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Austrian market

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## Abstract

**Purpose** – This research paper seeks to understand the role of Artificial Intelligence (AI) in reshaping the landscape of corporate ESG. It considers both the impact AI already has and the possibilities it holds for the future. By looking at how AI tools are applied within companies, the paper examines their influence on environmental responsibility, social practices, and governance standards. The study is situated on the Austrian market, with its scope limited to the corporate sector.

**Design/methodology/approach** – This study will adopt a qualitative-empirical approach to data collection. The primary data for the study will be collected through semi-structured interviews with professionals who have direct experience and expertise in the use of AI tools in corporate accounting and ESG management. The author interviewed 16 participants, including several ESG experts, risk managers, two AI specialists, three partners, one manager as well as two financial regulatory officers. In total, the research paper consists of 16 semi-structured interviews conducted between April and June of the year 2025.

**Findings**– AI tools are becoming ever more vital in enhancing ESG performance within the corporate sector, enabling companies to operate more efficiently, ensure more reliable data, and deliver higher-quality non-financial reporting. Regarding environmental aspects, AI supports real-time emissions monitoring and risk forecasting. At the same time, socially, it contributes to employee development through upskilling and has the potential to improve diversity and engagement of employees. However, challenges including data bias, ethical concerns, the environmental footprint of AI infrastructure, and unequal access for SME remain. On the whole, AI is seen as a supportive tool in ESG strategy, but human oversight and ethical governance are essential for sustainable adoption.

**Originality/ value**- As one of the first studies to explore the understanding and application of AI technology in relation to ESG performance in the Austrian corporate sector, it also provides insights into the current and potential future impact of AI technology and existing AI instruments on ESG practices.

**Research limitations** – As this is a relatively new field, the existing literature on the intersection of AI tools and corporate ESG performance remains scarce. Additionally, the number of qualified participants for the qualitative interviews was challenging to find. Furthermore, the study's focus on corporate business only lines in Austria market, thus the study can be different in another geographic regions.

**Keywords** - Artificial Intelligence, ESG performance, AI-tools, sustainability reporting

**Paper type**- Interview-based research paper.

## **Abstract (Deutsch)**

**Zweck-** Diese Forschungsarbeit untersucht die Rolle Künstlicher Intelligenz (KI) bei der Neugestaltung der ESG-Landschaft von Unternehmen. Sie berücksichtigt sowohl die bereits vorhandenen Auswirkungen von KI als auch ihre zukünftigen Möglichkeiten. Anhand der Anwendung von KI-Tools in Unternehmen untersucht die Arbeit deren Einfluss auf Umweltverantwortung, soziale Praktiken und Governance-Standards. Die Studie ist auf den österreichischen Markt ausgerichtet und beschränkt sich auf den Unternehmenssektor.

**Design/ Methodik/ Ansatz-** Diese Forschungsarbeit untersucht die Rolle Künstlicher Intelligenz (KI) bei der Neugestaltung der ESG-Landschaft von Unternehmen. Sie berücksichtigt sowohl die bereits vorhandenen Auswirkungen von KI als auch ihre zukünftigen Möglichkeiten. Anhand der Anwendung von KI-Tools in Unternehmen untersucht die Arbeit deren Einfluss auf Umweltverantwortung, soziale Praktiken und Governance-Standards. Die Studie ist auf den österreichischen Markt ausgerichtet und beschränkt sich auf den Unternehmenssektor.

**Ergebnisse-** KI-Tools werden für die Verbesserung der ESG-Performance im Unternehmenssektor immer wichtiger. Sie ermöglichen Unternehmen effizienteres Arbeiten, zuverlässigere Daten und eine qualitativ hochwertigere nichtfinanzielle Berichterstattung. In ökologischer Hinsicht unterstützt KI die Echtzeit-Emissionsüberwachung und Risikoprognose. Gleichzeitig trägt sie durch Weiterbildung zur Mitarbeiterentwicklung bei und hat das Potenzial, die Vielfalt und das Engagement der Mitarbeiter zu verbessern. Herausforderungen wie Datenverzerrung, ethische Bedenken, der ökologische Fußabdruck der KI-Infrastruktur und ungleicher Zugang für KMU bleiben jedoch bestehen. Insgesamt wird KI als unterstützendes Instrument in der ESG-Strategie angesehen, doch menschliche Kontrolle und ethische Governance sind für eine nachhaltige Einführung unerlässlich.

