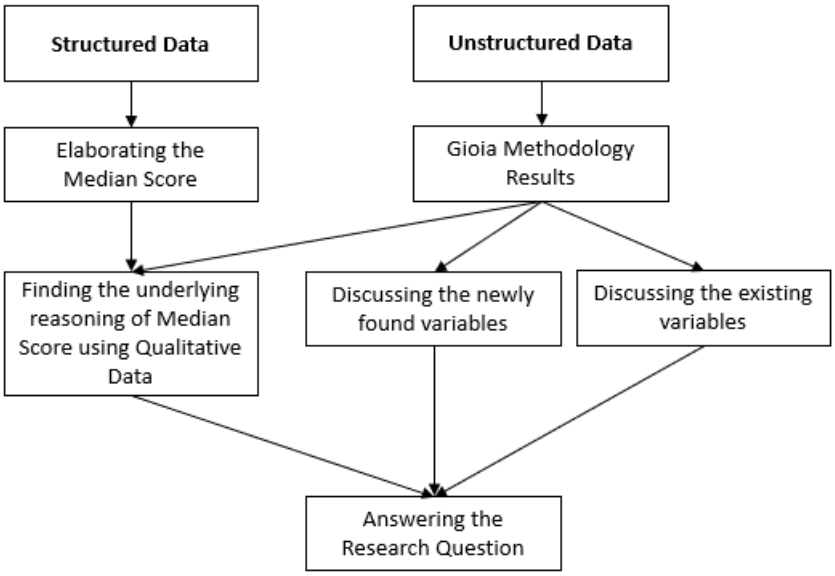

Figure 12: Process to the RQ (Author's Design)

5.2 Sample Characteristics

Below, the sample characteristics are displayed in bar charts. A total of nine respondents have been questioned about their vision about AI and the adoption intention. All of the respondents are residents of The Netherlands, with an educational background mostly of postgraduates. More than half of the respondents are the Managing Director or CEO of the organisation and all the respondents have at least 6 years of experience in Business Valuation up to more than 21 years. With this experience, all of the respondents use the Discounted Cash Flow (DCF method) as the most common valuation model with the purpose of transactional valuation. On average, the value of the valuation is higher than €2.000.000 and all of the respondents perform at least more than 3 valuations each year. The frequency distribution of purpose of valuation and common valuation model are excluded due to an unanimous answer, respectively, Transactional Valuation and Discounted Cash Flow (DCF).

		Respondent 1	Respondent 2	Respondent 3	Respondent 4	Respondent 5	Respondent 6	Respondent 7	Respondent 8	Respondent 9
Age	*18 - 30*		X							
	31 - 40			X				X	X	X
	41 - 50					X				
	> 50	X			X		X			
Education Level	*Undergraduate*									
	Graduate	X								X
	Postgraduate		X	X	X	X	X	X	X	
Job title	*Manager*							X		
	Financial Analyst									
	Chief Information/Technology Officer									
	Managing Director/CEO/Founder	X				X	X		X	X
	Other		X	X	X					
Years of Experience	*1 - 5 years*									
	6 - 10 years		X	X				X		X
	11 - 15 years	X							X	
	16 - 20 years				X	X				
	> 21 years						X			
Firm Age	*<3*		X				X			
	3 - <5									
	5 - <10				X					
	10 - <20			X		X			X	
	>20	X						X		X

		Respondent 1	Respondent 2	Respondent 3	Respondent 4	Respondent 5	Respondent 6	Respondent 7	Respondent 8	Respondent 9
Number of Empoloyees	*<5*	X			X		X			X
	5 - <50		X	X		X			X	
	50 - <150							X		
	150 - <300									
	>300									
Average Value of Projects	*<€100.000*									
	€100.000 - <€500.000									
	€500.000 - <€1.000.000									
	€1.000.000 - <€2.000.000	X								
	>€2.000.000		X	X	X	X	X	X	X	X
Average # of projects	*<3*									
	3 - <5		X				X			
	5 - <10	X			X					X
	10 - <20							X	X	
	>20			X		X				
Most Common Purpose	*Transaction valuation*	X	X	X	X	X	X	X	X	X
	Tax valuation									
	Financial reporting valuation									
	Regulatory valuation									
	Dispute resolution									
	Other									
Common Valuation Method	*Relative Valuation*									
	Discounted Cash Flow (DCF)	X	X	X	X	X	X	X	X	X
	Option Pricing Models									
	Asset-Based Valuations									
	Dividend-Based Valuation									
	Other									

Figure 13: Overview of sample characteristics

Descriptive Analysis	N	Min.	Max.	Mean	Std. Deviation	Coefficient of Variation (%)
Age	*9*	*1*	*4*	*2,7*	*1,12*	41.48
Education Level	*9*	*2*	*3*	*2,8*	*0,44*	15.71
Job Title	*9*	*1*	*5*	*4,0*	*1,23*	30.75
Years of Experience	*9*	*2*	*5*	*3,0*	*1,12*	37.33
Firm Age	*9*	*1*	*5*	*3,6*	*1,59*	44.17
Number of Employees	*9*	*1*	*3*	*1,7*	*0,71*	41.76
Average value of Valued Businesses	*9*	*4*	*5*	*4,9*	*0,33*	6.73
Average number of Valued Businesses	*9*	*2*	*5*	*3,4*	*1,13*	33.24
Purpose of Valuation	*9*	*1*	*1*	*1,0*	*0,00*	0.00
Common Valuation Method	*9*	*2*	*2*	*2,0*	*0,00*	0.00

Table 6: Descriptive analysis of sample characteristics

The analysis of the sample characteristics reveals a mix of homogeneity and heterogeneity across different variables. Variables such as "Purpose of Valuation" and "Common Valuation Method" are completely homogeneous, as they show no variation at all among all the participants, indicating that all respondents share the same purpose of valuation and method for valuation. Similarly, "Education Level" and "Average value of Valued Businesses" exhibit homogeneity, with low standard deviations and narrow ranges, suggesting that participants have similar educational backgrounds and business valuations.

In contrast, variables like "Job Title" and "Firm Age" demonstrate significant heterogeneity. The wide range and higher standard deviations for these variables indicate considerable diversity in job roles and the ages of the firms involved. This suggests that the sample includes participants from various professional levels and companies of different ages, contributing to a more diverse dataset. Other variables, such as "Age," "Years of Experience," and "Average number of Valued Businesses," show moderate heterogeneity, with noticeable variation around their means.

To determine whether the variables with a high standard deviation around their mean has a lot of impact on the research answers, the Coefficient of Variability (CV) is calculated, which gives a good impression of the variance in the sample characteristics. The analysis of the CV across the variables in this study provides valuable insights into the relative variability and consistency within the sample. The CV is a measure of relative dispersion and allows to compare the degree of variability across different variables, irrespective of the units or scale (Abdi, 2010).

Key findings from the CV analysis reveal that variables such as Education Level, Average Value of Valued Businesses, Purpose of Valuation, and Common Valuation Method show low CVs, indicating a high degree of consistency across the sample. This homogeneity suggests that these characteristics are stable and uniform, which can enhance the reliability of the conclusions drawn from these variables (Abdi, 2010).

In contrast, variables like Age, Firm Age, Number of Employees, and Years of Experience show high CVs, reflecting significant diversity within the sample. This heterogeneity indicates that these characteristics vary widely among the respondents, which could introduce complexity in the analysis and interpretation of results. The diversity in these variables suggests that the sample captures a broad spectrum of experiences and backgrounds, which might affect the study's outcomes and the applicability to other populations (Abdi, 2010).

Variables such as Job Title and Average Number of Valued Businesses have moderate CVs, indicating some level of diversity but not as pronounced as the highly variable characteristics. This moderate variability suggests that while there is some diversity, it is not as extreme, allowing for more straightforward analysis compared to the highly heterogeneous variables.

The appearance of both homogeneous and heterogeneous variables in the sample has important implications for this research. The homogeneous variables provide a stable foundation for analysis, as their consistency increases generalizability. However, the heterogeneous variables introduce variability that could impact the study's findings, potentially leading to varied outcomes. This variability will be carefully considered in the analysis, as it may affect the generalizability of the results.

5.3 Structured Data

Using SPSS, the median, standard deviation, mean and range is being retrieved from the structured dataset. In order to make sure that the outliers in the structured dataset will not affect the score of the data analysis, the median will be used in order to give an unambiguous sense of the data which offers a central tendency in the scoring. First off, the Organizational & Environmental statements will be displayed, the Technological statements will follow after. A 7-point Likert-Scale is used.

7-point Likert-scale: 1 = strongly disagree, 2 = disagree, 3 = partially disagree, 4 = undecided, 5 = partially agree, 6 = agree and 7 = strongly agree

Organizational & Environmental Statements

Nr.	Description	Valid	Mean	Median	Std. Deviation	Range	Min	Max
Nr_4.1	Top management considers AI adoption as important to the organization in digital transformation.	9	6.11	5.00	0.601	2	5	7
Nr_4.2	Top management effectively communicates its support for the use of AI.	9	4.67	5.00	2.062	5	2	7
Nr_4.3	Top management is likely to invest funds in AI-related technologies.	9	5.78	6.00	0.833	3	4	7
Nr_5.1	Larger firms benefit more from this new technology because they have the capacity to invest.	9	4.89	5.00	1.537	5	2	7
Nr_5.2	Smaller firms avoid using this technology.	9	3.11	3.00	1.167	3	2	5
Nr_5.3	The capital of my company is high compared to the industry.	9	4.67	5.00	1.000	4	2	6
Nr_6.1	Technological infrastructure as well as human resources are needed to support AI adoption in the firm.	9	5.56	6.00	0.726	2	4	6
Nr_6.2	The firm seeks out new ways to do things in AI.	9	4.78	5.00	1.481	5	2	7
Nr_7.1	It is a strategic requirement to utilize AI to compete in the market.	9	4.56	5.00	1.333	5	2	7
Nr_7.2	I believe the firm will lose market share if it does not adopt AI in the digital transformation.	9	5.67	6.00	0.866	2	4	6
Nr_7.3	It is necessary to adopt AI as it allows accuracy in the business process.	9	3.22	3.00	0.833	3	2	5
Nr_8.1	I would utilize AI to improve coordination among business partners.	9	4.00	4.00	1.225	4	2	6
Nr_8.2	My organization is willing to facilitate intraorganizational collaboration between different business partners through new formats and tools.	9	4.44	5.00	1.509	5	2	7
Nr_8.3	Our business partners are against the adoption of AI.	9	2.11	2.00	0.782	3	1	4

Figure 14: Overview of Structured Data (Organizational & Environmental)

Question:	Structured Data Findings	Structured Data Meaning	Conclusion
Nr 4.1: “Top Management considers AI adoption as important to the organisation in digital transformation”.	The median score is 6, with a range of 2 (minimum 5, maximum 7) and a standard deviation of 0.60	The respondents ‘Agree’ with the statement that Top Management considers the adoption of AI as important.	Respondents think that the Top Management view the adoption of AI as important.
Nr 4.2: “Top Management effectively communicates its support for the use of AI”.	The median score is 5, with a range of 5 (minimum 2, maximum 7) and a standard deviation of 2.06	The respondents ‘Somewhat Agree’ with the statement that Top Management communicates its support for the use of AI. The St. Deviation indicates a mixed opinions on how well top management communicates its AI support.	Respondents think that Top Management communicates its support for the use of AI a bit, however there are respondents who ‘Disagree’ with this statement.
Nr 4.3: “Top Management is likely to invest funds in AI-related technologies”.	The median score is 6, with a range of 3 (minimum 4, maximum 7) and a standard deviation of 0.83	The respondents ‘Agree’ with the statement that Top Management is likely to invest funds in AI-related technologies.	Respondents think that Top Management is likely to invest in AI-related technologies.
Nr 5.1: “Larger firms are more benefited from this new technology because they have capacity to invest”.	The median score is 5, with a range of 5 (minimum 2, maximum 7) and a standard deviation of 1.54	The respondents ‘Somewhat Agree’ with the statement that larger firms are more benefited from AI. The St. Deviation suggesting some differing views on whether larger firms benefit more due to their investment capacity.	Respondents think that larger firms benefit more from AI than smaller firms, however there are respondents who ‘Disagree’ with this particular statement. A high variance is discovered.
Nr 5.2: “Smaller firms avoids to use this technology”.	The median score is 3, with a range of 3 (minimum 2, maximum 5) and a standard deviation of 1.17	The respondents ‘Partially Disagree’ with the statement that smaller firms avoid AI.	Respondents think that smaller firms do not avoid to use AI, however some respondents ‘Partially Agree’ with the statement meaning that smaller firms indeed do avoid to use AI.

Nr 5.3: “The capital of my company is high compared to the industry”	The median score is 5, with a range of 2 (minimum 5, maximum 7) and a standard deviation of 1.00	The respondents ‘Somewhat Agree’ with the statement that the capital of their organization is high compared to the industry.	Respondents think that the capital of their organization is higher than those of the competition.
Nr 6.1: “Technological infrastructure as well as human resources are needed to support adoption of AI in the firm”.	The median score is 6, with a range of 2 (minimum 4, maximum 6) and a standard deviation of 0.73	The respondents ‘Agree’ with the statement that the technological infrastructure and human resources are needed in order to adopt AI.	Respondents think that the technological infrastructure and human resources are needed to adopt AI and a low variability is apparent which indicates a broad agreement.
Nr 6.2: “The firm seeks out new ways to do things in AI”.	The median score is 5, with a range of 5 (minimum 2, maximum 7) and a standard deviation of 1.48	The respondents ‘Partially Agree’ with the statement that the firm seeks out new ways to work with AI.	Respondents overall partially agree with the statements, however opinions are divided due to a high variance of 1.48, indicating differing views on the firm’s pursuit of innovation in AI.
Nr 7.1: “It is a strategic requirement to utilize AI to compete in the market”.	The median score is 5, with a range of 4 (minimum 3, maximum 7) and a standard deviation of 1.33	The respondents ‘Partially Agree’ with the statement that it is a strategic requirement to use AI in order to compete in the market.	Respondents are overall agreeing with the statements, however opinions are divided here as week given the high variance.
Nr 7.2: “I believe the firm will lose market share if it does not adopt AI in the digital transformation”.	The median score is 5, with a range of 2 (minimum 5, maximum 7) and a standard deviation of 0.86	The respondents ‘Partially Agree’ with the statement that the firm will lose a market share if it does not adopt AI.	The respondents are agreeing with the statement, where 5 (“Partially Agree”) is the minimum and a moderate variability in the answers.
Nr 7.3: “It is necessary to adopt AI as it allows to have more accuracy in the BV process”.	The median score is 3, with a range of 2 (minimum 2, maximum 4) and a standard deviation of 0.83	The respondents ‘Partially Disagree’ with statement that the firm has to adopt AI in order to have more accuracy in the process.	The respondents are agreeing that it is not necessary to adopt AI in order to have more accuracy in the BV process.

Nr 8.1: “I would utilize AI to improve coordination among the business partners”.	The median score is 4, with a range of 3 (minimum 2, maximum 5) and a standard deviation of 1.23	The respondents are ‘Undecided’ on the statement that it could improve coordination among business partners.	The respondents cannot decide whether AI would improve coordination among business partners or worsen. However, some respondents agree/disagree with the statement.
Nr 8.2: “My organization is willing to facilitate intraorganizational collaboration between different business partners through new formats and tools”.	The median score is 5, with a range of 4 (minimum 2, maximum 6) and a standard deviation of 1.51	The respondents ‘Partially Agree’ with the statement that the organization is willing to facilitate intraorganizational collaboration between business partners.	The respondents agree with the statement, however a high range is detected. Whereas respondents go from ‘Disagree’ to ‘Agree’ on the Likert-scale.
Nr 8.3: “Our business partners are against the adoption of AI”.	The median score is 2, with a range of 3 (minimum 1, maximum 4) and a standard deviation of 0.78	The respondents ‘Disagree’ with the statement that business partners are against the adoption of AI.	The respondents mostly think that the business partners are not against the adoption of AI and suggesting consistent responses that business partners may generally be resistant to AI adoption.

Table 7: Structured Data (Organizational & Environmental)

Technological Statements

Nr.	Description	Valid	Mean	Median	Std. Deviation	Range	Min	Max
Nr_1.1	Using AI in the Business Analysis will be an advantage to me and the organization compared to the traditional methods.	9	5.67	6.00	0,71	5	2	7
Nr_2.1	Ensuring compatibility between AI and the current procedure of Business Analysis is important.	9	4.56	6.00	1,13	5	1	6
Nr_3.1	AI is too complex to be used in the Business Analysis.	9	2.22	2.00	1,20	3	1	4
Nr_1.2	Using AI in the Financial Statements Analysis will be an advantage to me and the organization compared to the traditional methods.	9	5.67	6.00	1,22	4	4	7
Nr_2.2	Ensuring compatibility between AI and the current procedure of Financial Statements Analysis is important.	9	5.11	5.00	1,54	5	2	7
Nr_3.2	AI is too complex to be used in the Financial Statements Analysis.	9	2.22	2.00	1,20	3	1	4
Nr_1.3	Using AI will be an advantage to me and the organization when I try to forecast compared to the traditional methods.	9	5.11	6.00	1,69	5	2	7
Nr_2.3	Ensuring compatibility between AI and the current procedure of Forecasting is important.	9	5.56	6.00	1,13	5	3	7
Nr_3.3	AI is too complex to be used in Forecasting.	9	2.44	2.00	1,67	4	2	6
Nr_1.4	Using AI will be an advantage to me and the organization when executing the valuation compared to the traditional methods.	9	5.78	6.00	0,83	4	3	7
Nr_2.4	Ensuring compatibility between AI and the current procedure of Valuation is important.	9	5.56	6.00	1,88	5	2	7
Nr_3.4	AI is too complex to be used in Valuation.	9	2.22	2.00	0,97	3	1	4
Nr_1.5	Using AI in the Sensitivity Analysis will be an advantage to me and the organization compared to the traditional methods.	9	5.67	6.00	1,32	4	4	7
Nr_2.5	Ensuring compatibility between AI and the current procedure of Sensitivity Analysis is important.	9	5.67	6.00	1,50	4	4	7
Nr_3.5	AI is too complex to be used in Sensitivity Analysis.	9	2.44	2.00	1,01	4	2	6

Figure 15: Overview of Structured Data (Technological)

Question:	Structured Data Findings	Structured Meaning	Conclusion
Nr 1.1: "Using AI in the Business Analysis will be an advantage to me and the organization compared to the traditional methods"	The median score is 6, with a range of 2 (minimum 5, maximum 7) and a standard deviation of 0.71.	The respondents 'Agree' with the statement that AI can be an advantage to the organization.	Respondents fully agree that AI can be an advantage to the organization.
Nr 2.1: "Ensuring compatibility between AI and the current procedure of Business Analysis is important"	The median score is 5, with a range of 3 (minimum 3, maximum 6) and a standard deviation of 1.13.	The respondents 'Partially Agree' with the statement that compatibility is needed between AI and the current procedure of Business Analysis.	Most respondents agree on the statement that compatibility is needed, however some respondents partially disagree with this.
Nr 3.1: "AI is too complex to be used in the Business Analysis".	The median score is 2, with a range of 3 (minimum 1, maximum 4) and a standard deviation of 1.20.	The respondents 'Disagree' with the statement that AI is too complex to be used in the Business Analysis.	All respondents agree that AI is not too complex to be used in the Business Analysis. However, some are undecided about this statement.
Nr 1.2: "Using AI in the FSA will be an advantage to me and the organization compared to the traditional methods".	The median score is 6, with a range of 4 (minimum 3, maximum 7) and a standard deviation of 1.22.	The respondents 'Agree' with the statement that AI can be used as an advantage to the organization. However some respondents think it is not an advantage ('Partially Disagree')	Moderate variance, indicating mixed views on AI's advantage in Financial Statement Analysis, but with a slight lean toward agreement.
Nr 2.2: "Ensuring compatibility between AI and the current procedure of FSA is important".	The median score is 5, with a range of 4 (minimum 3, maximum 7) and a standard deviation of 1.54.	The respondents 'Partially Agree' with the statement that compatibility needs to be ensured between AI and the current procedure. However some respondents think it is not important because they 'Partially Disagree' with the statement.	High variance, showing respondents had differing opinions on AI compatibility with Financial Statements, indicating no clear consensus.
Nr 3.2: "AI is too complex to be used in the FSA".	The median score is 2, with a range of 3 (minimum 1, maximum 4) and a standard deviation of 1.20	The respondents 'Disagree' with the statement that AI is too complex to be used in the FSA.	All respondents agree that AI is not too complex to be used in the FSA. However, some are undecided about this statement.