**Originalität/ Wert-** Als eine der ersten Studien, die das Verständnis und die Anwendung von KI-Technologie in Bezug auf die ESG-Performance im österreichischen Unternehmenssektor untersucht, bietet sie auch Einblicke in die derzeitigen und potenziellen zukünftigen Auswirkungen von KI-Technologie und bestehenden KI-Instrumenten auf ESG-Praktiken.

**Forschungslimitationen-** Da es sich um ein relativ neues Forschungsfeld handelt, ist die vorhandene Literatur zum Zusammenhang von KI-Tools und der ESG-Performance von Unternehmen noch spärlich. Zudem war es schwierig, qualifizierte Teilnehmer für die qualitativen Interviews zu finden. Da sich die Studie ausschließlich auf

Unternehmensgeschäftsbereiche im österreichischen Markt konzentriert, kann die Studie in anderen geografischen Regionen abweichen.

**Schlüsselbegriffe-** Künstliche Intelligenz, ESG-Performance, KI-Tools, Nachhaltigkeitsberichterstattung

**Art der Arbeit-** Interviewbasierte Forschungsarbeit.

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## List of Abbreviations

|         |                                                  |
|---------|--------------------------------------------------|
| AI      | Artificial Intelligence                          |
| ChatGPT | Generative Pre-trained Transformer               |
| CSDDD   | Corporate Sustainability Due Diligence Directive |
| CSRD    | Corporate Sustainability Reporting Directive     |
| GDPR    | General Data protection Regulation               |
| ESG     | Environmental, Social, Governance                |
| EU      | European Union                                   |
| HR      | Human resource management                        |
| LLM     | Large Language Model                             |
| SME     | Small medium enterprise                          |



# 1. Introduction

The continuous growth of the Internet and related digital technologies, including cloud computing, blockchain, big data analytics (BDA), and artificial intelligence (AI), is driving a significant transformation across industries and reshaping the global digital economy (Moll & Yigitbasioglu, 2019). These technologies, often integrated with web-based business models such as digital platforms, contribute to what is now widely referred to as the Fourth Industrial Revolution, or Industry 4.0 (Ng & Alarcon, 2020, p. 1). The digital revolution radically alters classical and traditional business procedures, creating new opportunities and challenges for various professions. Presently, a broad number of companies and service firms have an increasing tendency to use Artificial Intelligence (AI) to collect and process data, turning it into valuable insights that support improved decision-making and secure economic advantages (Lehner et al., 2022, p.109). As one of the defining technologies of the 21st century, artificial intelligence is transforming operations across a wide range of industries, including auditing, accounting and corporate governance.

Not only is AI bringing latest developments and provoking significant attention and debate, the term ESG- Environmental, Social, and Governance has become widespread (Seok et al., 2024, p. 1) . as well. As essential participants in the microeconomic processes of production and operations, companies play a critical role in advancing sustainable development (Han & Liu, 2023, p.1). According to Seok et al., (2024, p. 1), for the time being, the term ESG has become a central focus in the growing field of corporate sustainability. Therefore, an important question arises regarding the connection between AI and sustainable ESG principles. How does the use of artificial intelligence and accessible tools influence the performance of Environmental, Social, and Governance (ESG) factors in the corporate sector of the Austrian market exactly? This core question served as the starting point for developing this research thesis and was inspired by Fedyk et al. (2022) and their research question: “How can artificial intelligence impact audit quality and efficiency?”