Nr 1.3: “Using AI will be and advantage to me and the organization when I try to forecast compared to the traditional methods”.	The median score is 6, with a range of 5 (minimum 2, maximum 7) and a standard deviation of 1.69.	This high variance shows the most divided opinions in the dataset within the Technological Context, suggesting a strong mix of views on AI's advantage in Forecasting.	The respondents agree that AI can be an advantage, but a high variance in Standard Deviation is apparent. This means that a big difference in vision and opinions is divided among the respondents from ‘Disagree’ to ‘Strongly Agree’.
Nr 2.3: “Ensuring compatibility between AI and the current procedure of Forecasting is important”.	The median score is 6, with a range of 4 (minimum 3, maximum 7) and a standard deviation of 1.13	The respondents ‘Agree’ with the statement that compatibility between AI and the current procedure is important in forecasting, however some respondents ‘Partially Disagree’ with the statement.	The respondents overall agree with the statement that compatibility between AI and the current procedure is important. Some partially disagree with the statement.
Nr 3.3: “AI is too complex to be used in Forecasting”.	The median score is 2, with a range of 5 (minimum 1, maximum 6) and a standard deviation of 1.67	The respondents “Disagree” with the statement that AI is too complex to be used in forecasting, however some respondents ‘Agree’ with the statement.	The respondents overall disagree with the statement that AI is too complex to be used in forecasting. However, some respondents agree with the statement.
Nr 1.4: “using AI will be an advantage to me and the organization when executing the valuation when compared to the traditional methods”.	The median score is 6, with a range of 2 (minimum 5, maximum 7) and a standard deviation of 0.83	The respondents ‘Agree’ with the statement that AI can be an advantage to the organization when executing the valuation.	All of the respondents agree on some level with the statement that AI will be an advantage to the organization when executing the valuation.
Nr 2.4: “Ensuring compatibility between AI and the current procedure of Valuation is important”.	The median score is 6, with a range of 5 (minimum 2, maximum 7) and a standard deviation of 1.88	The highest variance, showing widely varying opinions on the importance of AI compatibility in Valuation	A divided agreement/disagreement with the statement that compatibility needs to be ensured in the valuation procedure. A wide variance in opinions is apparent.

Nr 3.4: “AI is too complex to be used in Valuation”.	The median score is 2, with a range of 3 (minimum 1, maximum 4) and a standard deviation of 0.97.	The respondents ‘Disagree’ with the statement that AI is too complex to be used in the valuation procedure. Some respondents are undecided on this statement.	All of the respondents disagree with the statement that AI is too complex to be used in the valuation procedure, with some respondents being undecided on this matter.
Nr 1.5: “Using AI in the Sensitivity Analysis will be an advantage to me and the organization compared to traditional methods”.	The median score is 6, with a range of 4 (minimum 3, maximum 7) and a standard deviation of 1.32	The respondents ‘Agree’ on the statement that AI can be an advantage to the organization in the Sensitivity Analysis”. However, some ‘Partially Disagree’ with this statement.	Most respondents agree on the statement that AI will be an advantage to the organization in the Sensitivity Analysis. However, some respondents partially disagree with the statement. Opinions and visions are divided on this statement.
Nr 2.5: “Ensuring compatibility between AI and the current procedure of Sensitivity Analysis is important”.	The median score is 6, with a range of 4 (minimum 3, maximum 7) and a standard deviation of 1.50	The respondents ‘Agree’ on the statement that compatibility needs to be ensured in the Sensitivity Analysis procedure. However, some respondents ‘Partially Disagree’ with this statement.	Most respondents agree on the statement that compatibility needs to be ensured, however some respondents disagree. Opinions and visions are divided on this matter.
Nr 3.5: “AI is too complex to be used in the Sensitivity Analysis”.	The median score is 2, with a range of 3 (minimum 1, maximum 4) and a standard deviation of 1.01.	The respondents ‘Disagree’ on the statement that AI is too complex to be used in the Sensitivity Analysis. However, some respondents are left ‘Undecided’ on this matter.	All of the respondents disagree on the statement that AI is too complex to be used in the Sensitivity Analysis. Some are however undecided on this matter.

Table 8: Structured Data (Technological)

In summary, the table below will show the overall scoring of each statement according to the median score and taking into consideration the standard deviation. Divided in sections according to the variables from the literature and according to the DOI-TOE framework.

Context	Statement	D/U/A
Technological	**Relative Advantage**	
	Nr 1.1: "Using AI in the Business Analysis will be an advantage to me and the organization compared to the traditional methods"	Agree
	Nr 1.2: "Using AI in the FSA will be an advantage to me and the organization compared to the traditional methods".	Agree
	Nr 1.3: "Using AI will be and advantage to me and the organization when I try to forecast compared to the traditional methods".	Agree
	Nr 1.4: "using AI will be an advantage to me and the organization when executing the valuation when compared to the traditional methods".	Agree
	Nr 1.5: "Using AI in the Sensitivity Analysis will be an advantage to me and the organization compared to traditional methods".	Agree
	Compatibility	
	Nr 2.1: "Ensuring compatibility between AI and the current procedure of Business Analysis is important"	Agree
	Nr 2.2: "Ensuring compatibility between AI and the current procedure of FSA is important".	Agree
	Nr 2.3: "Ensuring compatibility between AI and the current procedure of Forecasting is important".	Agree
	Nr 2.4: "Ensuring compatibility between AI and the current procedure of Valuation is important".	Agree
	Nr 2.5: "Ensuring compatibility between AI and the current procedure of Sensitivity Analysis is important".	Agree
	Complexity	
	Nr 3.1: "AI is too complex to be used in the Business Analysis".	Disagree
	Nr 3.2: "AI is too complex to be used in the FSA".	Disagree
	Nr 3.3: "AI is too complex to be used in Forecasting".	Disagree
	Nr 3.4: "AI is too complex to be used in Valuation".	Disagree
	Nr 3.5: "AI is too complex to be used in the Sensitivity Analysis".	Disagree
Organizational	**Top Management Support**	
	Nr 4.1: "Top Management considers AI adoption as important to the organisation in digital transformation".	Agree
	Nr 4.2: "Top Management effectively communicates its support for the use of AI".	Agree
	Nr 4.3: "Top Management is likely to invest funds in AI-related technologies".	Agree
	Firm Size	
	Nr 5.1: "Larger firms are more benefited from this new technology because they have capacity to invest".	Agree
	Nr 5.2: "Smaller firms avoids to use this technology".	Disagree
	Nr 5.3: "The capital of my company is high compared to the industry"	Agree
	Absorptive Capacity	
	Nr 6.1: "Technological infrastructure as well as human resources are needed to support adoption of AI in the firm".	Agree
	Nr 6.2: "The firm seeks out new ways to do things in AI".	Agree

Enviromental	**Competitive Pressure**	
	Nr 7.1: “It is a strategic requirement to utilize AI to compete in the market”.	Agree
	Nr 7.2: “I believe the firm will lose market share if it does not adopt AI in the digital transformation”.	Agree
	Nr 7.3: “It is necessary to adopt AI as it allows to have more accuracy in the BV process”.	Disagree
	Business Partner	
	Nr 8.1: “I would utilize AI to improve coordination among the business partners”.	Undecided
	Nr 8.2: “My organization is willing to facilitate intraorganizational collaboration between different business partners through new formats and tools”.	Agree
	Nr 8.3: “Our business partners are against the adoption of AI”.	Disagree

Table 9: Summary of structured data answers

When summarizing, three notable discoveries are made:

- Nr. 5.2: “Smaller firms … this technology” – Disagree
- Nr. 7.3: “It is necessary … in the BV process” - Disagree
- Business Partner Nr. 8.1 to 8.3 – Division of opinions

Nr. 5.2: “Smaller firms … this technology”

Statement 5.1 highlights that larger firms benefit more from new technology because they have the resources and capacity to invest, in which this case the respondents agree with. Similarly, Statement 5.3 reinforces this by showing that firms with higher capital (likely larger firms) are better positioned to adopt and benefit from such advancements. These two statements clearly emphasize the advantages that larger firms have when it comes to adopting new technology.

However, Statement 5.2, which suggests that smaller firms avoid using this technology, received a disagree response. While this might seem different at first glance, it actually complements the other two statements. It suggests that while larger firms have clear advantages, smaller firms are not completely avoiding the technology. Instead, they are still engaging with it, albeit at a different scale or pace, despite their resource limitations. This indicates that smaller firms, while facing challenges, are finding ways to adopt new technology, likely driven by competitive pressures or the availability of affordable solutions. This demonstrates that firm size, while influential, does not entirely determine whether a company adopts new technology.

Nr. 7.3: “It is necessary … in the BV process”

The disagreement with Statement 7.3, “It is necessary to adopt AI as it allows to have more accuracy in the BV process,” contrasts with the agreements of Statements 7.1 and 7.2, which emphasize the strategic importance of AI for competitive pressure. This inconsistency can be explained by two key insights that reflect respondents' priorities and/or perceptions.

Firstly, respondents most likely view AI as a tool for achieving broader goals rather than focusing on specific process improvements like ‘accuracy in the BV process’. The strong agreement with Statements 7.1 and 7.2 suggests that respondents prioritize AI's role in maintaining competitiveness. In contrast, the narrower focus on "accuracy" in Statement 7.3 may not suggest as a critical reason for AI adoption, especially if respondents see accuracy as a secondary benefit or believe the BV process is already sufficiently accurate.

Secondly, the wording of Statement 7.3 may have influenced the responses. The term "accuracy" might have been interpreted differently or perceived as less relevant in the context of AI adoption. Respondents may have associated AI with benefits like efficiency, scalability, or innovation rather than accuracy, particularly in processes where human expertise or existing methods are already trusted and used intensively.

Therefore, these statements should be used with caution, as their interpretation may vary depending on respondents' priorities, perceptions, and the specific wording of the statements.

Business Partner Nr. 8.1, 8.2 and 8.3

The variable "Business Partner" has been evaluated through several statements, but the responses reveal a lack of consensus, with opinions varying across the statements. This inconsistency makes it difficult to draw a unified conclusion about the variable. Specifically:

Nr 8.1: "I would … business partners":

"I would utilize AI to improve coordination among the business partners" received an undecided response, indicating uncertainty or mixed views on the use of AI for coordination.

Nr 8.2: "My organization … and tools":

"My organization is willing to facilitate intraorganizational collaboration between different business partners through new formats and tools" received an agree response, showing a positive stance toward collaboration.

Nr 8.3: "Our business … of AI":

"Our business partners are against the adoption of AI" received a disagree response, suggesting that business partners are not opposed to AI adoption.

These divided opinions highlight a lack of alignment among respondents regarding the role of AI and collaborating in the context of business partners. As a result, the variable "Business Partner" cannot be used in this context, as the mixed responses prevent a clear and impactful interpretation.

5.4 Unstructured Data Analysis

The unstructured data analysis is comprehended of 222 codes from 9 interviews conducted with the sample characteristics from Section 5.2. This section will be structured according to the DOI-TOE framework as seen in Figure 8: Integrated DOI-TOE model (Author's design). In the following table, the variables discovered in the unstructured data will be displayed together with the frequency of codes for every variable. For the variables that have more than twenty codes, the codes have been submitted to a more thoroughly analysis to increase understanding of the variables.

Context	Existing Variables	Frequency	Sub Variables	Frequency
Technological	Relative Advantage	90 codes	Efficiency & Time-Saving	39 codes
			Improved Accuracy & Precision	32 codes
			Decision-Making & Problem-Solving	19 codes
	Compatibility	48 codes	Technical Compatibility	21 codes
			Human Compatibility	20 codes
			Cultural and Societal Compatibility	7 codes
	Complexity	13 codes	N/A	N/A
Organizational	Top Management Support	4 codes	N/A	N/A
	Firm Size	5 codes	N/A	N/A
	Absorptive Capacity	19 codes	N/A	N/A
Environmental	Competitive Pressure	2 codes	N/A	N/A
	Business Partner	0 codes	N/A	N/A

Context	New Variables	Frequency	Sub Variables	Frequency
TBD	Reliability	26 codes	Trust and Dependence	19 codes
			Quality of Input/Output Data	7 codes
	Unfamiliarity	12 codes	N/A	N/A
	Safety & Privacy	6 codes	N/A	N/A

Table 10: Codes of Unstructured Data

Important to note is that the number of occurrence in the interviews does not determine whether a variable is applicable to the research question. However, the frequency of codes can offer valuable insights, but it should be stated that it is not the primary criterion for determining the relevance of a variable. Instead, it serves as a supportive measure that helps identify which themes might be more prominent or significant. By examining the frequency of specific codes within the data, insights can be gained into the perceived importance or relevance of particular variables in the analysis. This can guide the exploration of why certain themes are more prevalent and what they reveal about the phenomena being studied.

Because the three newly found variables have not been explained in the theoretical framework, the three new variables will be shortly explained below.

I. Reliability
    - Reliability implicates the trust and dependence on the technology. In this, various aspects such as the risk of relying too much on the AI technology and the quality of the output/input data is being considered. These arguments are being seen as important by the respondents in the consideration of adopting Artificial Intelligence in the Business Valuation process.

II. Unfamiliarity
    - Unfamiliarity implicates the undiscovered potentials of AI and the lack of prior knowledge AI. Examples were given such as (not) sharing knowledge among professionals or the lack of priority due to the unknown potential of AI.

III. Safety & Privacy
    - Safety & Privacy conveys the fear of safety and privacy threats due to technology development, policy-making and ethical considerations. Safety considers the ethical use of the technology and the protection from cyber threats. Privacy considers the data protection and anonymization of personal data, but also the regulations from the government such as the GDPR (General Data Protection Regulation, see Section 3.2.3).

6. Results

The analysis of Chapter 5 will be used to explore how combining unstructured and structured data enhance the understanding of variables influencing the intention to adopt AI in the Business Valuation process. By integrating these two research methods, triangulation will be used in order to provide a more comprehensive perspective on AI adoption. By using this approach, a cross-examination will be executed to discover different angles, revealing deeper insights into the motivations, challenges, and perceptions surrounding the adoption of AI technology in the Business Valuation process. Though this nuanced analysis, a clearer picture will be offered of what drives or hinders the adoption of AI in the Business Valuation process. The existing and newly-discovered variables will be explained using triangulation, citations from the interviews and the data from the structured set of questions. Additionally, the variables that have a higher code occurrence of 20 or more, will be evaluated more deeply because they might represent broad or overarching concepts that encapsulate multiple related ideas or experiences. Respondents may use these terms to refer to a variety of underlying themes or issues, making them critical to understand in depth. A threshold of 20 codes strikes a balance between ensuring that frequently mentioned themes are explored in depth and maintaining a manageable scope for analysis.

6.1 Technological Context

1. Relative Advantage *is the degree to which an innovation is perceived as being better than the idea it supersedes (Rogers, 1962). The degree of relative advantage is often expressed in economic profitability, status giving, or in other ways.*

In the structured data research, Nr 1.1, 1.2, 1.3, 1.4 and 1.5 ask about the relative advantage in which all the median scores are 'Agree' when asking the respondents if AI will be an advantage to them and the organization. However, in Nr. 1.3 and Nr. 1.5 the respondents varied in opinions and visions about the advantage of AI in the Forecasting & Sensitivity Analysis process.

Nr. 1.3: *"Using AI will be and advantage to me and the organization when I try to Forecast compared to the traditional methods".*

Nr. 1.5: *"Using AI in the Sensitivity Analysis will be an advantage to me and the organization compared to traditional methods".*

In total, 90 codes have been discovered that relate to the variable 'Relative Advantage' during the Unstructured Data Research. Considering the Sensitivity Analysis, one respondent said the following: "*It helps you do that more easily; otherwise, you would have to build all of that yourself, and perhaps you could do it much more smoothly with AI." (Subject 2)*. The respondent implicates that conducting the Sensitivity Analysis, AI could build a model in which the Sensitivity Analysis can be performed, while some professionals still build their own model when valuation an organization. Without AI, the professional would need to build and manage complex models and scenarios but AI can streamline this whole process and make it more smoothly. However, Subject 1 said the following: *"Before AI, there were also sensitivity analyses done... it is not necessary to use AI, but it can help to analyse certain data more effectively".* Subject 1 states that no valuator needs AI in order to come up with a valuation and do a Sensitivity Analysis for a business. Subject 1 admits that there is an advantage to it but states that it is most definitely not necessary.

Another respondent says the following about the process in general: *"So I really see it as a solution to also take over a part that we might otherwise not be able to carry out because we don't have the people."* *(Subject 4).* The respondent implicates an advantage of AI, which suggests that AI is viewed as a way to handle tasks or responsibilities that would be challenging or impossible to manage without the human resources, especially in a time where human resources are scarce.

In general, the respondents agree that AI will have a relative advantage to it when compared to the traditional methods. But some respondents argue that AI is not an advantage to the whole process, but it would definitely enhance the way of Business Valuation in some sections.

Due to the totality of 90 codes, a more in-depth look will be given to the context of the 90 codes given the fact that 'Relative Advantage' can be seen as an umbrella term.

Therefore, the following three sub codes have been discovered:

- **Efficiency & Time-Saving** relates to the fact that AI can automate repetitive tasks, process large amounts of data quickly, and streamline workflows, reducing the time spent on routine tasks. Subject 7 states the following: *"To do a lot of typically lengthy processes, such as writing an investment proposal, used to take me quite a lot of time. And nowadays, yes, of course, you still need the same amount of time for the thought process and discussions, etc., but the actual working out of your ideas has just become a lot easier and faster".* Where the respondent states that the lengthy process of working out ideas is now being done by AI which saves time and is way more efficient. Subject 5 adds the following to this sub-code: "*Then you just type in, I want to make a follow-up call about this or that. Give me a little script. Well, you get a really simple script right away".*
- **Improved Accuracy & Precision** means that AI can provide more precise and consistent outputs by reducing human error in data processing and analysis. Subject 8 has the following view upon this: "*AI can process and analyse large amounts of data, but it is up to us to interpret and use that information properly".* In this, Subject 8 discusses that AI processes and analyses data accurately and is providing a foundation for humans to make precise decisions. This statement is similar to the vision of Subject 3: "*If you give AI proper access to the right sources, which accurately distil what has been used in the world of acquisitions, then with the right questions, you can quickly get your comparables properly articulated"*¸ which means that AI can precisely extract and distil information, leading to more accurate comparisons and valuations. Both subjects view AI as a tool to improve the accuracy and precision of the information coming from an AI tool.
- **Decision-Making & Problem-Solving** means that AI aids in solving complex problems and making decisions by processing data and offering insights that enhance human judgment. Subject 2 and 7 share the same view, whereas subject 7 states that *"by using AI to run various simulations side by side, you could say that you are already adding significant value to the business valuation process fairly quickly".* Subject 2 states: *"I think AI would also enable you to make that forecast even more dynamic. By adding more knowledge, but also, let's say, by asking different questions, you can build a different type of forecast much faster".* Both Subject 2 and Subject 7 view AI as a way of offering decision-makers a more flexible way and solving problems more rapidly.

2. Compatibility - *is the degree to which an innovation is perceived as consistent with the existing values, past experiences, and needs of potential adopters (Rogers, 1962). The compatibility of an innovation can be determined: with sociocultural values and beliefs; with previously introduced ideas in the organization, or with needs for innovations.*

In the structured data research, Nr. 2.1, 2.2, 2.3, 2.4 and 2.5 asks about the compatibility of AI and the current procedure of all the five process segments in Business Valuation. The statements are as follows:

Nr. 2.1: "Ensuring compatibility between AI and the current procedure of Business Analysis is important"

Nr. 2.2: "Ensuring compatibility between AI and the current procedure of FSA is important".

Nr. 2.3: "Ensuring compatibility between AI and the current procedure of Forecasting is important".

Nr. 2.4: "Ensuring compatibility between AI and the current procedure of Valuation is important".

Nr. 2.5: "Ensuring compatibility between AI and the current procedure of Sensitivity Analysis is important".

Most respondents agree with the five statements given in the structured set of questions, however at every statement, only one respondent (Subject 3) does not think that ensuring the compatibility between AI and the current procedure is important. During the unstructured data research, a many heard argument is the following, as said by Subject 6: *"I think that AI provides a consistent outcome. I see it as a disadvantage that it essentially removes some of the cognitive effort from the evaluator. When the input is provided and a final report comes out, it becomes harder to check it. When you write a report yourself, you also keep everything clearly in view."* Or the following statement by Subject 9: "*So it's a kind of collaboration; you still need to be able to think critically yourself".* Subject 6 and 9 implicate that AI will not fully take their job, because every professional has to critically think about the outcome of AI and still has to justify the outcome to the other parties. The compatibility between the valuator itself and the output from an AI tool/model is highly valued by the respondents. Subject 3 is quite resistant to the adoption of AI, one of its statements are: *"And for that, an entrepreneur won't just get it from an AI tool. For that, I think human advising will always remain superior".* Subject 3 does not think that AI will be compatible with the current procedure because Subject 3 argues that human advising will always be superior to AI (or any other technology) and therefore does not have to be compatible with any technology.

In general, all respondents who are willing to adopt AI argue that it is important to ensure that AI and the current procedures are in synergy with each other.

Due to the totality of 48 codes, a more in-depth look will be given to the context of the 48 codes given the fact that 'Compatibility' can be seen as an umbrella term.

Therefore, the following three sub codes have been discovered:

- **Technical Compatibility** means that this sub-code assesses how well AI systems can be integrated with existing BV tools and processes, considering their technical capabilities and/or limitations. Subject 8 says the following: "*This naturally costs money and a lot of time to ensure that it aligns well with our current procedure".* Subject 8 talks about the need to balance the benefits of innovation with the technical challenges of implementation, including the view that, even if there is money and time, is it possible to align AI with the current procedure. Subject 5's view is similar, considering the following statement: *"On the other hand, garbage in is garbage out. So there is also a lot of nonsense on the internet if it is not filled in correctly and if the algorithm is not built correctly."* Which underscores the critical role of robust algorithm design, because algorithm design refers to the integration of AI into existing workflows. If the algorithm is not compatible, it can lead to integration complications.
- **Human Compatibility** refers to the compatibility of AI with human roles and decision-making processes, highlighting the need for human oversight and the unique insights humans provide. An important statement by Subject 7 considering human compatibility: "*So the business valuation you perform for an entrepreneur or for a director-major shareholder or whatever, that is just the result. The emotional separation of saying goodbye to your company is something that AI cannot easily take over"*. The statement emphasizes that while AI can support many business functions, the emotional and personal aspects of certain decisions and transitions remain firmly within the realm of human capability, highlighting the need for human compatibility in these areas.
- **Cultural and Societal Compatibility** acknowledges that AI adoption has to align with societal values and user expectations, including concerns about job displacement and the broader impact on society. Subject 8 states that *"there is also the risk that people will lose their jobs because of AI, as AI will likely be able to take over many tasks that people currently do in the future."* Subject 8 addresses concerns about job displacement, which is a significant societal issue together with the statement of Subject 2, which says: *"So you have to be open to it, and the second is translating it into practice."* Subject 2 emphasizes the cultural shift towards accepting and embracing AI. Overcoming resistance and willing to integrate AI into existing practices is a cultural issue in many organizations.

3. Complexity - *is the degree to which an innovation is perceived as relatively difficult to understand and use (Rogers, 1962). If an innovation is too complex, as perceived by members of a social system, the rate of adoption will be negatively affected.*

In the structured data research, Nr. 3.1, 3.2, 3.3, 3.4 and 3.5 ask the respondent to grade the following statements about Complexity:

Nr 3.1: "AI is too complex to be used in the Business Analysis".

Nr 3.2: "AI is too complex to be used in the FSA".

Nr 3.3: "AI is too complex to be used in Forecasting".

Nr 3.4: "AI is too complex to be used in Valuation".

Nr 3.5: "AI is too complex to be used in the Sensitivity Analysis".

Most of the respondents disagree with the statement that AI is too complex in the five segments of the Business Valuation process, however some respondents are undecided on this topic. During the structured data research, Subject 5 states the following: "*In business valuations, I think it can be very useful, but building a separate model for each company seems quite complex".* Subject 5 acknowledges the potential utility of AI but also notes the complexity it involves in creating customized models for every individual organisation. The model needs to adhere to the principles and wishes of the organisation and every organisation has a different path to a certain value. Subject 2 concludes that with the following statement: *"The risk is that you really need to know what you're doing, so you have to understand where something comes from".* The respondent emphasizes the importance of understanding and being cautious when using complex tools with AI. Using AI, it's crucial to have a deep understanding of how it works. This includes e.g. know-how of the algorithms, data sources and the underlying principles but also the origins of data and the functioning of Artificial Intelligence.

In conclusion, all respondents agree that complexity is a big part of adopting AI into the business valuation process but being cautious about understanding AI and effectively manage the risks is important to them.

6.2 Organizational Context

4. Top Management Support – *is the support from the Top Management due to its essential factor to overcome barriers and the resistance to change (Lin, 2014).*

During the structured data research, the following statements were used:

Nr 4.1: "Top Management considers AI adoption as important to the organisation in digital transformation".

Nr 4.2: "Top Management effectively communicates its support for the use of AI".

Nr 4.3: "Top Management is likely to invest funds in AI-related technologies".

Overall, the respondent all agree to the above three statements. During the unstructured data research, some respondents gave an insight into why they would agree to the statement considering the Top Management Support. With only four codes among the nine respondents, not much information is available and means that the respondents do not think instantly about the support from its management when adopting AI. To take note, the following two subjects are CEO or Managing Director at the organisation and state the following: Subject 2: *"It is a priority. It's really a priority whether you use AI and want to develop it or not".* Subject 2 states that it is a priority issue whether you want to develop with an AI tool or wants to take a wait-and-see approach to discover what the competition is doing. Subject 4: *"I need to think about it as well, because I don't think about it day in and day out".* Subject 4 indicates that they need time to consider the matter further because it is not something they continuously ponder. Both subjects 2 and 4 can agree that it is a priority thing and they do not think about this matter a lot, given the fact that both of these subjects carry a Top Management title, both Top Managers do not think about this enough to take initiative into adopting AI.

In conclusion, the structured data results reveal that the respondents agree that top management considers AI adoption as important and that it is likely that they would invest in AI-related technologies, but do not feel any pressure to adopt AI that quickly, because "they do not think about it day in day out" or describe that "It's really a priority whether you use AI and want to develop in it or not" which does not state any pressure from the Top Management.

5. Firm Size - *Larger organizations have been found more likely to adopt new technology, as they have more resources, flexibility and ability to take risks than smaller organizations have (Lin, 2014).*

During the structured data research, the following statements were used:

Nr 5.1: "Larger firms are more benefited from this new technology because they have capacity to invest".

Nr 5.2: "Smaller firms avoids to use this technology".

Nr 5.3: "The capital of my company is high compared to the industry".

Most of the respondents agree with statements 5.1 and 5.3, while most of the respondents disagree with statement 5.2. However, the following result is noteworthy:

Nr. 5.1 shows a high range (minimum 2, maximum 7). Most respondents (strongly) agree with the statement, but one respondent disagrees with the statement.

Subject 4 is a respondent disagreeing with this statement. Subject 4 states the following: "*Yes, it also has to do with the size. Look, we are a small team; there are only *anonymized* of us, but we can be just as innovative as a company with more than 200 employees.*" Looking further in this comment, Subject 4 is employed by a small organisation and argues that when larger firms have a higher investment budget, they can take risks to develop AI tools but this does not necessarily mean that a more accurate and more efficient AI tool is being invented. Large organizations can sometimes struggle with bureaucracy, slower decision-making or resistance to change.

Another respondent (Subject 1) states the following: *"When you have a large organization and you can leverage it more broadly, you have many more processes where you can build this".* Subject 1 states that organisations can leverage their size to integrate new innovations across many processes. This broader application gives them the opportunity to maximize the benefits of AI throughout their organization. But also states that: *"Larger companies can invest more, but smaller companies are often more flexible"* meaning that smaller companies often benefit from increased flexibility, enabling them to adapt quickly to changes and skip the long road of bureaucracy.

Overall, all the respondents agree that firm size does matter when adopting AI. But all respondents argue differently about how firm size impacts the adoption of AI.

6. Absorptive Capacity - *is the organisational readiness for the emerging technology about the emerging technology (Lippert & Govindarajulu, 2006)*

In the structured data research, Nr. 6.1 and 6.2 ask the respondent to grade the following statements:

Nr. 6.1: "Technological infrastructure as well as human resources are needed to support adoption of AI in the firm."

Nr. 6.2: "The firm seeks out new ways to do things in AI."

In both cases, the respondents agree with the statements and feel that the Absorptive Capacity example statements are relevant to their situation, which implicates that this factor, considering the structured data research, matters to the adoption intention of AI in the Business Valuation process. However, Subject 1 stands out, due to its answer that it disagrees with statement Nr. 6.2, in which the explanation for this was as follows: *"There are also offices where the average age is a bit older like our firm... the younger generation who are just finishing school... have grown up with AI but aren't employed at our firm".* Subject 1 argues that the employees who are familiar with AI and know what AI can do, have not yet entered their firm as employees and cannot spread the idea of seeking out new ways to do things with AI. For the rest of the respondents, all of them agree that the firm is looking for new ways to do things in AI and accept the statement that technological infrastructure and HR are needed to support the adoption of AI in the firm. Another respondent (Subject 2) said: "*The most important thing is acceptance, so culture; if you have a young team, it goes much faster than if you have people like me, so to speak".* The respondent is emphasizing that culture and acceptance is a heavily depends on age and openness, which argues that the absorptive capacity of the employees/employers are determined in adopting AI. A younger team, presumably more familiar with or receptive to AI will adapt more quickly than an older team, in this context Absorptive Capacity is important.

In general, respondents agree that the absorptive capacity (in this context mostly staff/employees) is important for adopting AI.

6.3 Environmental Context

7. Competitive Pressure - *drives organizations to seek competitive advantages by adopting a new technology. The pressure resulting from a threat of losing competitive advantage, forcing firms to adopt and implement a new technology (Lin, 2014).*

During the structured data research, the following statements were used:

Nr 7.1: "It is a strategic requirement to utilize AI to compete in the market".

Nr 7.2: "I believe the firm will lose market share if it does not adopt AI in the digital transformation".

Nr 7.3: "It is necessary to adopt AI as it allows to have more accuracy in the BV process".

Overall, the respondent agree with Nr. 7.1 and 7.2 and disagree with Nr. 7.3. However, only two codes have been discovered among the nine respondents and the median of the scores lies closely to the argument of 'Undecided' on this particular topic. In order to delve into the variable Competitive Pressure, the following two comments are made by, respectively, Subject 5 and Subject 9: *"But when it comes to business valuations, I'm not too concerned. I don't think I'll fall behind if I don't accept it."* and "*Especially people who are in businesses that are growing rapidly or entering new markets. They think differently and need to adopt AI."*

Subject 5 argues that Subject 5 is not particularly worried about adopting AI for business valuations. Subject 5 believes that not accepting or using AI will not significantly impact their ability to stay competitive or current in the field. Subject 9 argues that only the professionals who are in rapidly growing companies or those exploring new markets should have a different mindset and are more likely to benefit from adopting AI in the field. Embracing AI in those markets can be crucial for managing growth and staying competitive but is not applicable to the business valuation field, suggests Subject 9.

Overall, with only two codes from the unstructured data research and a general agreeing picture of all respondents and whereas the median score is closing the spectrum of 'Undecided' in the structured data questions, it can be argued that Competitive Pressure is not really a present variable considering AI in the Business Valuation field.

6.4 Newly Discovered Variables

Below are the newly discovered variables. Among these three variables, no structured data is available due to absence of prior knowledge of these variables in the literature review and theoretical background. The following variables are fully grounded on a unstructured data research basis. These variables will be shown to their according place in the T-O-E framework later in this chapter.

8. Reliability [NEW] - *implicates the trust and dependence on the technology. In this, various aspects such as the risk of relying too much on the AI technology and the quality of the output/input data is being considered.*

Reliability was one of the three aggregate dimensions with 26 codes that was found in the dataset of the unstructured data research. All of the respondents argue that the data quality and accuracy of the input and output of the AI models are highly important in the business valuation process. Quality of input affects the output, which results in an AI that can be biased or a high risk of assumptions made by AI on the wrong data. Subject 7 states the following: *"Well, the output is still significant and largely depends on the input. So, if the input quality is poor, the output will also be poor"*. In this statement, Subject 7 emphasizes the effectiveness of the quality of the results (output) is heavily reliant on the quality of the data (input) used. This highlight the importance of relying too much on data whether it is quality or garbage data. Subject 5 agrees with this: *"On the other hand, garbage in is garbage out. So, there is also a lot of nonsense on the internet"*. Moreover, Subject 9 states that there is a high risk of assumptions that can be led to different outcomes: "*You can input the valuation of a company into a model, but there are also many assumptions involved that I think AI might not assess as well".* Subject 9 emphasises that while AI can be used to process and analyse company valuations through a model, there are numerous assumptions and subjective elements that AI may struggle with to evaluate correctly. All of these statements have one question in common: "Is AI (data or model) reliable enough to make a valid valuation?".

Due to the totality of 26 codes, a more in-depth look will be given to the context of the 26 codes given the fact that 'Reliability' can be seen as an umbrella term.

Therefore, the following two sub codes have been discovered:

- **Trust and Dependence** highlights the importance of trust in AI systems while cautioning against over-reliance without understanding their decision-making processes. It emphasizes the need for transparency, explainability, and human oversight to ensure AI is used responsibly and effectively. Subject 8 is aware of the potential biases and states the following: "*For example, if data contains biases, then AI can adopt those biases and make incorrect decisions, which means you can't just blindly adopt the decisions"*. By highlighting the risk of AI inheriting biases from data founded on human biases, subject 8 emphasizes the need for critical evaluation of AI outputs. Subject 5 agrees with subject 8 because of the following statement: "*That is also quite dangerous (AI output). Because you see that not all answers are correct".* Subject 5 points out the danger of relying on AI outputs, as they may not always be accurate or correct, highlighting the need for caution and verification. In summary, trust and dependence as a sub-code emphasizes the importance of trust and caution in using AI, highlighting the risks of over-reliance without understanding their decision-making processes. It underscores the need for transparency, explainability, and human oversight.
- **Quality of Input/Output Data** focuses on the critical role of high-quality input data in ensuring reliable AI outputs, underscoring the "garbage in, garbage out" principle. It stresses the necessity for rigorous data management and validation to maintain the accuracy and consistency of AI results. Subject 5 addresses another point in the same sentence as used in Compatibility. The following statement refers to both Compatibility and Reliability: *"On the other hand, garbage in is garbage out. So there is also a lot of nonsense on the internet if it (AI input) is not filled in correctly and if the algorithm is not built correctly"* Which underscores the critical role of ensuring that AI functions reliably and produces valid results when looking at the input. Subject 7 agrees with the following statement: "*Well, the output is, of course, still largely dependent on the input, so if your input quality is lousy, then the output will be lousy as well".* This reinforces the dependency of AI output quality on the quality of input data, highlighting the need for careful data management, such as data collection and preparation, data validation and bias mitigation. Focusing on these aspects can ensure that AI delivers meaningful and trustworthy results.

9. Unfamiliarity [NEW] - *implicates the undiscovered potentials of AI and the lack of prior knowledge of AI.*

Unfamiliarity has emerged as a key theme, with 12 statements from nine respondents highlighting its impact. These statements specifically address the implications of undiscovered potentials of AI and the lack of prior knowledge about AI. Subject 4 states that "*Everyone sees that it has great potential, but I don't have the feeling that people know exactly where it's headed".* Subject 4 acknowledges that there is some recognition of AI's potential, but is uncertain about its future direction. Subject 4 feels that people are not fully aware or clear about the specific trajectory of AI development. Subject 7 takes it further: *"Colleagues who are still a bit cautious or even just think, 'Well, time will tell.' Yes, just ignorance, they have no idea what the possibilities are and are stuck in routine processes"*. Subject 7 describes that some colleagues as being hesitant or dismissive about AI developments – "*have no idea what the possibilities are and are stuck in routine processes"* – they are perceived as being set in their traditional ways and unaware of the potential benefits that AI might offer. There is a bidirectional causation between being set in their traditional ways (routine) and unaware of potential benefits. If you don't know the potential benefits, knowledge is missing and you will stay stuck in the routine process. If you are stuck in a routine process, you are most likely lacking initiative and are not getting to know the potential benefits.