Interestingly, the relevance of sustainability reporting and Environmental, Social, and Governance (ESG) issues began to gain significant attention in December 2015, when the Paris Agreement was signed in Paris, France, and subsequently adopted by 196 countries (European Commission, n.d.). The agreement aimed to actively mitigate the emission of greenhouse gases,

which are major contributors to global warming and climate change disruption. Moreover, the European Commission has additionally set out its goals and main strategies to keep the global average temperature rise below 1.5°C compared to pre-industrial levels. Its long-term vision aspires to position the EU as the world's first climate-neutral continent by 2050, through significant pollution reductions and dedicated efforts to restore environmental and ecological balance (United Nations Framework Convention on Climate Change, 2015). At that time, the concept of ESG emerged at the leading edge of global economic discourse, emphasizing the importance of sustainability and social responsibility (Norocel & Vierescu, 2024, p. 1). The second S-pillar, social, stands for equal opportunity policies, human rights, and other socially responsible activities within the company. The last G-pillar, governance, relates to governance practices such as ensuring transparency and accountability in leadership, as well as implementing business ethics policies (Xie et al., 2018, p. 296). These three elements are critical components of ESG frameworks and will be further discussed in detail in this study in second section 2.3.1 The concept and structure of ESG.

Importantly, further qualitative research is essential to gain a deeper understanding of the current market position regarding modern technologies, artificial intelligence, and the impact of AI tools on company's sustainability performance. Consequently, the principal purpose of this thesis is to explore how AI tools, such as data analytics, machine learning, and automation, shape ESG performance in the corporate sector within the Austrian market. Due to the high cost of modernization, research, and development for technology implementation, small and medium-sized companies' adoption of AI tools can create barriers (Kend & Nguyen, 2020, p. 269). Therefore, only large companies, as defined by Austrian law and paragraph § 221 UGB, along with their employees and partners will be included in this study. Moreover, to further support the objectives of the research, two external stakeholders, employed in government agencies also participated in the research. Besides, the paper will investigate how AI tools are strategically utilized in corporate accounting to assess and manage ESG risks, monitor progress toward sustainability goals, and optimize sustainability reporting and existing compliance processes. Ultimately, this study aims to provide a comprehensive understanding of the operational outcomes, realized benefits, and potential risks of integrating AI tools into the ESG domain, both within corporations and across diverse stakeholder groups beyond them.

Additionally, this paper should answer the following three research questions:

*RQ1: What have the past challenges and barriers to implementing AI tools in the corporate sector been?*

*RQ2: What are the key expectations of stakeholders (e.g., employees, customers, investors) regarding integrating AI tools in corporate ESG strategies in the Austrian market?*

*RQ3: What new opportunities and benefits can AI tools introduce to the future ESG performance of companies?*

The paper is structured as follows. Firstly, the literature background of artificial intelligence, Environmental, Social, and Governance (ESG) expression, and the connection between the abovementioned two are reviewed. After providing a literature review, the second section describes the methodology and scope of the paper, followed by the presentation of the qualitative research findings, which will be discussed in detail in the paper. Lastly, a summary of the paper, as well as the specific limitations of the study, will be conducted.

## **2.Literature Review**

### **2.1 Theoretical Framework and gaps in literature**

In this section, theoretical background of the thesis will be outlined, providing a framework for understanding the foundation that guides the research. The theoretical framework for this study is primarily based on stakeholder theory, particularly Freeman's 1984 concept of the "stakeholder" (Freeman et al., 2010, p. 33). Stakeholder theory has been widely acknowledged for over four decades as a framework that emphasizes the significance of various stakeholders' interests, needs, and influence in organizational decision-making processes. By applying stakeholder theory, this research critically examines how different groups, such as employees, customers, investors, partners and regulators, interact with and are impacted by the integration of AI tools in corporate Environmental, Social, and Governance (ESG) practices.

Back in 1980s, Freeman and other scholars addressed three core business issues that are closely linked. The first business issues or the stakeholder theory problem was “the problem of value creation and trade” (Freeman et al., 2010, p. 4). This matter addresses and examines the topic of research paper critically, where in the times when the AI technologies, as a rapidly changing and affecting technology, have heavily influenced daily activities of companies, creating new value matter for a broad range of stakeholders. Furthermore, the problem also targets and spreads on the ESG segment, and examines whether AI tools contribute to environmental sustainability, support social integration, and encourage ethical governance. This approach moves beyond shareholder returns, focusing instead on how artificial-intelligence-enabled practices impact long-term goals in the corporations, and review stakeholder relationships and achieve sustainable business performance.