In general, respondents are unfamiliar with AI as a whole or just with its potential benefits. This results in scepticism, resistance, and reluctance to adopt AI, which can impede the integration of AI solutions and limit their effectiveness within organizations.

10. Safety & Privacy [NEW] - *conveys the fear of safety and privacy threats due to technology development, policy-making and ethical considerations.*

Safety & Privacy was uncovered as an aggregate dimension with 6 codes among the nine respondents. Safety & Privacy has been combined into one factor given the circumstances that these two variables are interrelated because protecting personal data (privacy) is crucial for preventing unauthorized access and misuse, which directly impacts the security and ethical operation of AI systems (safety). Ensuring robust data protection helps safeguard both privacy and safety of AI applications, maintaining trust and preventing harm. Subject 1 argues the following about Safety: "*data storage involves a lot of access to data and how you handle that storage which can also be a limiting factor (for adopting AI)".* Subject 1 highlights that managing data storage is crucial due to the extensive access required to handle data. The way data is stored can impact efficiency and effectiveness, particularly becoming a limiting factor for the adoption of AI when not handled properly. While Subject 1 argues that Safety is a limiting factor, Subject 4 says the following about Privacy: *"Privacy can indeed be seen as a threat (with AI). It's about how you handle that".* Subject 4 suggests that privacy issues can pose a significant threat when dealing with an AI model or tool. The core concern is managing and safeguarding privacy effectively to mitigate any potential threats. Subject 8 confirm the Privacy issue: *"But there are also problems, such as privacy and data sensitivity. People are concerned that their data may not be secure with AI, that it could potentially be exposed to the entire world, and that all their data might end up being public"* – meaning they point out the security of personal data, fearing it could be widely exposed or misused if not properly protected.

The decision to use the three variables — 8) Reliability, 9) Unfamiliarity, and 10) Safety & Privacy — is based on their significant role in understanding how AI is adopted in business valuation. Each of these variables highlights a different aspect of the challenges and opportunities identified during the interviews, allowing for a more detailed and clear analysis of the topic. Without including these variables, relying solely on those from the literature review would not fully capture the respondents' opinions and views. This could lead to an overuse of broad "umbrella terms," making the findings less specific and harder to interpret.

8. Reliability focuses on how trustworthy and dependable AI systems are. While existing variables like Compatibility and Complexity look at how AI fits into current systems and how hard it is to implement, Reliability is more about whether the AI can be trusted to deliver accurate and unbiased results. It also includes concerns about the quality of the data being used and the risks of relying too much on AI without proper checks. This is something that was not fully addressed by the existing variables but is clearly important based on the interviews.

9. Unfamiliarity highlights the lack of knowledge and understanding about AI, which came up as a big issue in the interviews. While variables like Absorptive Capacity and Top Management Support focus on how well a company can learn and apply new technologies, Unfamiliarity is more about the hesitation and uncertainty caused by not knowing enough about AI. This includes things like resistance to change and sticking to old ways of working, which are barriers that were not fully captured by the existing variables.

10. Safety & Privacy brings in concerns about ethical and security issues, like protecting data and preventing unauthorized access. These concerns are becoming more important as AI is used in sensitive areas like BV. While the existing variable like Competitive Pressure might touch on external factors, it does not directly address the fear of data breaches or privacy risks, which were clearly important to the respondents.

By including these three new variables, the analysis goes beyond the technological, organizational and environmental factors outlined in the literature to address the specific concerns and challenges raised by the respondents. This ensures that the findings are not only grounded in existing theory but also reflective of the real-world experiences and perspectives of those involved in the adoption of AI in the BV field. Together, the existing and newly identified variables provide a more complete framework for understanding the factors that influence AI adoption in this context.

6.5 Updated Integrated DOI-TOE model

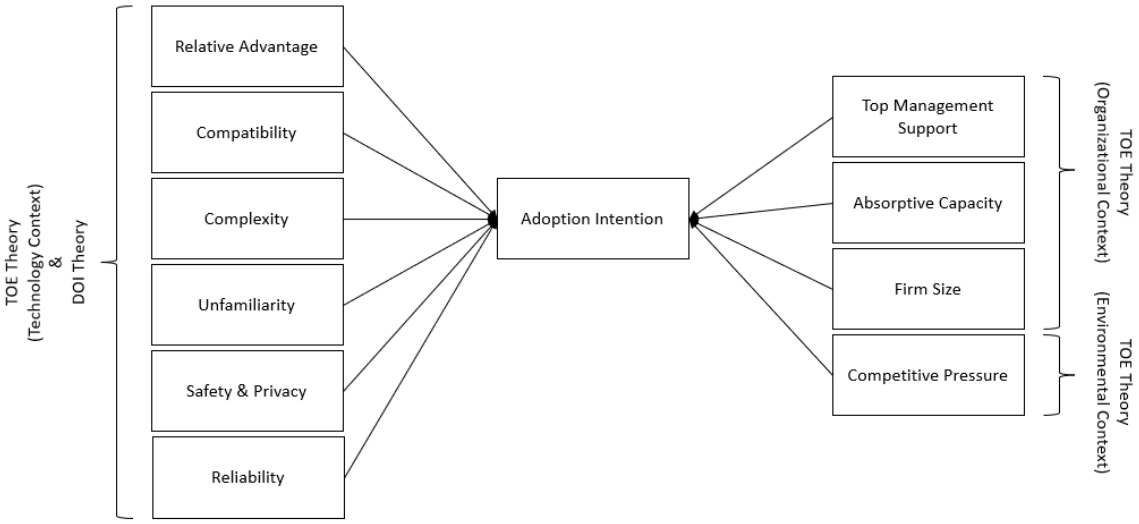

Figure 16: Updated integrated DOI-TOE model (Author's Design)

All three newly discovered variables have been put under the Technological Context because of the following reasons:

- **Unfamiliarity –** It directly translates to the technological aspect of the DOI-TOE framework because of concerns or barriers within AI itself. Unfamiliarity can hinder the adoption of AI due to the lack of knowledge about its existence in the first place, which can lead to fears of potential risks.
- **Safety & Privacy:** It directly translates to the critical concerns related to the security and integrity of the technology being adopted. These concerns are part of the Technological Context because they deal with the intrinsic properties of AI that might affect its adoption.
- **Reliability:** Reliability directly translates tot the consistency and dependability of AI in performing its intended functions without failure. This variable is also part of the Technological Context because it relates to the performance characteristics of AI. If AI is perceived as unreliable, it is less likely to be adopted as the organizations depend on stable and consistent AI in- and output to support their Business Valuation process.

To answer the central research question on what key drivers influence the adoption intention of AI in the Business Valuation process, this study reveals that the above ten factors influence this intention and are therefore considered important factors to consider when adopting AI in the Business Valuation Process in SME's.

7. Discussion

The study of AI adoption in Business Valuation shows some interesting patterns and contradictions that deserve closer attention. One key finding is the importance of Relative Advantage, which appears 90 times in the data. This suggests that professionals mainly look at AI adoption in terms of its potential benefits. However, this finding is more complex than it seems. While most respondents agree that AI has advantages, they see it as a tool to improve traditional methods, not replace them. For example, some say AI is "not necessary" but could be helpful, showing cautious optimism rather than full acceptance.

The technological context is especially important, with three new factor all falling into this category. This shows that the main challenges to adopt AI are technical and not organizational or environmental factors. Reliability, particularly regarding data quality and accuracy, is a major concern. Respondents mention the "garbage in, garbage out" principle, showing they understand that AI depends heavily on good input data.

An interesting contradiction appears when looking at Competitive Pressure. In the structured questions, respondents agree that AI adoption is strategically important. But in unstructured responses, they show little concern about falling behind competitors if they do not adopt AI. This suggests that while professionals see AI as important in theory, they do not feel an urgent competitive threat in their specific situations.

Top Management Support is another area with contradictions. While respondents agree in structured questions that leadership support is important, unstructured responses show that leaders often take a passive approach. For example, some say leaders "don’t think about it day in and day out," suggesting a gap between recognizing AI’s importance and actually prioritizing it. This raises questions about whether traditional models of technology adoption fully capture the complexity of AI integration.

This is quite an important statement because, for adopting AI into the business valuation process, a clear priority must be placed on its implementation. If the gap between recognizing AI’s importance and actually prioritizing its adoption continues to exist, there will likely be delays in fully realizing AI's potential benefits, leaving businesses at a disadvantage in terms of efficiency, innovation, and competitiveness.

Next, the findings on Compatibility show a deep understanding of its different aspects. Respondents highlight not just technical compatibility but also human and cultural compatibility. Some worry that AI might "remove cognitive effort" from valuators, raising concerns about maintaining professional judgment and expertise. This suggests that compatibility is not just a technical issue but also a question of professional identity and practice.

Firm Size also plays a more complex role than expected. Larger firms have more resources for AI adoption, but smaller firms may be more flexible and quicker to implement it. This challenges the idea that bigger firms are always better at adopting new technologies.

Following the emergence of Unfamiliarity as a key factor is particularly interesting. It’s not just about a lack of knowledge but also uncertainty about AI’s future and how it will be used. This shows that hesitation to adopt AI comes from deeper concerns about its evolution and impact on professional work.

Overall, the study shows that AI adoption in Business Valuation is shaped by a mix of recognizing its benefits and worrying about the challenges of using it. These findings suggest that traditional models of technology adoption may need to be updated to better reflect the complexity of AI adoption in professional services. The combination of technical capabilities, professional judgment, and organizational factors creates a more complicated picture than earlier studies of technology adoption.

Finally, respondents do not see AI as a revolutionary force that will completely change valuation practices. Instead, they view it as a tool that needs to be carefully integrated into existing methods and professional judgment. This cautious approach suggests that successful AI adoption in Business Valuation will require a more thoughtful and tailored strategy compared to other fields.

8. Limitations

This study aimed to explore the factors influencing the adoption intention of AI in the Business Valuation process. While the findings contribute to an understanding of this emerging technology, several limitations must be acknowledged. These limitations may have influenced the results and should be considered when interpreting the findings provided. By recognizing these constraints, a need for a better understanding is considered when looking at the boundaries of this research and identify areas for further investigation. While this study provides valuable insights for the adoption intention of AI in the Business Valuation process, it is important to acknowledge the limitations that may have impacted the findings and their generalizability. These limitations arise from various factors and are considered as methodological limitations and data & theoretical limitations.

8.1 Methodological Limitations

When analysing the interviews and applying the Gioia Methodology, the researcher conducted the iterative process independently, which introduces the potential for researcher bias. This bias can manifest when the researcher interprets or codes the data in a way that reflects their own preconceptions rather than accurately capturing the interviewees' intended meanings. The impact of this bias can be observed in two distinct stages: the interpretation stage during the interviews and the coding stage.

In the interpretation stage, there is a risk of miscommunication between the researcher and the interviewee. This occurs when the intended message from the interviewee is not accurately received or understood by the researcher, often due to assumptions made by either party. Such assumptions can lead to differences between what the interviewee intends to say and what the researcher perceives.

The second stage where bias can occur is during the coding process. At this stage, the researcher may inaccurately impose their own interpretations on the statements provided by the interviewee, potentially leading to misinterpretations of the interviewee's original intent. This can happen if the researcher makes assumptions about the meaning of the statements that do not align with the interviewee's perspective.

8.2 Data and Theoretical Limitations

In terms of conceptual ambiguity, the literature review showed that each researcher had their own way of understanding the different factors in the integrated DOI-TOE model. This means that these variables are hard to define clearly, which can lead to misunderstandings or too simple explanations. The ten variables in the model can be tricky because their meanings might change depending on who is looking at them. This makes it hard to have a consistent understanding across different studies. When researchers look at the DOI-TOE model, they often interpret its components based on their own experiences and perspectives. This can result in different definitions and uses of the same variables, making it challenging to compare results across the different studies. E.g., one researcher might see a variable like "Top Management Support" as direct involvement in AI projects by the top management, while another researcher might interpret it as the top management simply providing resources. These different views can lead to confusion and can make it difficult to build a unified area of knowledge.

One significant limitation of this study is the heterogeneity observed in several key variables, such as Age, Firm Age, Number of Employees, and Years of Experience. This variability indicates a diverse sample, which may affect the generalizability of the findings. The high coefficient of variation in these variables suggests that the sample includes a wide range of characteristics, potentially leading to varied responses and outcomes. This diversity can introduce complexity in interpreting the results, as the influence of these heterogeneous factors might not be uniformly distributed across the sample. Consequently, the findings may not be fully representative of a more homogeneous population, and caution should be exercised when extrapolating these results to broader contexts.

9. Recommendations

Based on the limitations identified, the this chapter provides recommendations for future research and practical implications for organizations considering the adoption of AI. Addressing these recommendations could enhance the robustness of future studies and eases the decision-making in the adoption of AI.

9.1 Theoretical Recommendations for Future Research

To minimize researcher bias, it is recommended to use inter-coder reliability. This involves having more than one researcher independently code the same dataset. Afterwards, the researchers compare their categorizations to make sure there is consistency in the results. This process helps to verify that the coding is not too much influenced by one of the researcher's personal biases or interpretations. By involving multiple researchers, the study can achieve a more objective analysis, as differences in coding can be discussed and resolved. This approach not only enhances the reliability of the findings but also strengthens the overall validity of the research process.

To address conceptual ambiguity, it is advisable to consult with various experts in the field. Engaging with experts who have different perspectives and definitions of the DOI-TOE model that can be invaluable in clarifying what a specific variable entails. These different viewpoints can help determine whether a variable is applicable and how the variable should be measured during the research. By incorporating insights from multiple experts, researchers can enhance their understanding of complex concepts, reduce ambiguity, and ensure that the variables are accurately defined and relevant to the study. This collaborative approach can lead to a more comprehensive and nuanced interpretation of the research results.

Finally, increasing the sample size can significantly enhance the generalizability of the results. A larger sample size provides a broader representation of the whole population, capturing a wider range of experiences and opinions. This diversity helps to ensure that all of the results are not skewed by the characteristics of a certain group within the sample size. By including more participants, the study can produce findings that are more trustworthy given the fact that the sample size would be more homogenous and less heterogenous, thereby increasing the robustness and applicability of the conclusion of this study. Future research should benefit from stratifying the sample or controlling for these variables to better understand their impact and to enhance the generalizability of this research' conclusions.

9.2 Practical Recommendations

The identification of key variables influencing AI adoption provides insights for organizations trying to find a way to integrate AI into their operations. These variables—Relative Advantage, Compatibility, Complexity, Top Management Support, Absorptive Capacity, Firm Size, Competitive Pressure, Unfamiliarity, Safety & Privacy, and Reliability—serve as a comprehensive roadmap to enhance AI adoption efforts. The following recommendations will be made according to the discovered variables:

Context	Actionable Variable	Actionable Recommendation
Technological	Leverage Relative Advantage	Clearly communicate the benefits of AI over traditional methods to employees. Highlight improvements in efficiency, accuracy, and decision-making capabilities. For example, emphasize how AI can streamline processes like Sensitivity Analysis, making them more efficient and less resource-intensive.
	Ensure Compatibility	Assess and enhance the compatibility of AI with existing systems and organizational culture. This includes technical integration with current tools and processes, as well as alignment with human roles and decision-making. Encourage a collaborative approach where AI complements human expertise, ensuring that professionals remain engaged and critical in the evaluation process.
	Address Complexity	Simplify AI adoption by providing training and resources to reduce perceived complexity. Make sure that employees understand the functionalities of AI, data sources, and underlying principles. This will help mitigate risks associated with using complex tools and results in a more confident workforce.
	Address Unfamiliarity	Reduce unfamiliarity by conducting an open dialogue about AI's potential and risks. Provide clear information and education to make AI clearer to understand and build trust among employees. This will help overcome scepticism and resistance, paving the way for successful AI adoption.
	Prioritize Safety & Privacy	Implement data protection measures to address concerns related to safety and privacy. Make sure employees comply with regulations and ethical standards to maintain employees confidence and prevent data breaches. This is essential for safeguarding both the privacy and security of AI applications and the employees.
	Ensure Reliability	Focus on developing reliable AI systems by ensuring high-quality data inputs and rigorous testing. Emphasize the importance of trust and transparency in AI processes, and maintain human oversight to verify AI outputs. This will help organizations depend on AI for accurate and consistent results, supporting their business valuation processes.

Organizational	Strengthen Top Management Support	Secure active involvement and commitment from top management to champion AI initiatives. This support is crucial for overcoming resistance to change and ensuring the necessary resources and strategic priorities are in place. Encourage management to communicate the importance of AI adoption and its role in digital transformation.
	Consider Firm Size	Make sure that AI strategies fit the organization's size and resources. Larger firms can leverage their size to integrate AI across multiple processes, while smaller firms can capitalize on their flexibility to quickly adapt and implement AI solutions. Recognize that both large and small organizations have unique advantages that can be harnessed in AI adoption.
	Enhance Absorptive Capacity	Invest in building the organization's readiness for AI by providing a culture of learning and innovate. Encourage openness to new ideas and technologies, especially to employees who may be less familiar with AI. This can be achieved through training programs and by promoting a culture that values adaptability/flexibility and innovation.
Environmental	Evaluate Competitive Pressure	Keep an eye out for industry trends and competitor activities to identify opportunities for applications that work with AI. While competitive pressure may not be a significant factor for all organizations as shown by this research, those in rapidly growing markets should consider AI adoption as a strategic necessity to maintain their competitive edge.

Table 11: Actionable recommendations key variables

By addressing these variables, organizations can strategically position themselves to successfully adopt AI, leading to enhanced competitiveness and innovation. These practical recommendations offer a clear pathway for navigating the complexities of AI adoption, ensuring that organizations can harness the full potential of AI to drive business growth and improve accuracy in the business valuation field.

10. Conclusion

This study aimed to explore the factors influencing the adoption of AI in SME's in the Business Valuation process. The findings indicate that the factors from the literature review, including Relative Advantage, Compatibility, Complexity, Top Management Support, Absorptive Capacity, Firm Size and Competitive Pressure are of importance in the adoption of AI in the BV process. By conducting a research consisting of semi-structured interviews and collecting structured data from nine respondents, new insights have been acquired about the adoption intention of Artificial Intelligence in the Business Valuation organizations. By conducting this research, new variables have been uncovered, including Unfamiliarity, Safety & Privacy and Reliability. These variables have been added to the integrated DOI-TOE model in order to extend the model and provide a more elaborated view. These results suggest that organizations that wish to adopt AI technologies in their day-to-day tasks, are advised to first consider these ten factors how these factors influence their adoption process. If an organization wants to adopt AI, but does not know where to start, this study is a good starting point on what to look for when seeking information about adopting AI in the BV process. Ultimately, understanding the challenges in AI and addressing the factors that relate to the adoption of AI is crucial for leveraging AI's potential in driving innovation and growth in Business Valuation organizations.

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Appendices

Appendix A – Informed Consent Form

Interview Consent Form

Research Title: Exploring the Adoption Intention of Artificial Intelligence in Business Valuation

Researcher: Sam H. Beernink

Interviewee: _____

Organization of Interviewee: _____

Introduction: I am conducting research on the adoption intention of Artificial Intelligence (AI) in the SME segment of Business Valuation. As part of this research, I would like to invite you to participate in an interview to gather insights and perspectives on this topic.

Purpose: The purpose of this interview is to understand your views and experiences regarding the integration of AI technologies in the business valuation process within SMEs.

Procedure:

- The interview will last approximately 60 minutes.
- The interview will be conducted in person.
- The interview will be audio-recorded for accuracy and reference purposes.
- The interviewer may also take notes during the interview to capture key points and insights.

Confidentiality:

- Your responses will be kept confidential and anonymous in any reports or publications resulting from this research.
- All data collected will be securely stored and only accessible to the researcher.

Voluntary Participation:

- Your participation in this interview is voluntary, and you have the right to withdraw at any time.
- You are not obligated to answer any questions that you feel uncomfortable with or do not wish to answer.

Videotaping and Recording:

- The interview may be videotaped for research purposes.
- Audio recording of the interview will also be conducted to ensure accuracy in data collection.

Informed Consent:

- By participating in this interview, you acknowledge that you have read and understood the information provided in this consent form.
- You consent to the audio recording, videotaping (if applicable), and note-taking during the interview.
- You understand that you can withdraw from participation at any time without any obligation.

Contact Information: If you have any questions or concerns about the research or your participation, please feel free to contact Sam Beernink before/during/after the interview is/was being conducted.

Participant's Signature: _____

Date: _____

Researcher's Signature: _____

Date: _____

Appendix B – Structure of Interview English Version

Beginning of the interview

Age:

A. 18 – 30
B. 31 – 40
C. 41 – 50
D. Above 50

Education Level:

A. High school qualification/Undergraduate
B. Graduate
C. Postgraduate

Job title:

A. Manager
B. Financial Analyst
C. Chief Information/Technology Officer
D. Managing Director/CEO/Founder
E. Other: _____

How many years of experience do you have in Business Valuation?

A. 1 - 5 years
B. 6 - 10 years
C. 11 - 15 years
D. 16 - 20 years
E. 21 years or more

Firm Age:

A. <3
B. 3 - <5
C. 5 – <10
D. 10 – <20
E. >20

Number of Employees:

A. <5
B. 5 – <50
C. 50 – <150
D. 150 – <300
E. >300

Average value of valued businesses:

A. <€100.000
B. €100.000 - <€500.000
C. €500.000 - <€1.000.000
D. €1.000.000 - <€2.000.000
E. >€2.000.000

Average number of valued businesses within one year:

A. <3
B. 3 - <5
C. 5 - <10
D. 10 - <20
E. >20

Most typical reason for purpose of business valuation:

A. Transaction valuation
B. Tax valuation
C. Financial reporting valuation
D. Regulatory valuation
E. Dispute resolution
F. Other: _____

Most common valuation method:

A. Relative Valuation (Comparables/Multiples)
B. Discounted Cash Flow (DCF)
C. Option Pricing Models
D. Asset-Based Valuations
E. Dividend-Based Valuation
F. Other: _____

"First, a couple of open-ended questions will be asked to understand your view and understanding of AI in the business valuation context."

OQ1: Could you please share your views about AI?
OQ2: To what extent do you think your organisation or colleagues are aware of Artificial Intelligence?
OQ3: In your opinion, what are the benefits and risks of AI over existing technology for business valuation services?
OQ4: How familiar are you with AI?
OQ5: What do you think about AI and its impact on the business valuation process?
OQ6: What would happen if you implemented AI in your business process?
OQ7: Why have or haven't you adopted AI in your business process?
OQ8: What is missing in the organization for you to adopt AI?
OQ9: What challenges do you believe organizations face in adopting AI?

"Secondly, the statements below are to be answered according to a 7-point Likert scale, depending on your opinion about the particular statement. Numbers 4.1 until 6.2 consider the Organizational context, while 7.1 until 8.3 considers the Environmental context."

7-point Likert-scale: 1 = strongly disagree, 2 = disagree, 3 = partially disagree, 4 = undecided, 5 = partially agree, 6 = agree and 7 = strongly agree

Nr.	Question	1	2	3	4	5	6	7
4.1	Top management considers AI adoption as important to the organization in digital transformation.							
4.2	Top management effectively communicates its support for the use of AI.							
4.3	Top management is likely to invest funds in AI-related technologies.							
5.1	Larger firms are more benefited from this new technology because they have capacity to invest.							
5.2	Smaller firms avoids to use this technology.							
5.3	The capital of my company is high compared to the industry.							
6.1	Technological infrastructure as well as human resources are needed to support adoption of AI in the firm.							
6.2	The firm seeks out new ways to do things in AI.							
7.1	It is a strategic requirement to utilize AI to compete in the market.							
7.2	I believe the firm will lose market share if the firm does not adopt AI in the digital transformation.							
7.3	It is necessary to adopt AI as it allows to have accuracy in the BV process.							
8.1	I would utilize AI to improve coordination among the business partners.							
8.2	My organization is willing to facilitate intraorganizational collaboration between different business partners through new formats and tools.							
8.3	Our business partners are against the adoption of AI.							
OQ10	Are there any other factors that could matter to enhance the adoption intention of AI in the organisation?							
OQ11	Are there any other factors that could matter to enhance the adoption intention of AI considering the environmental variables?							

"Thirdly, the statements below are discovering the Technological context. These are structured on the business valuation process described in the thesis:"
1st: Business Analysis
2nd: Financial Statements Analysis
3rd: Forecasting
4th: Valuation
5th: Sensitivity Analysis

7-point Likert-scale: 1 = strongly disagree, 2 = disagree, 3 = partially disagree, 4 = undecided, 5 = partially agree, 6 = agree and 7 = strongly agree

Business Analysis

Nr.	Question	1	2	3	4	5	6	7
1.1	Using AI in the Business Analysis will be an advantage to me and the organization compared to the traditional methods.							
2.1	Ensuring compatibility between AI and the current procedure of Business Analysis is important.							
3.1	AI is too complex to be used in the Business Analysis.							
OQ12	Are there any other factors that could matter regarding to AI to enhance the adoption intention during the business analysis?							

Based on the answers of the 7-point Likert scale, more questions can be asked

7-point Likert-scale: 1 = strongly disagree, 2 = disagree, 3 = partially disagree, 4 = undecided, 5 = partially agree, 6 = agree and 7 = strongly agree

Financial Statement Analysis

Nr.	Question	1	2	3	4	5	6	7
1.2	Using AI in the Financial Statements Analysis will be an advantage to me and the organization compared to the traditional methods.							
2.2	Ensuring compatibility between AI and the current procedure of Financial Statements Analysis is important.							
3.2	AI is too complex to be used in the Financial Statements Analysis.							
OQ13	Are there any other factors that could matter regarding to AI to enhance the adoption intention during the financial statements analysis?							

Based on the answers of the 7-point Likert scale, more questions can be asked

Forecast

Nr.	Question	1	2	3	4	5	6	7
1.3	Using AI will be an advantage to me and the organization when I try to forecast compared to the traditional methods.							
2.3	Ensuring compatibility between AI and the current procedure of Forecasting is important.							
3.3	AI is too complex to be used in Forecasting.							
OQ14	Are there any other factors that could matter regarding to AI to enhance the adoption intention during the forecasting?							

Based on the answers of the 7-point Likert scale, more questions can be asked

7-point Likert-scale: 1 = strongly disagree, 2 = disagree, 3 = partially disagree, 4 = undecided, 5 = partially agree, 6 = agree and 7 = strongly agree

Valuation

Nr.	Question	1	2	3	4	5	6	7
1.4	Using AI will be an advantage to me and the organization when executing the valuation when compared to the traditional methods.							
2.4	Ensuring compatibility between AI and the current procedure of Valuation is important.							
3.4	AI is too complex to be used in Valuation.							
OQ15	Are there any other factors that could matter regarding to AI to enhance the adoption intention during the valuation step?							

Based on the answers of the 7-point Likert scale, more questions can be asked

Sensitivity Analysis

Nr.	Question	1	2	3	4	5	6	7
1.5	Using AI in the Sensitivity Analysis will be an advantage to me and the organization compared to the traditional methods.							
2.5	Ensuring compatibility between AI and the current procedure of Sensitivity Analysis is important.							
3.5	AI is too complex to be used in the Sensitivity Analysis.							
OQ16	Are there any other factors that could matter regarding to AI to enhance the adoption intention during the sensitivity analysis?							

Based on the answers of the 7-point Likert scale, more questions can be asked

Q17: Is there anything important you would like to highlight that hasn't been adequately addressed during the interview?

End of the interview

Structure of Interview Dutch Version

Start interview

Leeftijd:

A. 18 – 30

B. 31 – 40

C. 41 – 50

D. > 50

Opleidingsniveau:

A. Middelbare school

B. Bachelor diploma

C. Postdoctoraal (Master/PhD)

Functietitel:

A. Manager

B. Financial Analyst

C. Chief Information/Technology Officer

D. Algemeen Directeur/CEO/Oprichter

E. Anders: _____

Hoeveel jaar ervaring heeft u in bedrijfswaardering?

A. 1 - 5 jaar

B. 6 - 10 jaar

C. 11 - 15 jaar

D. 16 - 20 jaar

E. 21 jaar of meer

Leeftijd van het bedrijf:

A. <3

B. 3 - <5

C. 5 – <10

D. 10 – <20

E. >20

Aantal medewerkers:

A. <5

B. 5 – <50

C. 50 – <150

D. 150 – <300

E. >300

Gemiddelde waarde van gewaardeerde bedrijven:

A. <€100.000

B. €100.000 - <€500.000

C. €500.000 - <€1.000.000

D. €1.000.000 - <€2.000.000

E. >€2.000.000

Gemiddeld aantal gewaardeerde bedrijven per jaar:

A. <3

B. 3 - <5

C. 5 - <10

D. 10 - <20

E. >20

Meest voorkomende reden voor bedrijfswaardering:

A. Transaction valuation (transactiewaardering)
B. Tax valuation (belastingwaardering)
C. Financial Reporting valuation (Financiële verslagleggingswaardering)
D. Regulatory valuation (regelgevingswaardering)
E. Dispute resolution (geschillenbeslechting)
F. Anders: _____

Meest gebruikelijke waarderingsmethode:

A. Relative Valuation (Comparables/Multiples)
B. Discounted Cash Flow (DCF)
C. Option Pricing Models
D. Asset-Based Valuations
E. Dividend-Based Valuation
F. Anders: _____

"Eerst worden er een paar open vragen gesteld om uw kijk en begrip van AI in de context van bedrijfswaardering te begrijpen."
OQ1: Kunt u uw mening over AI delen?
OQ2: In hoeverre denkt u dat uw organisatie of collega's zich bewust zijn van Kunstmatige Intelligentie?
OQ3: Wat zijn volgens u de voordelen en risico's van AI ten opzichte van bestaande technologie voor bedrijfswaarderingsdiensten?
OQ4: Hoe bekend bent u met AI?
OQ5: Wat vindt u van AI en de impact ervan op het bedrijfswaarderingsproces?
OQ6: Wat zou er gebeuren als u AI in uw bedrijfsproces implementeert?
OQ7: Waarom heeft u AI wel of niet ingevoerd in uw bedrijfsproces?
OQ8: Wat mist er in de organisatie om AI te kunnen adopteren?
OQ9: Welke uitdagingen denkt u dat organisaties tegenkomen bij het adopteren van AI?

"Ten tweede moeten de onderstaande uitspraken worden beantwoord volgens de punten schaal van Likert, afhankelijk van uw mening over de betreffende uitspraak. Nummers 4.1 tot en met 6.2 betreffen de organisatorische context, terwijl 7.1 tot en met 8.3 de omgevingscontext betreffen. Per vraag 1 kruis zetten."

7-punts Likert-schaal: 1 = sterk mee oneens, 2 = mee oneens, 3 = deels mee oneens, 4 = neutraal, 5 = deels mee eens, 6 = mee eens en 7 = sterk mee eens

Nr.	Vraag	1	2	3	4	5	6	7
4.1	Het topmanagement beschouwt AI-adoptie als belangrijk voor de organisatie bij digitale transformatie.							
4.2	Het topmanagement communiceert effectief zijn steun voor het gebruik van AI.							
4.3	Het topmanagement is waarschijnlijk bereid om te investeren in AI-gerelateerde technologieën.							
5.1	Grotere bedrijven profiteren meer van deze nieuwe technologie omdat ze de capaciteit hebben om te investeren.							
5.2	Kleinere bedrijven vermijden het gebruik van deze technologie.							
5.3	Het kapitaal van mijn bedrijf is hoog vergeleken met de sector.							
6.1	Technologische infrastructuur en human resources zijn nodig om de adoptie van AI in het bedrijf te ondersteunen.							
6.2	Het bedrijf zoekt naar nieuwe manieren om dingen te doen in AI.							
7.1	Het is een strategische vereiste om AI te gebruiken om te concurreren op de markt.							
7.2	Ik geloof dat het bedrijf marktaandeel zal verliezen als het bedrijf AI niet adopteert in de digitale transformatie.							
7.3	Het is noodzakelijk om AI te adopteren omdat het nauwkeurigheid in het bedrijfswaarderingsproces mogelijk maakt.							
8.1	Ik zou AI gebruiken om de coördinatie tussen de zakenpartners te verbeteren.							
8.2	Mijn organisatie is bereid om intra-organisatorische samenwerking tussen verschillende zakenpartners te faciliteren via nieuwe formats en tools.							
8.3	Onze zakenpartners zijn tegen de adoptie van AI.							
OQ10	Zijn er andere factoren die van belang kunnen zijn om de adoptie-intentie van AI in de organisatie te verbeteren?							
OQ11	Zijn er andere factoren die van belang kunnen zijn om de adoptie-intentie van AI te verbeteren in de environmentcontext/omgevingscontext?							

"Ten derde verkennen de onderstaande uitspraken de technologische context. Deze zijn gestructureerd op het bedrijfswaarderingsproces zoals beschreven in de thesis en hieronder:"
1e: Bedrijfsanalyse
2e: Financiële analyse
3e: Forecasting
4e: Valuation
5e: Gevoeligheidsanalyse (Sensitivity Analysis)

7-punts Likert-schaal: 1 = sterk mee oneens, 2 = mee oneens, 3 = deels mee oneens, 4 = neutraal, 5 = deels mee eens, 6 = mee eens en 7 = sterk mee eens

Business Analysis

Nr.	Vraag	1	2	3	4	5	6	7
1.1	Het gebruik van AI in de bedrijfsanalyse zal een voordeel zijn voor mij en de organisatie in vergelijking met de traditionele methoden.							
2.1	Het waarborgen van compatibiliteit tussen AI en de huidige procedure van bedrijfsanalyse is belangrijk.							
3.1	AI is te complex om te worden gebruikt in de bedrijfsanalyse.							
OQ12	Zijn er andere factoren die van belang kunnen zijn betreffende AI/kunstmatige intelligentie om de adoptie-intentie te verbeteren binnen de bedrijfsanalyse?							

Gebaseerd op de antwoorden van de 7-punts Likert-schaal kunnen er meer vragen worden gesteld.

7-punts Likert-schaal: 1 = sterk mee oneens, 2 = mee oneens, 3 = deels mee oneens, 4 = neutraal, 5 = deels mee eens, 6 = mee eens en 7 = sterk mee eens

Financial Statement Analysis

Nr.	Vraag	1	2	3	4	5	6	7
1.2	Het gebruik van AI in de financiële analyse zal een voordeel zijn voor mij en de organisatie in vergelijking met de traditionele methoden.							
2.2	Het waarborgen van compatibiliteit tussen AI en de huidige procedure van financiële analyse is belangrijk.							
3.2	AI is te complex om te worden gebruikt in de financiële analyse.							
OQ13	Zijn er andere factoren die van belang kunnen zijn betreffende AI/kunstmatige intelligentie om de adoptie-intentie te verbeteren binnen de financiële analyse?							

Gebaseerd op de antwoorden van de 7-punts Likert-schaal kunnen er meer vragen worden gesteld.

Forecast

Nr.	Vraag	1	2	3	4	5	6	7
1.3	Het gebruik van AI zal een voordeel zijn voor mij en de organisatie wanneer ik probeer te voorspellen in vergelijking met de traditionele methoden.							
2.3	Het waarborgen van compatibiliteit tussen AI en de huidige procedure van forecasting is belangrijk.							
3.3	AI is te complex om te worden gebruikt in forecasting.							
OQ14	Zijn er andere factoren die van belang kunnen zijn betreffende AI/kunstmatige intelligentie om de adoptie-intentie te verbeteren binnen het forecasten?							

Gebaseerd op de antwoorden van de 7-punts Likert-schaal kunnen er meer vragen worden gesteld.

7-punts Likert-schaal: 1 = sterk mee oneens, 2 = mee oneens, 3 = deels mee oneens, 4 = neutraal, 5 = deels mee eens, 6 = mee eens en 7 = sterk mee eens

Valuation

Nr.	Question	1	2	3	4	5	6	7
1.4	Het gebruik van AI zal een voordeel zijn voor mij en de organisatie bij het uitvoeren van de waardering in vergelijking met de traditionele methoden.							
2.4	Het waarborgen van compatibiliteit tussen AI en de huidige procedure van waardering is belangrijk.							
3.4	AI is te complex om te worden gebruikt in waardering.							
OQ15	Zijn er andere factoren die van belang kunnen zijn betreffende AI/kunstmatige intelligentie om de adoptie-intentie te verbeteren binnen de waardering?							

Gebaseerd op de antwoorden van de 7-punts Likert-schaal kunnen er meer vragen worden gesteld.

Sensitivity Analysis

Nr.	Question	1	2	3	4	5	6	7
1.5	Het gebruik van AI in de gevoeligheidsanalyse zal een voordeel zijn voor mij en de organisatie in vergelijking met de traditionele methoden.							
2.5	Het waarborgen van compatibiliteit tussen AI en de huidige procedure van gevoeligheidsanalyse is belangrijk.							
3.5	AI is te complex om te worden gebruikt in de gevoeligheidsanalyse.							
OQ16	Zijn er andere factoren die van belang kunnen zijn betreffende AI/kunstmatige intelligentie om de adoptie-intentie te verbeteren binnen de gevoeligheidsanalyse/sensitivity analyse?							

Gebaseerd op de antwoorden van de 7-punts Likert-schaal kunnen er meer vragen worden gesteld.