The second addressed problem of the stakeholder theory was “the problem of the ethics of capitalism” (Freeman, 2010, p. 4). Freeman and other scholars argued for a more ethical, stakeholder-oriented form of capitalism, in which value creation benefits all stakeholders, not just investors and shareholders, which are mostly purely profit oriented. This problem raises the question whether contemporary capitalism can be considered morally defensible, particularly when it prioritizes achieving shareholder profit over broader social and ethical responsibilities. Applied to the research paper, this problem is equally relevant for the ethical use of AI tools. With application of the AI tools in the companies, traditional capitalism might deploy the tools solely for profit achievement where the cost cutting such as workforce reduction can occur. The paper should examine if AI tools can support responsible and sustainable form of capitalism in corporations.

The last addressed stakeholder theory problem is “the problem of managerial mindset” (Freeman et al., 2010, p.5). This issue can be as well applied to the research subject, impact of AI tools on corporate ESG performance, whereby the focus on the managers is and how the value can be created better and how the business can be connected to ethics. Nowadays, evolving managerial thinking from traditional control and efficiency to modern collaboration, ethical responsibility and sustainability is crucial for AI tools to be used responsibly and effectively in ESG frameworks. This transformation includes investing in AI transparency tools and developing internal models within the organizations. Furthermore, building cross-functional ESG collaboration in the entities and embedding AI ethics into core strategic decision-making are included in the transformation as well.

The academic literature of the last five years has primarily addressed the direct impact of emerging AI technologies on accounting field as well as the auditing professionals, in which the importance of continuing education in order to stay in line with the new trend was often highlighted. The findings underscore the necessity to adapt and modify the current educational curricula in the school system. Imjai et al. (2024, p.1) indicated in their study the existing presence of a gap between AI and future accountants and highlighted the need to integrate AI education in accounting to prepare future professionals for evolving technologies. Besides, accounting and accountability studies have both the responsibility and the potential to contribute to the discourse by addressing not only the challenges, but also the opportunities, through continuous learning and adaptability (Bracci, 2022, p. 756). Besides, Ballantine et al. (2024, p.9) expressed in their study consideration that without change in accounting academics, that profession is likely to become progressively less relevant to the evolving needs of business. Moreover, accountants and auditors, the relationship between AI technologies, especially the use of AI tools and other relevant stakeholders, appeared to be neglected. In addition, the use of AI tools and the impact on the ESG performance was until now only analyzed in small numbers of research and practical journals on the Asian market. Furthermore, those mentioned practical journals barely included qualitative research methods in the papers.

On the relevant research subject, there was no accomplished study or relevant literature in Europe, especially not in the Austrian market. In order to address this gap in literature, this research paper examines the influence of AI tools on the corporate ESG performance, considering the perspectives and impacts of both internal and external stakeholder groups. On the internal side, the study focuses particularly on different employees and managers of the companies. The study looks into the roles the existing roles currently held within companies, their working conditions, and the extent to which decision-making processes may be directly shaped by the integration of AI technologies. On the external side, the research incorporates the viewpoints and expectations of key stakeholder groups such as business partners and shareholders, whose investment decisions and long-term interests are increasingly shaped by ESG outcomes. Additionally, the study explores the role of regulatory bodies operating within the Austrian market, which play a critical role in shaping ESG compliance standards and guiding responsible AI adoption through legal and policy frameworks.

## 2.2 Artificial Intelligence

### 2.2.1 Origins and meaning of AI

The idiom “Artificial Intelligence” describes a computer program or software application that is designed to imitate or reproduce the behavior of a human being (Ng & Alarcon, 2020, p. 3). The development of AI technology began in the middle of the 20th century, initially taking shape as a theoretical concept within academic and scientific circles. John McCarthy, a computer scientist, is seen as a foundational figure in the development of artificial intelligence (AI). (Kaplan, 2016, P. 1). In 1955, he described a system as “that of making machine behave in ways that would be called intelligent if a human were so behaving” (Kaplan, 2016, P. 1). Year after, in 1956 the expression of AI was brought by Marvin Minsky and John McCarthy, researchers at Stanford, at the Dartmouth Conference on Artificial Intelligence (Haenlein & Kaplan, 2019, P. 7).