Q17: Is er iets belangrijks dat u wilt benadrukken dat niet (voldoende) is behandeld tijdens het interview?

Einde interview

Unstructured Data Analysis: Coding Scheme

Text	Open Codes	Axial Coding	Aggregate Dimensions
"Om de AI ook voor de inhoudelijk zaken te kunnen gebruiken denk ik wel dat je dat overal een beetje moet zitten omdat je anders ook de kwaliteit die je weer niet kan waarborgen." (Subject 1)	AI quality assurance across organization	AI Quality Assurance	Absorptive Capacity
"Je hebt steeds nieuwe versies dus CHATGPT een versie waarin je meer kan, ja we proberen wel om mensen binnen de organisatie verantwoordelijk te maken voor een stukje ontwikkeling daarin en in geval te zorgen dat ze zitten, he mocht daar iets nieuws uit komen waarom kunnen we dat ook benutten." (Subject 1)	Keeping up with AI advancements and assigning responsibilities	Challenges and Benefits of AI Collaboration	Absorptive Capacity
"Nou, misschien moet je dan wel meer en meer klussen binnen gaan halen om die uren weer weg te zetten. Dat kan iets zijn." (Subject 1)	AI might require reorganizing team tasks and workload	Reorganizing Challenge	Absorptive Capacity
"Dat speelt hier natuurlijk ook een stukje. Dat is een deel van je werk opeet dan hoe graag wil je het dan omarmen." (Subject 9)	Needing to embrace AI	Flexible and Adaptive Mindset	Absorptive Capacity
"Er zijn ook kantoren waar de gemiddelde leeftijd net iets ouder is dan bij ons... de jonge generatie die nu net uit school komt... zijn opgegroeid met de AI maar werken nog niet bij ons." (Subject 1)	Familiarity with AI depends on age	Age and AI	Absorptive Capacity
"De jeugd van tegenwoordig is veel sneller om nieuwe dingen te leren. Ik denk dat de senioren nog meer van de oude stempel zijn. Die wachten af omdat ze het wat langzamer zien zitten alle nieuwe technologie denk ik." (Subject 9)	A wait-and-see attitude due to age	Age and AI	Absorptive Capacity
"Het is meer dat we zelf proberen om te optimaliseren en efficiënter te worden, dan dat die eisen vanuit klanten liggen." (Subject 1)	Internal drive for optimization and efficiency	Internal Pressure	Absorptive Capacity
"Ik denk dat het heel wisselend is hoe organisaties het gebruik en ermee omgaan ik denk dat dat ook wel een beetje afhankelijk is van de generatie." (Subject 9)	Generational differences in AI adoption	Generational Differences	Absorptive Capacity
"Ik denk ook wel de flexibiliteit van geest doet er toe." (Subject 4)	Flexible mindset matters for adopting AI	Flexible and Adaptive Mindset	Absorptive Capacity

"We proberen open te staan voor de verschillende toepassingen... als je er efficiënter door gaat werken en bepaalde dingen kan inrichten." (Subject 1)	Openness to various AI applications for efficiency	Flexible and Adaptive Mindset	Absorptive Capacity
"En wij hebben ook binnen ons team wel wat verdeeld wat betreft AI. Ook door die fusie van vorig jaar hebben we ruimte kunnen vrijmaken" (Subject 4)	Team division	Practical Adoption	Absorptive Capacity
"Je tijdsbesteding binnen een team anders ingericht moet worden." (Subject 1)	Team time management reorganization	Practical Adoption	Absorptive Capacity
"Ik ben ook niet bang voor dat het het werk minder zal maken. Ik denk juist dat je het toch moet omarmen want je weet toch dat het verder ontwikkeld gaat worden en dat het steeds meer komt." (Subject 1)	AI will not reduce work but should be embraced for future dev.	Future Adoption and Impact	Absorptive Capacity
"Met generaties nu ziet dat het was met een telefoon en met internet... die er mee opgroeien... dat zal je met de AI zien." (Subject 1)	Comparison to past technology adoption	Learning from History	Absorptive Capacity
"Nou, ja, dat is nog... Ik denk dat... AI implementatie en, oké, nu hebben we AI zo werkt in mijn ogen niet. Ik denk dat hetzelfde is zoals je veel van... we weten nu nog niet wat het allemaal kan." (Subject 3)	Implementation challenges	Practical Challenges in Implementation	Absorptive Capacity
"Het belangrijkste is acceptatie, dus cultuur, dus als je een jong team hebt gaat dat heel veel sneller dan als je mensen als ik hebt zeg maar" (Subject 2)	Importance of culture in adoption	Organizational Culture	Absorptive Capacity
"Ik denk dat het personeel een heel belangrijke factor is... je moet er wel voor open staan om het te gebruiken." (Subject 1)	Importance of personnel openness to AI	Organizational Culture	Absorptive Capacity
"AI kan daar niet bij komen, dat is omdat hij niet met de ondernemer aan tafel zit of er komt een innovatie in een bepaalde markt waardoor die markten in één keer beginnen vliegen" (Subject 2)	AI can't replace human insight	AI Human Interaction Limitations	Compatibility
"Als het niet goed op een juiste manier gevuld is en als het logaritme niet op een juiste manier gebouwd is." (Subject 5)	Correct setup is crucial for accuracy	AI Setup and Accuracy	Compatibility
"Als ik een jaarrekening krijg, dan lees ik dat doorheen en dan moet ik de punten eruit halen die mij opvallen, maar het kan heel gemakkelijk zijn dat ik een aantal dingen gewoon over het hoofd heb gezien als ik AI gebruik." (Subject 6)	Losing critical thinking about the material	Over-Reliance Risks	Compatibility
"Dat model het zelf kan programmeren.. Ben ik daar misschien te veel nog van leek in. Dat ik niet precies weet wat er allemaal voor mogelijk is." (Subject 5)	Uncertainty about AI capabilities	Limited AI Applicability	Compatibility

"Dat zie ik niet, dat AI makkelijk een professional kan gaan vervangen." (Subject 3)	AI limitations in replacement	AI Human Interaction Limitations	Compatibility
"dus het blijft kunstmatig en het zijn lerende algoritmes, wat er onder AI zit, dus uiteindelijk moet je wel weten wat je doet" (Subject 2)	AI requires understanding	Human Involvement Necessity	Compatibility
"Dus het geldt alleen maar op dat stukje (*specific part of AI integration)*, maar je mag het niet over de hele breedte doortrekken." (Subject 5)	Limited application of conclusions	Limited AI Applicability	Compatibility
"Een ding weet ik zeker, AI heeft de ondernemer niet gesproken." (Subject 2)	AI lacks personal interaction	AI Human Interaction Limitations	Compatibility
"En er is ook het risico dat mensen hun banen verliezen door AI, want AI kan waarschijnlijk later heel veel taken overnemen die mensen nu doen." (Subject 8)	Job loss fear	Employment Impact	Compatibility
"Maar het risico is dat als je dat uitbesteed aan een computer dat je geen check-up hebt meer van jezelf als je waardering maakt." (Subject 9)	Resistance due to fear of losing control	Resistance to AI	Compatibility
"Maar ik geloof altijd wel dat de mensheid altijd wel weer een oplossing zoekt voor het banenverlies. Mensen houden wel banen, maar moeten zich misschien omscholen of toch een andere richting kiezen. Wij als mensen zijn innovatief, toen internet uitkwam dachten mensen ook dat mensen hun banen zouden verliezen zoals de postbode. We verzenden natuurlijk veel emails nu, maar overal op aarde lopen nog steeds postbodes." (Subject 8)	Need for human input	Human Involvement Necessity	Compatibility
"Op het moment dat de input levert en er komt wel een laatste rapport uit dan is die check lastiger. Wanneer je zelf een rapport schrijft, heb je het ook allemaal scherp op je netvlies." (Subject 6)	Human check is crucial for accuracy	Human Oversight Importance	Compatibility
"Je hebt je telefoon waar tegen je de hele dag kunt praten en die 99% van de tijd een betere antwoord zou geven dan waarschijnlijk een daadwerkelijk persoonlijk assistent." (*Subject 7*)	AI as a better assistant	Collaboration Between AI and Humans	Compatibility
"Voor nu hebben we het betaalde abonnement van ChatGPT en daar redden we ons prima mee het maakt de rapportages voor ons gedeeltelijk en kan zo worden overgenomen wanneer we er zelf nog eens kritisch overheen kijken." (Subject 8)	AI and Human collaboration	Collaboration Between AI and Humans	Compatibility
"Dus het is een soort van samenspel alleen, je moet zelf nog wel kritisch kunnen blijven nadenken?" (Subject 9)	AI-human collaboration	AI and Human Interaction	Compatibility

"Dus dan moet je als er iemand zich in gaat specialiseren en voor alle type bedrijven en alle omstandigheden daar een AI model van heeft gebouwd dan kun je dat verkopen." (Subject 9)	Need for specialized models	AI Adoption Considerations	Compatibility
"Dus de bedrijfswaardering die je uitvoert voor een ondernemer of voor een DGA of wat en ook, dat is gewoon het resultaat. De emotionele scheiding van het afscheid nemen van je bedrijf, dat is iets wat een AI niet makkelijk over kan nemen." (*Subject 7*)	Emotional part hard for AI	Human Element and Interaction Concerns	Compatibility
"Dus nu moeten we nog maar nadenken en dat is denk ik ook de meest gezonde manier van, kijk even, ik vind een rekenmachine doet ook alles goed totdat je iets verkeerd invoert." (Subject 3)	AI vs manual methods	Practical Application Concerns	Compatibility
"Een ding weet ik zeker, AI heeft de ondernemer niet gesproken. En dat is nou net een stukje, want het waarderen en ondernemer, dat is toch ook wel keuzes maken." (Subject 2)	Lack of personal interaction	Human Element and Interaction Concerns	Compatibility
"En dat bedoel ik ook met het kunnen schatten van wat een rekensom zou moeten kunnen zijn. Dat inschatten kunnen we zelf, dus als de output niet klopt, dat kun je schatten." (Subject 3)	Importance of estimation	AI Adoption Considerations	Compatibility
"En waarom is het voor jou handig om een rekenmachine te gebruiken en ben je niet bang dat je iets verkeerd invoert, is omdat je gewoon gedurende jouw schoolgaande leven hebt leren schatten." (Subject 3)	Basic knowledge importance	Knowledge and Skills Development	Compatibility
"Ik denk dat dat altijd van belang is om kritisch te blijven. En dat je dat ook in controle moet houden. Ook om kwaliteiten ook richting je klant." (Subject 1)	Importance of critical thinking and control in AI usage	Trust and Vigilance	Compatibility
"Ik denk dat het een heel mooi samenspel is dat je juist extra diepgang kan creëren in je rapporten en in de analyse." (Subject 1)	Financial models and analyses still done manually in short term	Future Adoption and Impact	Compatibility
"Ja gewoon zelf kritisch naar kijken waar en wat de info is die AI eruit haalt. Om te kijken of het goed loopt." (Subject 1)	Critical assessment of AI outputs	Evaluation and Validation	Compatibility
"Ja wel deels mee eens, puur door wat ik zei met zo'n fiscale waardering wil je toch de verantwoordelijkheid hebben." (Subject 4)	Responsibility in valuations	AI Adoption Considerations	Compatibility
"Je moet zelf in ieder geval de uitkomsten kunnen benchmarken." (Subject 3)	Benchmarking AI outcomes	Evaluation and Validation	Compatibility
"Maar dat slaat natuurlijk nergens op, want vanaf 1 januari loopt die voorraad waarschijnlijk een klein beetje op. AI zal dat hoogstwaarschijnlijk niet kunnen zien of bedenken." (Subject 3)	Critical assessment of AI outputs	Evaluation and Validation	Compatibility

"Want als mensen het niet snappen. Dan zag ik vroeger ook conclusies trekken die nergens op sloegen." (Subject 5)	Importance of understanding AI conclusions	AI Adoption Considerations	Compatibility
"De toegankelijkheid om hoogwaardige informatie te krijgen is sterk toegenomen." (*Subject 7*)	Access to quality information	Data Retrieval Efficiency	Compatibility
"Dus je moet wel wat basis kennis hebben, je moet wel wat basis, in mijn ogen wel wat basis ervaring hebben om de uitkomst te kunnen snappen, om te kunnen begrijpen naar wat eruit komt, dat dat logisch is, beter dan wat erin is gegaan." (Subject 3)	Need for understanding	AI Adoption Considerations	Compatibility/Complexity
"Van wat zijn je aannames geweest in het model? En hoe rekent dat door?" (Subject 5)	Explaining model assumptions	AI Adoption Considerations	Compatibility/Complexity
"er zou ook een zekere mate van weerstand kunnen zijn, vooral van medewerkers die zich zorgen maken over de impact van AI op hun banen." (Subject 8)	Employees resist	Human VS AI	Compatiblity
"Waar AI gewoon heel goed in is, is simuleren en waarbij als mensen relatief slecht in zijn, is simuleren." (*Subject 7*)	AI good at simulations	AI for Simulations	Compatiblity
"Gezond Boeren Verstand, waardering is een rekensom. Ja, het is een interpretatie." (Subject 6)	Human intuition is important	Importance of Human Intuition	Compatiblity
"Ik denk, uiteindelijk, jij kunt hele irrationele keuzes maken en toch een succesvolle ondernemer zijn, omdat het keuzes tegen de stroom in zijn, of omdat je een gat in de markt ziet, wat niemand ziet. Nou, hoe gaat de AI nou zeggen?" (Subject 2)	Human intuition vs AI	Balancing AI and Human Skills	Compatiblity
"Je moet onderbouwen. Je moet het snappen. Dat is iets wat AI moet leren maar de persoon die ermee werkt ook." (Subject 6)	AI needs understanding and expertise	Human Involvement Necessity	Compatiblity
"Maar we moeten ook realistisch zijn over de uitdagingen en dat we ervoor zorgen dat we AI op een verantwoorde manier kunnen gebruiken." (Subject 8)	Using AI in a responsible way combined with human skills	Balancing AI and Human Skills	Compatiblity
"Omdat als je de financiële analyse door AI laat doen, zit je zelf veel minder in de materie." (Subject 6)	Practical experience needed for AI data	Importance of Practical Experience	Compatiblity
"Dus je moet ervoor openstaan en het tweede is het vertalen ervan naar de praktijk" (Subject 2)	Practical application needed	Integrating AI	Compatiblity

"En daarvoor gaat een ondernemer niet gewoon krijgen uit een AI tool. Daarvoor denk ik dat de menselijke advisering, zeg maar, dat dat altijd boven blijft." (Subject 3)	Human advice importance	AI and Human Interaction	Compatiblity
"En een voel voor iets mag ook niet missen wanneer je AI gebruikt. En een inschatting van percentages wat de uitkomst beïnvloedt. Dat zijn dingen die kan AI niet." (Subject 5)	Intuition and estimation in valuation	AI VS Human	Compatiblity
"Er komt gewoon dingen voor waarin je met gezond verstand zegt van moet je niet willen. En ik zeg nee met mijn verstand en de computer zegt ja, dat is denk ik compatibiliteit. Daar moet wel een gezonde balans in zitten." (Subject 6)	Balance AI with the human skills	AI and Human Interaction	Compatiblity
"Financiëel denk ik dat je wel gewoon zelf je modellen en je analyse in ieder geval op de korte termijn dat wel blijft doen." (Subject 1)	Models and analysis together with the human skills	AI and Human Collaboration	Compatiblity
"Aan de andere kant denk ik, ja, waardering is ook handjeklap, en transactie doen is handjeklap" (Subject 2)	Human element in valuation	Human Element and Interaction Concerns	Compatiblity
"Als jij je business analyse goed hebt gedaan, je hebt je forecast goed gedaan, dan heb je eigenlijk alle blokjes van de waarderingen dan hoef je alleen maar in de formule te stoppen." (Subject 2)	Importance of prior analysis	AI Adoption Considerations	Compatiblity
"Bij bedrijfswaarderingen is, bedrijfswaardering is eigenlijk een rekenkunstje. Je stopt aan de voorkant informatie in, die informatie is deels subjectief. En aan de achterkant rolt het vanuit de formule rolt er een waardering uit." (Subject 6)	Valuation needs subjective input and output	Human Element and Interaction Concerns	Compatiblity
"De emotionele scheiding van het afscheid nemen van je bedrijf, dat is iets wat een AI niet makkelijk over kan nemen." (*Subject 7*)	Emotional part hard for AI	Human Element and Interaction Concerns	Compatiblity
"dit kost natuurlijk geld en heel veel tijd om ervoor te zorgen dat het goed gepaard gaat met onze huidige procedure." (Subject 8)	AI costs money to make sure its compatible	Implementation Challenges and Costs	Compatiblity
"En zeker mensen met die in ondernemingen zitten die hard groeien of die nieuwe markten betreden. Die denken anders en moeten ook wel AI adopteren" (Subject 9)	Growing is necessary when entering new markets	Importance of growth	Competitive Pressure
"Maar als het gaat om bedrijfswaarderingen, maak ik me niet zo druk. Ik denk niet dat ik ga achter lopen als ik het niet accepteer." (Subject 5)	Not worried about AI in business valuation	Mixed Perception on Necessity	Competitive Pressure

"Je wilt een sinterklaasgedichtje maken, dan zal het apparaat een prachtig. Je stopt een paar kernwoorden in, je krijgt een mooi gedicht uit. Maar op het moment dat voor een computer moet gaan beslissen of je een kernbom wel gaat lanceren of niet, er komt soms andere motieven bij te pas, dat is wel lastig." (Subject 6)	AI might make decisions differently than humans	AI Decision Transparency	Complexity
"We moeten er zeker van zijn dat als we AI gebruiken dat wat eruit rolt, we ook echt kunnen gebruiken omdat het eerlijk en transparant moet zijn." (Subject 8)	Understanding AI decisions	AI Decision Transparency	Complexity
"Het systeem, al die AI-dingen, dat leert zichzelf Dat vind ik wel wel ingewikkeld, want wat je erin stopt, dat geeft richting. Alles wat je erin stopt, geeft richting dat is denk ik wel iets om in je achterhoofd te houden." (Subject 2)	AI learns from input	AI Learning and Adaptation	Complexity
"Bij bedrijfswaarderingen zelf denk ik dat het heel nuttig kan zijn, maar om voor ieder bedrijf een eigen model te bouwen lijkt me best ingewikkeld." (Subject 5)	Useful but complex for individual business models	Practical Application Concerns	Complexity
"Het risico is dat je inderdaad, je moet echt wel weten wat je doet, dus je moet wel doorgronden van waar komt iets vandaan" (Subject 2)	Need for understanding AI origins	AI Learning and Adaptation	Complexity
"Hoe homogeen is het waar je naar kijkt. Dus kun je één model voor alles doen?" (Subject 2)	Homogeneity in valuation	Practical Challenges in Implementation	Complexity
"Ik denk dat ik altijd confrontatie, model, praktijk en dan ken ik de bedrijven zelf en dan ken ik de ondernemers, dus ik weet precies hoe het zit en de AI moet zijn kennis ergens vandaan halen." (Subject 2)	Need for personal knowledge	Knowledge and Skills Development	Complexity
"Je moet het kunnen uitleggen aan de klant van hoe iets tot stand komt" (Subject 2)	Explaining AI to clients	AI Adoption Considerations	Complexity
"Tot op zekere hoogte dat standaardwerk overzichtelijke werk dan komt er wel een punt dat dat met AI kan en dan krijg je de complexiteit boven" (Subject 2)	AI for standard tasks, not too complex	Practical AI Applications	Complexity
"Ik gebruik AI nog niet omdat ik er gewoon te weinig kennis van heb." (Subject 9)	Lack of knowledge leads to resistance	AI Training and Education	Complexity/Absoprtive Capacity
"Nou, we hebben wel ook introductie cursus en zo gegeven over het gebruik van ChatGPT en wat de mogelijkheden er allemaal mee zijn." (*Subject 7*)	Training on AI	AI Training and Education	Complexity/Absoprtive Capacity

"Dus eigenlijk de grootte van het bedrijf, dat is een beetje het knelpunt" (Subject 4)	Company size bottleneck	Big VS Small	Firm size
"Grote bedrijven kunnen meer investeren maar kleine bedrijven zijn vaak flexibeler." (Subject 1)	Flexibility of small vs. large companies in AI adoption	Big VS Small	Firm Size
"Ja, hij heeft ook wel met de omvang te maken. Kijk, wij zijn een kleine club, we zijn met z'n *klein getal* maar wij kunnen net zo innovatief zijn als een bedrijf met meer dan 200 werknemers." (Subject 4)	Small company challenge	Organizational Challenges	Firm Size
"Wanneer je een grote organisatie hebt en je kunt dat dan ook breeder benutten dat je ook veel meer processen hebt waar je dat kan dit bouwen." (Subject 1)	Broad utilization in large organizations	Scalability and Firm Size	Firm Size
"Ik denk dat dat wel als je een grote organisatie hebt en je kunt dat dan ook brede benutten dat je ook veel meer processen hebt waar je dat kan dit bouwen." (Subject 1)	Larger organizations can benefit more broadly from AI	Scalability and Broad Utilization	Firm Size
"Hij kent partijen en die laat de mail gewoon al beantwoorden." (Subject 5)	AI automating email responses	Practical AI Applications	Relative Advantage
"Ik denk dat AI bij waardering minder relevant is, behalve voor het kleinere werk" (Subject 2)	Limited relevance of AI in complex valuation	Limited AI Applicability	Relative Advantage
"Kijk, dat is nu nog niet zo. Dat er beter gewaardeerd kan worden door AI." (Subject 4)	Current AI limitations	Limited AI Applicability	Relative Advantage
"Weet je wel, het is zo'n lokkertje. Maar ik kan me voorstellen als je dat koppelt aan AI en die ook nog meer informatie bij trekt dat die misschien veel preciezere antwoorden kan zijn." (Subject 5)	AI providing precise answers	AI Precision	Relative Advantage
"AI gebruikt om allerlei simulaties naast elkaar te maken, dan zou je daarmee kunnen zeggen dat je al vrij snel toegevoegde waarde biedt in het bedrijfswaarderingproces." (*Subject 7*)	AI adds value to valuation	AI for Business Valuation	Relative Advantage
"AI gebruikt wordt in bedrijven om bedrijfsvoering te verbeteren en of dat aan een effect heeft op de waardering van het bedrijf." (*Subject 7*)	AI improves business operations	Enhanced Business Operations	Relative Advantage
"AI kan bijvoorbeeld veel dingen veranderen in hoe we werken enzo. In bijvoorbeeld de bedrijfswaardering kan kunstmatige intelligentie heel snel data analyseren, veel sneller dan mensen." (Subject 8)	AI analyzes data faster	AI Efficiency and Speed	Relative Advantage
"AI kan veel data verwerken en analyseren, maar het is aan ons om die informatie op de juiste manier te interpreteren en te gebruiken." (Subject 8)	AI helps decision making	Enhanced Decision Making	Relative Advantage

"Dan tik je gewoon in, ik wil een follow-up-telefoon doen daar en daarover. Geef me een scriptje. Nou, krijg je gewoon een heel makkelijk script." (Subject 5)	AI can create useful scripts	Practical AI Applications	Relative Advantage
"Dat het je makkelijker helpt om dat te doen anders moet je dat allemaal bouwen en misschien kun je dat met AI wel veel flotter." (Subject 2)	AI simplifies sensitivity analysis	Simplified Sensitivity Analysis	Relative Advantage
"Dus als je dat soort modellen kunt gaan gebruiken. En je hebt de feiten die je hebt ingevoerd. Die zijn helemaal correct. Dus het allemaal wetenschappelijk onderzoek in." (Subject 5)	Accurate input makes AI useful	User-Driven Improvement	Relative Advantage
"Dus je dan zegt van, voor welke uitslag is hier het meest sensitief? Dat kan gewoon een vraag zijn dan kan die dat berekenen en dan kun je daar mee gaan spelen." (Subject 5)	AI helps identify sensitivities	Simplified Sensitivity Analysis	Relative Advantage
"Ik denk dat het voordeel is dat je heel veel data is beschikbaar. Alleen als je daar zelf naar gaat zoeken. En je weet niet precies waar je moet zoeken. Dan kan het heel lang duren voordat je die data die eventueel benodigd hebt." (Subject 1)	AI helps in quickly finding necessary data	Data Retrieval Efficiency	Relative Advantage
"Nou, dan ga je ook weer naar die data. En uit data kun je heel veel halen, dus op basis van data kun je inkopen, je kunt omzet ontwikkelingen, kosten ontwikkelingen inconsistentie in cijfers kunnen ze er makkelijker uit halen." (Subject 6)	AI enhances forecasting	Improved Forecasting	Relative Advantage
"Nu nu het voornamelijk nog in daar de lerende vermogen van uit trajecten die je gedaan hebt om bepaalde componenten van rapportages omdat om daar een aantal onderwerpen en hoofdstukken al te zorgen dat dat eigenlijk door A.I. te genereren wordt." (Subject 1)	AI used for generating report components	Practical AI Applications	Relative Advantage
"Om heel veel normaal gesproken, langdurige processen, bijvoorbeeld te schrijven van een investeringsvoorstel, dat kostte mij normaal gesproken echt wel veel tijd. En tegenwoordig, ja, natuurlijk moet je in het hele gedachteproces heb je nog steeds precies dezelfde tijd en gesprekken et cetera nodig, alleen het uitwerken vervolgens van je gedachte, dat gaat gewoon een stuk makkelijker." (*Subject 7*)	AI saves a lot of time in the process	AI Efficiency and Speed	Relative Advantage
"Voordelen is een stukje consistentie en éénsluitendheid." (Subject 6)	AI improves reporting and the consistency of it	Improved Reporting and Consistency	Relative Advantage

"ze hebben twee kanten, de praktische kant en het principiële kant dus ik denk dat de praktische kant een hele mooie tool is om bij ondernemingen de besluitvorming te versnellen en ook vorm te geven" (Subject 2)	AI speeds up decision-making	Enhanced Decision Making	Relative Advantage
"Ze vullen dat de hele tijd aan met mensen die je gebruik van maken. Het kennisniveau wordt daardoor steeds iets hoger." (Subject 5)	AI improves with user input	User-Driven Improvement	Relative Advantage
"Dat je het dan op die manier meer tijd overhoudt. Om zeg maar in het kwa diepgang nog meer te kunnen doen ook voor je klant." (Subject 1)	AI frees up time for deeper client work	Enhanced Business Operations	Relative Advantage
"Dat we nu een beetje een half jaar, ja we gebruiken eigenlijk al een hele tijd een beetje om ook te helpen met teksten en gewoon simpele taken." (Subject 1)	AI assists with texts and simple tasks	Practical AI Applications	Relative Advantage
"Ik denk dat AI zeg maar wel consistent dan een uitkomst geeft. Ik vind het een nadeel dat je eigenlijk een stuk denkwerk weghaalt bij de waardeerder." (Subject 6)	AI helps but at a price	A Double-egded Sword	Relative Advantage
"Ik denk dat kunstmatige intelligentie de wetenschap, de economie, de samenleving heel erg verder kan helpen, maar ook kan bedreigen." (Subject 6)	AI can help but also pose threats	A Double-egded Sword	Relative Advantage
"We gebruiken eigenlijk al een hele tijd een beetje om ook te helpen met teksten en gewoon simpele taken." (Subject 1)	AI used for simple tasks	Practical AI Applications	Relative Advantage
"Ik heb het idee dat het, Ik zou heel veel toepassingen kennen, hoor. Maar de belangrijkste toepassing nu is samenvattend, zo zou ik het worden noemen." (Subject 3)	AI utility	Practical AI Applications	Relative Advantage
"Ik denk dat het nog een klein stukje bewust zijn is wat mist van wat je daar (AI) allemaal mee kan." (Subject 9)	Awareness of AI capabilities is lacking	Awareness and Education	Relative Advantage
"Ik heb zelf geen presentatie of schoolrapporten met de AI geschreven... je kunt het nu in je voordeel laten gebruiken." (Subject 1)	Early exposure benefits	Early Adoption Challenges	Relative Advantage
"AI kan dat in een paar minuten doen en je krijgt natuurlijk ook nauwkeurigheid in je werk." (Subject 8)	AI is accurate	Improved Decision-Making and Analysis	Relative Advantage
"Dat je efficiënter werkt, dat je eigenlijk zaken, ja, als ik nou mij als persoon heb, het zou mij zaken uit handen nemen waar ik geen arbeidsvreugde aan beleef." (Subject 6)	AI can make work more efficient	Enhanced Efficiency and Productivity	Relative Advantage
"Dat kunstmatige intelligentie echt dat het een specifieke tool gaat ontwikkelen voor het bedrijfswaardering zelf. Dat een groot bedrijf dat doet." (Subject 4)	AI tool development	AI Capabilities and Roles	Relative Advantage

"Dat t je kan helpen in zowel een stukje efficiëntie, maar ook om meer uit gegevens en data te halen. En dus ook in de waarderingspraktijk." (Subject 1)	AI increases efficiency and extracts more from data	Enhanced Efficiency and Productivity	Relative Advantage
"Dat zie je niet als een bedreiging, bijvoorbeeld het goedkoper worden." (Subject 4)	Cost reduction	Financial Considerations	Relative Advantage
"De hele dag, voor alles. Ik stel geen meer zelf op, eerlijk gezegd. Ja, alles gaat door chat GPT om het te structureer, formuleer, structureer." (*Subject 9*)	Intensive use of AI	Scalability and Broad Utilization	Relative Advantage
"Die gevoeligheid is wel belangrijk Ik denk dat je daar misschien met AI jezelf nog meer elementen aan toe kunt voegen Dat je zegt van ik ga nog op meerdere elementen, ga ik hem dynamisch maken." (Subject 2)	Importance of sensitivity analysis	AI Capabilities and Roles	Relative Advantage
"Dus als ik minder werk daar aan kwijt ben, dan heb ik meer marge." (Subject 4)	Less work, more margin	Enhanced Efficiency and Productivity	Relative Advantage
"Dus als je een tool hebt die dat al heel makkelijk kan doen. Ja, tuurlijk gebruik ik die." (Subject 9)	AI tools can save time	Enhanced Efficiency and Productivity	Relative Advantage
"Dus dat houdt ons wel bezig. En we zijn met name op zoek naar hoe kan het ons werk vergemakkelijken." (Subject 4)	Focus on AI benefits	AI Capabilities and Roles	Relative Advantage
"Dus ik zie het echt als een oplossing om ook een deel over te kunnen nemen, wat we anders misschien niet kunnen uitvoeren omdat we de mensen niet hebben." (Subject 4)	AI as solution for labor	Scalability and Broad Utilization	Relative Advantage
"Het voordeel is dat je bijvoorbeeld aan de marktkant zou je denk ik veel sneller informatie op kunnen halen en data op kunnen halen" (Subject 2)	Faster data retrieval	Enhanced Efficiency and Productivity	Relative Advantage
"Het zelflerende vermogen van die model is ongekend. Dat hebben we nog nooit ergens anders gezien." (*Subject 7*)	AI learns on its own	AI Learning and Adaptation	Relative Advantage
"Ik ben ook niet bang voor dat het het werk minder zal maken. Ik denk juist dat je het toch moet omarmen want je weet toch dat het verder ontwikkeld gaat worden en dat het steeds meer komt." (Subject 1)	AI creates extra depth in reports and analyses	Enhanced Efficiency and Productivity	Relative Advantage
"Ik denk dat het juist daar heel makkelijk gaat (gevoeligheidsanalyse). Als je dan al een complex model hebt en je hoeft alleen maar op een bepaald spiderweb te bouwen, Excel is heel veel werk." (Subject 5)	AI can simplify sensitivity analysis	Enhanced Efficiency and Productivity	Relative Advantage
"Ik denk dat je dat prima kunt gebruiken voor je bedrijfsanalyse... het belangrijkste element vanuit je waardering waarvoor je AI kunt gebruiken." (Subject 1)	AI is suitable for business analysis	Improved Decision-Making and Analysis	Relative Advantage

"Ik vind op dit moment, AI is eigenlijk een hele slimme zoekmachine voor mij. Ze hebben alle informatie van het internet gescraped." (Subject 9)	AI is a smart search engine	AI Capabilities and Roles	Relative Advantage
"Ja, want ik denk ook dat de arbeidskrapte zal ook nog lang blijven duren." (Subject 4)	Labor shortage solution	Scalability and Broad Utilization	Relative Advantage
"Maar er zijn bijvoorbeeld een aantal partijen die lezen de informatie memoranda in en dan stellen ze vragen *(aan AI)* van “Hey, in deze tekst, wat valt op? Wat lijkt gek?”" (Subject 5)	AI for analyzing documents	Improved Decision-Making and Analysis	Relative Advantage
"Maar even terug op jouw vragen hebben. Daar zou ik met de gevoeligheidsanalyses en ook in de rapportage met tabellen maken misschien aspecten benoemen die wij niet in het vizier hebben." (Subject 4)	Identifying new aspects	AI Capabilities and Roles	Relative Advantage
"Maar ik denk wel dat die mogelijkheden misschien ook wel bijna onuitputtelijk zijn." (Subject 6)	AI's future is unimaginable	Bright Future Ahead for AI	Relative Advantage
"Maar ik geloof dat ze het op die manier gebruiken. Analisten gebruiken een software die annonceert allemaal in de tekst." (Subject 5)	Analysts using AI software	Practical Adoption	Relative Advantage
"Markt analyses, bedrijfsprofielen, activiteiten. Je ziet hoe AI gewoon vanuit een website eigenlijk de informatie kan clusteren tot een stuk tekst of gegevens die je kan benutten." (Subject 1)	AI clusters information from websites for market analysis	Enhanced Efficiency and Productivity	Relative Advantage
"Nou, ik denk sowieso altijd in kansen. Ik zie dat meer is marge verbetering dan omzetderving." (Subject 4)	Margin improvement	Enhanced Efficiency and Productivity	Relative Advantage
"Nu vullen we dat in vanuit eigenlijk alle logboekgegevens van een onderneming, van alle financieel logboekgegevens van een onderneming." (Subject 3)	Using log data	AI Capabilities and Roles	Relative Advantage
"Tot op zekere hoogte dat standaardwerk overzichtelijke werk dan komt er wel een punt dat dat met AI kan en dan krijg je de complexiteit boven" (Subject 2)	AI for predictable tasks	AI Capabilities and Roles	Relative Advantage
"Voor het standaardwerk zou je hier echt wel wat mee kunnen. Maar voor juist die dingen, je moet ook het stukje en dat is waar hoge waarderingen zitten." (Subject 2)	AI for standard work, not complex	AI Capabilities and Roles	Relative Advantage
"Zo geavanceerd is dat je vooral ook gegevens, bron en veel breder kan benutten. Eigenlijk ook voor in je analyse veel meer diepgang kan gebruiken." (Subject 1)	AI utilizes data more broadly and deepens analysis	Improved Decision-Making and Analysis	Relative Advantage
"Zoal het vinden van de beste kopers zal het zeker een onderdeel van zijn." (Subject 3)	Identifying buyers	AI Capabilities and Roles	Relative Advantage