In the ethics guidelines for trustworthy, the term is described as: “Artificial intelligence (AI) systems are software (and possibly also hardware) systems designed by humans that, given a complex goal, act in the physical or digital dimension by perceiving their environment through data acquisition, interpreting the collected structured or unstructured data, reasoning on the knowledge, or processing the information, derived from this data and deciding the best action(s) to take to achieve the given goal. AI systems can either use symbolic rules or learn a numeric model, and they can also adapt their behavior by analyzing how the environment is affected by their previous actions.” (European Commission, 2019, p. 36). Furthermore, the Organization for Economic Co-operation and Development (OECD) describes AI respectfully as a machine-based system, designed to achieve specific human-defined objectives, be able to make predictions, provide recommendations, or influence decisions within both real and virtual environments (Fedyk et al., 2022, p. 943).

Even though the term AI has been present for over 70 years, most people know it as “Machine learning” or “Deep learning”. The reason behind that is that AI encompasses a variety of methods and strategies. These include machine learning, its specialized branches like deep learning and reinforcement learning, and machine reasoning, which encompasses planning, scheduling, knowledge representation, logical inference, search algorithms, and optimization. Additionally, AI involves robotics, which integrates control systems, perception, sensors,

actuators, and the combination of these components into fully functioning cyber-physical systems (European Commission, 2019, p. 36).

One of the most notable and widely adopted advancements in artificial intelligence is the AI chatbot ChatGPT (Chat Generative Pre-Trained Transformer) which was developed by the U.S.-based research organization OpenAI. The program ChatGPT is built on large language models (LLMs) (Marr, 2024, P. 4). Currently, the latest iteration of GPT-4 has brought major enhancements and simplifications for users. These included the ability to compose emails, generate programming code, and minimize the risk of producing harmful outputs, and improving precision in tasks such as facial recognition (Marr, 2024, P. 7).

Over time, AI transitioned from a research-based idea into a transformative technology, significantly influencing diverse areas of everyday life (Bianchini et al., 2022, p.2). Besides the impact of the AI-era developments on the fields of accounting and auditing, many considerations and pressing questions are being raised about the future of these two professions in light of AI. Moreover, AI collaboration in accounting continues to enable humans and societal values to influence key decisions. In this context, the balance between accountants and AI must be carefully managed to ensure that ethical decision-making is maintained in the future (Lehner et al., 2022, p. 127). Furthermore, Norzelan et al. (2023, p.8) pointed out in their study that AI can reduce manual daily tasks, such as data entry, data verification, etc. Reducing those manual tasks reduces costs for the company and provides time for other operations. Therefore, artificial intelligence is rapidly transforming different professions and its significance within organizations and society (Lehner et al., 2022, p. 126).

### **2.2.2 AI Act- The AI Regulation of the EU**

In spring 2024, after close to three years of discussions, the EU Parliament and Council finalized rules on using artificial intelligence. 12.7.2024, the official AI Act was published (European Parliament and Council, 2024). This makes the EU AI Act the first legal instrument worldwide to provide detailed provisions governing the use of AI under Regulation (EU) 2024/1689; companies must ensure transparency and accountability in AI usage (European Parliament and Council, 2024). At the beginning of February 2025, the EU AI Act was officially enacted. This regulation sets out a clear legal framework for how companies across the European Union may develop and deploy artificial intelligence. The provisions carry wide-range implications for almost every organization since AI is now embedded in almost every business areas—from office applications to strategic decision-making.