"Dus ik denk dat er op elk kleine toepassing dat de AI gaat helpen." (Subject 3)	Small applications	Practical Application Concerns	Relative Advantage
"Een website, zeg maar Dat was dan het oldschool ding In één keer was het niet een website er En dan werd er eerst wat gehobbyd, vervolgens ging het naar de reclamebureaus en op een enkel moment zijn er hele bedrijven omheen gebouwd." (Subject 2)	Evolution of new technology	Future Adoption and Impact	Relative Advantage
"En de waardeerder die dat zelf gaat doen is gewoon een hoop tijd en energie kwijt." (Subject 5)	Time and effort required for valuation	Implementation Challenges and Costs	Relative Advantage
"En volgens mij wordt het dan wel zinvol. Als een partij dat gaat aanbieden die software dat zou ik dat wel graag willen gebruiken." (Subject 5)	Willingness to use AI if proven effective	Mixed Perceptions	Relative Advantage
"Ik heb vroeger als ___ gewerkt. En dan maak je een business case. Ik krijg ze altijd sluitend, ik heb AI daar niet voor nodig" (Subject 5)	Past experience with business cases	Learning from History	Relative Advantage
"Ja, dat is veel minder makkelijk te automatiseren, omdat er gewoon een aantal gevoelens bij komen kijken die minder makkelijk, denk ik, meegenomen kunnen worden door een ChatGPT." (*Subject 7*)	Hard to automate feelings	Human Element and Interaction Concerns	Relative Advantage
"Ja, dat klopt hoor. Maar, weet je, de mensen die, uiteindelijk, kijk even, als ik kijk naar de fiscale waarderingen, dan moet het fiscus-proof zijn." (Subject 4)	Tax compliance	AI Adoption Considerations	Relative Advantage
"Maar ik denk ook in de modellen. Er zijn heel veel waarderingsmodellen en er zijn heel veel software oplossingen voor waarderingen." (Subject 9)	Many valuation models	AI Adoption Considerations	Relative Advantage
"Maar ja, het is ook belangrijk dat je de 10 partijen die je wilt benaderen dat dat de juiste 10 partijen zijn." (Subject 3)	Targeting right parties	AI Adoption Considerations	Relative Advantage
"Nee, ik bedoel, nee. Het kan een zegen zijn voor mijn beroepsgroep en het is ook, gelijk, de bedreiging." (Subject 5)	AI as both a benefit and a threat	Mixed Perceptions	Relative Advantage
"Voor AI waren er ook bedrijfswaarderingen... het is niet noodzakelijk om AI te gebruiken, maar het kan helpen om met bepaalde gegevens beter te kunnen analyseren." (Subject 1)	AI not necessary but helpful in business valuation	Mixed Perception on Necessity	Relative Advantage
"Want waarom zou je dan, het moet geen gadget worden." (Subject 2)	AI must be practical, not a gadget	Practical Application Concerns	Relative Advantage
"Dus het boek dat ik heb gelezen deze week, dat schrijft veel over artificial general intelligence en dat is eigenlijk het moment dat bijna de singularity bereikt is, dus dat een artificial intelligence echt op precies dezelfde manier als een mens denkt voelt alles, dan zou je dus in theorie een soort van AI kunnen	Future potential of AI	AI Potential and Future	Relative Advantage

vragen om dat proces te begeleiden en dan zou daar dus ook dezelfde uitkomst uitkomen." (*Subject 7*)			
"Dus ja AI heeft veel potentie en kan echt een groot verschil maken in bedrijfswaardering en andere gebieden." (*Subject 7*)	High potential of AI	AI Potential and Future	Relative Advantage
"Dus mijn visie op kunstmatige intelligentie of AI is dat het echt elk aspect van de wereld gaat veranderen." (*Subject 7*)	AI will change everything	AI Potential and Future	Relative Advantage
"En wat dat betreft vind ik wel heel spannend, wat straks uitslagen kunnen zijn." (Subject 5)	Excitement about AI potential	AI Potential and Future	Relative Advantage
"Ik denk dat we echt op het moment staan om van de tweede digitale revolutie in zekere zins. De eerste was het internet, de tweede wordt kunstmatige intelligentie." (*Subject 7*)	Second digital revolution	AI Potential and Future	Relative Advantage
"Als je AI goed toegang geeft tot de juiste bronnen, die goed destilleren wat er in de overname wereld allemaal is gebruikt, Ja, dan kun je met je goede vraagstelling, zodat je heel snel je comparables goed op woorden kan krijgen." (Subject 3)	Quick comparisons	Practical AI Applications	Relative Advantage
"Bij banken hier natuurlijk in de financieringsaanvragen nu al dat het steeds meer de algoritmes kijken of het bedrijf gefinancierd kan worden of niet." (Subject 1)	Use of algorithms in finance applications	Practical AI Applications	Relative Advantage
"Dus AI kan met die logboek gegevens, kan heel goed zien, met die logboek gegevens van de financiële data, kan heel goed zien wat de gedurende het jaar gebeurt en waarom dat afwijkt." (Subject 3)	Annual financial analysis	Practical AI Applications	Relative Advantage
"En AI zou daar nogmaals echt een mooie binnenbocht kunnen brengen." (Subject 3)	Simplifying research	Simplified Research	Relative Advantage
"En dat je kunt AI in een vraag kunt stellen. Die struint het internet af. En die vat samen met welke informatiebronnen er eigenlijk kan wel zijn." (Subject 3)	AI for summarizing	Practical AI Applications	Relative Advantage
"En een aantal grotere. Ja, ik weet niet of ze dat echt doen die hebben van je rekenmodellen bedacht dat als je je bedrijf wil verkopen of je wil de waardering van een bedrijf doen dan moet je een aantal kengetallen invullen." (Subject 5)	Use of AI for preliminary valuation	AI for Business Valuation	Relative Advantage

"Er zijn best veel tijd bezig met tabellen te maken. Rapportages, informatie memoranda, waarderingen. En dat kan het proces denk ik heel erg vergemakkelijken." (Subject 4)	AI for reporting	Improved Reporting and Consistency	Relative Advantage
"Het is daarom denk ik, voor het standaardwerk zou je hier echt wel wat mee kunnen." (Subject 2)	AI for standard work	Practical AI Applications	Relative Advantage
"Het is heel handig als je bij z'n vorm van het al jouw mailhistorie of al jouw klantendata soms al wat uitgelegd kan krijgen." (Subject 3)	Summarizing client data	Practical AI Applications	Relative Advantage
"Het meer recht toe, recht aan de werk Ja, oké En dan moet je in dat voorgaande stappen, dat zou dan de meer waarde zijn, dat je die niet doet. Minder complex." (Subject 2)	AI for straightforward tasks	Practical AI Applications	Relative Advantage
"Ik denk dat AI bij waardering minder relevant is, behalve voor het kleinere werk." (Subject 2)	AI for small-scale valuation	AI for Business Valuation	Relative Advantage
"Ik denk dat AI je ook wel in staat zou stellen om nog dynamischer die forecast te maken. Dus om er nog meer kennis toe te voegen, maar ook, zeg maar, door anders vragen te stellen, heel veel sneller een ander type forecast op te bouwen." (Subject 2)	AI for dynamic forecasting	Improved Forecasting	Relative Advantage
"Ik stel geen meer zelf op, eerlijk gezegd. Ja, alles gaat door chat GPT om het te structureer, formuleer, structureer." (*Subject 7*)	Using ChatGPT for everything	Practical AI Applications	Relative Advantage
"Maar als je dan kijkt wat wordt er dan met die foto's dan zijn wij dat die dat zeggen van hey, kunnen we dat ook niet gebruiken om foto's voor een goed waarderingsrapport te maken." (Subject 9)	AI for valuation reports	AI for Business Valuation	Relative Advantage
"Want die heeft, zeg maar, direct toegang tot al die bronnen." (Subject 3)	Direct access to sources	Data Retrieval Efficiency	Relative Advantage
"Zoals met veel dingen, zoals met veel services, is de toegankelijkheid om hoogwaardige informatie te krijgen, is sterk toegenomen." (*Subject 7*)	Access to information easier	Data Retrieval Efficiency	Relative Advantage
"Ik zie het absoluut niet als een bedreiging. Alleen maar kansen dus." (Subject 4)	AI as opportunity	AI Potential	Relative Advantage
"Bijvoorbeeld als data vooroordelen bevat, dan kan AI die vooroordelen overnemen en verkeerde beslissingen maken waardoor je eigenlijk de beslissingen niet klakkeloos kan overnemen." (Subject 8)	AI can be biased	AI Reliability Issues	Reliability
"Daar *(integrating AI)* gaat het dan weer straks mis mee, denk ik." (Subject 5)	Potential for errors	AI Reliability Issues	Reliability
"Dat betreft ook wel weer gevaarlijk (*output AI)*. Omdat je ziet dat niet alle antwoorden kloppen." (Subject 5)	AI can give wrong answers	AI Reliability Issues	Reliability

"Dat is denk ik, dat stukje, dat ga je dus niet vangen. Nou, en hoe zorg je nou dat je wel vertrouwt die dingen maar dat je ook weet, ik moet daar wel wat mee Ik moet daar altijd mijn ogen voor openhouden." (Subject 9)	Balancing AI trust and vigilance	Over-Reliance Risks	Reliability
"Dus dat vind ik ook wel het gevaar van artificial intelligence." (Subject 5)	Risk of incorrect assumptions	AI Setup and Accuracy	Reliability
"Dus er was laatst een operatie, een onderzoekje hadden ze camera's in de winkel staan en er werden altijd dezelfde mensen eruit gepikt omdat die vandaag waren en het was met AI gedaan. Hoe kwam dat? Input is output." (Subject 2)	Bias in AI	AI Reliability Issues	Reliability
"dus het gevaar is wel, vind ik, altijd dat je gaat vertrouwen op iets waarvan je eigenlijk niet weet hoe het tot stand gekomen is" (Subject 2)	Risk of blind trust in AI	Over-Reliance Risks	Reliability
"Het risico is dat je inderdaad, je moet echt wel weten wat je doet, dus je moet wel doorgronden van waar komt iets vandaan, hè." (Subject 8)	Risk of over-relying on AI	Over-Reliance Risks	Reliability
"Ook een AI tool kan fouten maken omdat het soms dingen verkeerd begrijpt of omdat de data die wij het gaven bijvoorbeeld niet goed is. AI leert natuurlijk van de vorige prompts of opdrachten die je hebt gegeven." (Subject 8)	AI can make errors	AI Reliability Issues	Reliability
"Heel het AI zorgt ook dat je, ja, het is een redelijk onverspelbaar iets." (Subject 4)	Unpredictable work	Reliability	Reliability
"En het kan best zijn dat we een generatie verder zijn die dan zegt jo, maak je druk om, we doen gewoon de deal erop. Dat zou kunnen, maar dat zie ik voor mezelf, zie ik dat niet." (Subject 9)	Trust in AI differs by age	Trust issues by age	Reliability
"AI moet goed geïmplementeerd en beheerd worden. Bijvoorbeeld, als je kijkt naar de nauwkeurigheid van waarderingen is het wel erg belangrijk dat de data die gebruikt wordt om de AI te trainen geen fouten bevat." (Subject 8)	Output should be as good as the input	Output Challenges	Reliability
"Dus dan is de vraag hoe mensen het gaan gebruiken. Als het straks zo iets wordt van de computer zegt dit dus het is zo. Daar heb ik bijvoorbeeld wel eens mijn twijfels over." (Subject 5)	Output should be as good as the input	AI Capabilities and Roles	Reliability
"Je hebt de waardering van een bedrijf dat kun je in een rekenmodel zetten maar er zit ook heel veel aannames in die AI minder goed kan inschatten denk ik." (Subject 9)	Hard for AI to make the correct assumptions	Decision-Making Difficulties	Reliability
"Aan andere kanten, garbage-in is garbage-out. Dus er is ook heel veel onzin op internet." (Subject 5)	Quality of input affects output	Data Quality and Accuracy	Reliability

"Als er een model is dat het prima waarderingen kan doen dan ben ik dat deel van de business kwijt." (Subject 5)	Risk of losing business to AI	Dependence and Reliability Concerns	Reliability
"Dat vind ik hetzelfde als vroeger met data-analyse. Je moet wel heel precies al je definities correct hebben." (Subject 9)	Importance of precise definitions	AI Adoption Considerations	Reliability
"dit betekent dat we moeten weten hoe beslissingen worden genomen door de AI en deze moeten we ook kunnen uitleggen." (Subject 8)	Need for AI transparency	Trust and Vigilance	Reliability
"Dus als je dat doet, dan ga je dus alle onvoorspelbare dingen loop je het risico die uit te sluiten." (Subject 2)	Risk of excluding unpredictability	Trust and Vigilance	Reliability
"Dus dat is denk ik, dat stukje, dat ga je dus niet vangen Nou, en hoe zorg je nou dat je wel vertrouwt die dingen maar dat je ook weet, ik moet daar wel wat mee Ik moet daar altijd mijn ogen voor openhouden." (Subject 2)	Balancing trust and vigilance	Trust and Vigilance	Reliability
"Het wordt steeds belangrijker wat je vragen. Hoe je te vragen. Of de juiste vragen stellen voor het correcte antwoord." (Subject 5)	Importance of asking the right questions	AI Adoption Considerations	Reliability
"Ik blijf dat lastig vinden. Waar ligt de grens tussen AI en software? AI is eigenlijk de vorm van perfecte software." (Subject 6)	Risk of relying too much on AI	Dependence and Reliability Concerns	Reliability
"Je moet het snappen. Maar je neemt aan dat AI dat ook specifieert op dat gebied." (Subject 6)	Ensuring data accuracy and quality	Data Quality and Accuracy	Reliability
"Maar waarom vind je dat iets iets waard is, want dat eigenlijk heb je het gebruikt om te bepalen wat iets waard is, dan moet je altijd uit kunnen leggen" (Subject 2)	Justifying AI results	Evaluation and Validation	Reliability
"Nou, de output is natuurlijk nog steeds wel groot en deels afhankelijk ook van de input, dus als je input-kwaliteit ruk is, dan wordt de output ook ruk." (*Subject 7*)	Quality depends on input	Data Quality and Accuracy	Reliability
"Om goede output te genereren met AI is ook de input heel erg belangrijk." (Subject 9)	Importance of input for quality output	Data Quality and Accuracy	Reliability
"Data opslag wordt natuurlijk heel veel toegang tot gegevens en hoe ga je om met die opslag... kan ook een limiterende factor zijn." (Subject 1)	Data storage and regulation as limiting factors	Data Privacy and Safety	Safety & Privacy
"En dan mag je dus ook niet delen met internet (*output AI)*, een derde partij." (Subject 5)	Data privacy concerns	Data Privacy and Safety	Safety & Privacy
"Er is nu ook veel regelgeving, Europees geregeld met AVG en gegevensbescherming... waarom bedrijven het niet gebruiken voor bepaalde dingen." (Subject 9)	European regulations impacting AI adoption	Data Privacy and Safety	Safety & Privacy

"Maar er zijn ook problemen, zoals privacy en gevoeligheid van data. Mensen maken zich zorgen dat hun gegevens niet veilig zijn met AI, dat het ik zeg maar wat in een keer de hele wereld overvliegt en dat al je data op straat ligt." (Subject 8)	Data safety concerns	Data Privacy and Safety	Safety & Privacy
"Privacy kan wel als een bedreiging gezien worden (*AI)*. Van hoe ga je daarmee om?" (Subject 4)	Privacy threat	Data Privacy and Safety	Safety & Privacy
"We hebben te maken met gevoelig informatie. Wat je niet zomaar in ChatGPT wil gooien, wat we ook niet doen." (Subject 4)	Privacy concerns	Data Security and Ethical Considerations	Safety & Privacy
"Ja, ik denk dat dat wel als je een grote organisatie hebt en je kunt dat dan ook brede benutten dat je ook veel meer processen hebt waar je dat kan dit bouwen en dat dan denk ik wel dat het goed is om dat professioneel op te pakken top-down omdat je anders ook niet die kennis en kunde binnen de gehele organisatie is." (Subject 9)	Professional approach to AI integration in large organizations	Organizational Optimization	Top Management Support
"Het is prioriteit. Het is gewoon echt prioriteit of je AI wel gebruikt en erin wilt ontwikkelen of niet" (Subject 2)	Priority issue	Mixed Perception on Necessity	Top Management Support
"Ik denk heel bewust. Maar dat is ook omdat we daar wel mee bezig zijn om dat in te richten." (Subject 1)	High awareness of AI	Knowledge and Skills Development	Top Management Support
"Ik moet er ook even over nadenken. Omdat ik hier niet dag na dag zo over nadenken." (Subject 4)	Occasional consideration	Mixed Perception on Necessity	Top Management Support
"Het (AI) is niet volledig onbekendheid. Het is denk ik gewoon in heel veel gevallen - Ja, het is enerzijds het gewoon onvoldoende weten wat je ermee kunt of zelf niet de drive hebben om ermee aan de slag te gaan." (Subject 7)	Lack of initiative	AI Training and Education	Unfamiliarity
"Maar goed, het *(AI)* staat wel in de kinderschoenen. We gebruiken het wel. Maar dat is met name laten we zeggen textueel omdat we niemand hebben die er zich écht in verdiept." (Subject 4)	Minimum of AI impact now	Early stages of AI	Unfamiliarity
"Iedereen ziet wel dat het grote mogelijkheden heeft maar waar het nou precies naartoe gaat dat gevoel heb ik niet dat mensen dat weten." (Subject 4)	Potential of AI	AI Potential	Unfamiliarity
"Zelfs dat je begon met internet, wist je ook niet wat er allemaal mogelijk was." (Subject 3)	Unknown potential	AI Potential	Unfamiliarity
"Alleen zit daar veel AI in? Niet dat ik weet." (Subject 4)	Lack of knowledge	Practical Challenges in Implementation	Unfamiliarity

"De professor waarvan ik daadwerkelijk, zeg maar, DCF waarderen heb geleerd, dat was 2022 of 21, die van hem moesten wij verplicht op het examen handgeschreven, DCF maken. Weet je waarom zouden we dat in godsnaam ooit nog doen? Maar dat moest wel van hem, en dan gingen we dat laten vragen, waarom moet dat nou? Dat wilde hij gewoon. Dat is wel totaal geen logica achter, nu gebeurt dat allemaal met AI als je wilt." (*Subject 7*)	Old habits die hard	Learning from History	Unfamiliarity
"Dus we proberen wel daarin te ontwikkelen maar het heeft nog geen top prioriteit." (Subject 4)	AI not top priority	Mixed Perception on Necessity	Unfamiliarity
"Het lastige is ook nog eens, en meteen nog wat je letterlijk hetzelfde lerende vermogen van het systeem, dat kan ik nog niet helemaal goed voorzien." (Subject 3)	Learning limitations	AI Learning and Adaptation	Unfamiliarity
"Onbekend maakt onbemind, toch, dat ze te weinig zien van wat, dat het te weinig praktisch gemaakt wordt naar de dag van vandaag" (Subject 2)	Lack of practical application	Practical Application Concerns	Unfamiliarity
"Vorig jaar kwamen er allemaal partijen bijeen of andere investeerders en bedrijfsovernamen, adviseurs en er waren juristen. En die vertelden hoe ze het gebruikten." (Subject 5)	Knowledge sharing among professionals	Knowledge and Skills Development	Unfamiliarity
"Collega's die inderdaad nog een beetje de kat uit de boom kijken, of zelfs gewoon denken van ja, weet je, dat zal ze tijd wel leren. Ja, gewoon onkennigheid, hebben gewoon geen idee wat de mogelijkheden zijn en vastgeroest in gewone processen." (*Subject 7*)	Colleagues are really cautious	Skepticism and Resistance	Unfamiliarity
"Dus het is niet volledig onbekendheid. Het is denk ik gewoon in heel veel gevallen - Ja, het is enerzijds het gewoon onvoldoende weten wat je ermee kunt of zelf niet de drive hebben om ermee aan de slag te gaan. Of misschien nog niet voldoende inzien wat de toegevoegde waarde nou daadwerkelijk is." (*Subject 7*)	Not seeing value in AI	Skepticism and Resistance	Unfamiliarity

Structured Data Research: Structured set of Questions Answers

Age	Edu_Lvl	Job_Title	Years_Exp	Firm_Age	Numb_Of_Emp	Avr_Valu_Business	Avr_Numb_Business	Purpose	Val_Meth	4.1	4.2	4.3	5.1	5.2	5.3	6.1	6.2	7.1	7.2	7.3	8.1	8.2	8.3	11	12	13	21	22	23	31	32	33	41	42	43	51	52	53
4	2	4	3	5	1	4	3	1	2	6	3	6	6	2	5	6	2	5	6	4	2	2	2	5	5	4	3	4	2	6	5	2	5	5	2	5	5	2
1	3	5	2	1	2	5	2	1	2	7	7	7	4	3	5	6	7	5	5	2	5	5	2	7	3	1	5	5	4	2	6	6	5	7	3	5	7	3
2	3	5	2	4	2	5	5	1	2	6	5	6	4	5	4	6	5	3	5	4	4	5	2	5	3	3	7	3	1	6	3	1	6	3	1	3	3	4
4	3	5	4	3	1	5	3	1	2	7	7	6	2	2	4	4	4	5	5	3	2	6	4	6	6	4	6	7	4	6	7	4	5	7	4	6	7	4
3	3	4	4	4	2	5	5	1	2	6	2	6	6	3	6	5	4	3	5	3	5	6	2	6	5	2	6	3	2	3	6	2	6	2	2	6	4	2
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