According to the Austrian Federal Economic Chamber (2025), the EU AI Act outlines a phased implementation based on a risk-based classification system, which took effect in February 2025. From this date onward, the use of prohibited AI systems must cease entirely. In addition, companies are required to provide appropriate training for employees on the AI tools implemented within their operations. Starting in August 2026, further obligations under the AI Act will come into force, including transparency requirements for generative AI systems. For high-risk AI applications, a longer transition period of 36 months has been granted to allow for full compliance (The Austrian Federal Economic Chamber, 2025).

Under the EU AI Act, companies must implement training measures to educate their employees on the responsible use of AI. The goal is to enhance AI literacy, promote responsible usage, and ensure compliance with legal standards. In the new EU AI Act law, Chapter XII contains separate legal regulations regarding failure to meet these required obligations for each member of the European Union. Article 99 lists all the Penalties, including significant fines and sanctions for small and medium enterprises (SMEs) and start-ups. Non-compliance of Article 5, Prohibited AI practices can lead to penalties of up to 7% of a company's global annual turnover, depending on the severity and nature of the violation. This underscores the importance for organizations to take compliance seriously and to proactively implement the necessary measures to align with the regulatory framework (European Parliament and Council, 2024).



## 2.3 ESG

### 2.3.1 The concept and structure of ESG

Since the signing of the Paris Agreement in 2015, the framework of ESG (Environmental, Social, and Governance) has taken center stage in the global economic conversation, bringing attention to the growing emphasis on sustainability and social responsibility (Norocel & Vierescu, 2024, p. 1). Over the past ten years, organizations have viewed corporate social responsibility as one of the key areas for achieving sustainable business growth, thereby adding value to the ESG disclosures and expanding investments focused on ESG principles (Seok et al., 2024, p. 1). ESG key components represent three different pillars, which are Environmental, Social, and Governance. These pillars are being seen as a guide for evaluating how a company behaves in three key areas (Gillan et al., 2021, p.2). The first key component of the ESG is the environmental pillar, which assesses a company's impact on the natural environment and its surrounding ecosystems (Seok et al., 2024, p. 6). This involves examining various factors, such as a proactive stance on environmental challenges, efforts of the entity to reduce pollution and emissions, reduction and control of waste, energy efficiency policies, environmental footprint reduction, and environmental impact reduction programs (Xie et al., 2018, p. 291).

The social, S- pillar highlights a company's engagement with stakeholders such as employees, customers, suppliers, and local communities, reflecting its commitment to social responsibility. (Hoggatt et al., 2024, p. 362). The organization encourages workplace diversity and inclusion while upholding strict policies against discrimination against any demographic group. Healthy and safety policies, as well as a fair remuneration policy, are important indicators of the social pillar (Xie et al., 2018, p. 291). The last pillar is governance, representing an overview of how companies are managed towards transparent governance. In this pillar, the importance of examining the leadership structure within the organization is included (Seok et al., 2024, p. 8). Different governance activities indicate whether the company is following Global Reporting Initiative criteria, is a member of the United Nations Global Compact initiative, represents the proportion of independent directors within the total board composition as well as others (Xie et al., 2018, p. 291).

Strong ESG performance and positive ESG ratings, especially when paired with high financial investment, significantly enhance corporate innovation. These results in high ESG ratings and therefore help investors, managers, and policymakers evaluate a company's social and

environmental responsibility, which is key to long-term sustainability and competitiveness (Li et al., 2022, p. 385). Additionally, Seok et al. (2024, p. 8) also highlighted that the relationship between ESG practices and firm value has become a focal point for both academics and practitioners as global attention to sustainability intensifies. However, ESG pillars could enhance a company's market value, while social initiatives may improve financial performance; still, the direct impact of ESG pillars on operational performance is less clear (Shobhwani & Lodha, 2024, p. 221). Furthermore, a study from Norocel & Vierescu (2024, p. 7) reveals an opposite correlation on the country level between ESG scores and economic growth. This suggests that higher ESG performance at the country level does not necessarily translate into higher economic growth rates and points to the risk of companies engaging in greenwashing or distorting the meaning of reports.

### **2.3.2 Omnibus Regulation**

The Omnibus Regulation brings forward changes to the Sustainable Reporting Directive (CSRD), Corporate Sustainability Due Diligence Directive (CSDDD), and the EU Taxonomy Regulation. On February 26, 2025, the EU Commission published the draft of the first Omnibus package, which aims to simplify sustainability reporting (European Commission, 2025/0045). This initiative seeks to ease regulatory and administrative burden, creating new opportunities for competitiveness and investments. It includes harmonizing and streamlining CSRD, the CSDDD, and the EU taxonomy (Federal Chancellery, 2025).

The initiative brings noticeable changes and new opportunities, particularly for manufacturing companies with complex supply chains and investment plans (Austrian Federal Economic Chamber, 2025). According to the federal ministry, the directive updates and strengthens the existing requirements for companies to report social and environmental information. Companies previously subject to 'non-financial' reporting must comply with the new rules for financial years starting on or after January 1, 2024 (the "first wave"). The scope will then expand to include all large companies from January 1, 2025 ("second wave") and publicly listed small and medium-sized enterprises from January 1, 2026 ("third wave") (Federal Ministry, Justice, 2025).

The "Omnibus Regulation" permits the deferral or, in some cases, the complete exemption from reporting obligations for specific categories of companies. Notably, one of the proposals' most critical changes concerns the CSRD reporting obligation, which applies exclusively to companies with over 1,000 employees and either a turnover exceeding 50 million euros or a

balance sheet total above 25 million euros (Austrian Federal Economic Chamber, 2025). Another key aspect of the new regulation is the postponement of the CSRD reporting deadlines. The deadlines will be uniformly extended by two years and will affect the financial year 2027 instead of 2025 (European Commission, 2025/0044).

The named "stop the clock" proposal, which aims to delay the reporting obligations by two years, was adopted by the European Parliament and the Council of the European Union and published on April 16, 2024, as Directive (EU) 2025/794 in the EU Official Journal (Austrian Federal Economic Chamber, 2025). As a result, the reporting obligation for "second wave" companies has been postponed to fiscal years beginning in January 1, 2027, and for "third wave" companies to fiscal years starting from January 1, 2028. At the same time, discussions are ongoing about reducing the scope of application for "second wave" companies altogether (Federal Chancellery, 2025).

## **2.4 The intersection of Artificial Intelligence and ESG Frameworks**

Both AI and ESG have reached increasing recognition in the corporate sectors. Incorporating ESG principles into corporate strategy is now a global imperative driven by regulatory pressures, investor expectations, and the need for sustainable development (Asif et al., 2023, p. 9). Optimizing production organizations' ESG performance is gaining growing significance in the worldwide push for environmental sustainability (Qaiser et al., 2025, p. 2052). The progress and development of the ESG pillars and sustainability are playing an essential role in the national economies, especially across Asian countries, most notably in China, which is the origin of most related research articles. Therefore, the pillars are critical for enhancing individual competitiveness and broader economic and social advancements (Xiao & Xiao, 2025, p. 1). On the other hand, AI is rapidly transforming the corporate landscape, offering new tools for optimizing operations, managing risks, and driving innovation (Zhang & Yang, 2024, p. 12).

With digital technology advancing and environmental problems becoming more urgent, AI is now an essential tool helping manufacturing companies stay ahead by working more sustainably (Qaiser et al., 2025, p. 2059). AI significantly elevates corporate ESG performance

from a supply chain perspective by enabling real time monitoring, data driven decision making, and transparent reporting (Lin & Zhu, 2024, p. 587). According to Zhang & Jang (2024, p. 14), their study also indicates the positive impact of use of AI on E pillars, environmental and S pillars, social, but also measures showing limited influence on governance aspects. Furthermore, the study from Naveed et al. (2025) highlighted the increase in environmental and social pillars. Still, on the other hand, the G pillar, governance, had an adverse effect, which is explained by the unwillingness of executives to invest time and resources such the AI in improving quality of sustainability reports. The study from Chen et al. (2024, p. 1093) highlights the importance of internal resource allocation and innovation as channels through which AI drives sustainability improvements. Besides, by optimizing resource allocation, promoting green innovation, and improving governance and social responsibility, AI enables firms to achieve higher ESG ratings and advance their sustainable development goals (Zhang & Yang, 2024, p. 12). Furthermore, Naveed et al. (2025, p. 16) brought attention to the increase in the quality of ESG sustainability disclosures with the adoption of AI tools by improving data accuracy, standardization, and transparency. Villiers et al. (2023, p. 111) confirmed in the study that AI offers significant potential to streamline sustainability reporting, however, it introduces systemic risks if deployed uncritically while implementing safeguards to prevent greenwashing and ensure accountability.

As AI technology continues to evolve, its role in shaping the future of corporate sustainability will only become more central, offering both opportunities and challenges for managers, policymakers, and researchers alike (Zhang & Yang, 2024, p. 9). At the same time, as regulatory demands and stakeholder expectations continue to rise, AI will remain central to the evolution of sustainable, ethical, and resilient global supply chains (Lin & Zhu, 2024, p. 595). Most of the study points out that ESG plays a fundamental role in connecting and enhancing the positive effects of AI on sustainability and providing a robust foundation for long-term corporate and societal progress (Xiao & Xiao, 2025, p. 16).

### 3. Methodology

In this research paper, a qualitative research method was applied. The study was based on semi-structured personal interviews, because of its adaptability and ability to reveal significant and often overlooked aspects of human and organizational behavior (Qu & Dumay, 2011, p. 246). The primary data for the study is collected through semi-structured interviews with professionals who have direct experience and expertise in the use of AI tools in corporate accounting and ESG management. In addition, a data collection interview guide was prepared in advance and comprising thirteen questions were developed and finalized. The semi-structured interviews were conducted with highly skilled employees from large companies, as defined by § 221 UGB. Two external stakeholders who are employed in government supervisory agencies participated in the research to support its objectives. These individuals participated in the interviews voluntarily.

Owing to the fact that the limited amount of empirical research in Austria, the author chose to narrow the scope of the study to focus primarily on the Austrian market and the stakeholder groups, as well as internal and external research in Austria. Consequently, all the participants were employed in Austria as well specifically in Austrian companies. The participants in the study were asked to answer thirteen questions derived from the content of the chapters of the research paper. The developed interview guide is designed to explore the past, present, and future impact of AI tools on ESG corporate performance in the corporate sector. Furthermore, the interview questions are created to assess companies' awareness of AI's role in the corporate sector and to evaluate the extent to which the use of AI tools is linked to ESG factors within organizations. The semi-structured interviews were conducted between April and the end of May of 2025, and 16 participants took part in the research in total.

Finally, after coding the interviews and consulting additional supportive literature, the author was able to answer the following three research questions:

*RQ1: What have the past challenges and barriers to implementing AI tools in the corporate sector been?*

*RQ2: What are the key expectations of stakeholders (e.g., employees, customers, investors) regarding integrating AI tools in corporate ESG strategies in the Austrian market?*

*RQ3: What new opportunities and benefits can AI tools introduce to the future ESG performance of companies?*

The following subchapters will provide details of the sample and data collection methods relevant to this study (3.1) and present a detailed data analysis of the collected data using MAXQDA software (3.2).

### **3.1 Sample and data collection**

The data collection process commenced in the middle of February 2025 and was concluded at the end of April the same year. During this period, two sampling strategies were employed to identify potential participants. The primary sampling strategy was homogeneous sampling, in which the author sought to engage individuals with relevant business experience and educational backgrounds, primarily through the professional social networking platform LinkedIn. However, due to a low response rate, this approach revealed a general reluctance among selected individuals to participate in the study. As secondary sampling strategy, snowball sampling was implemented. Through this method, five initial interviewees were identified. Most of the participants were collected through purposive sampling (Patton, 2015. P. 230). Leveraging the author's professional experience and network of colleagues, further participants were successfully engaged. In total, 20 participants were recruited through personal contacts, bringing the total number of initially identified participants to 25.

The selection criteria for participants were intentionally broad, in order to capture diverse perspectives across industries. However, only individuals employed by large companies, as defined under § 221 UGB (i.e., companies with at least 250 employees and specific revenue thresholds), were considered. Notably, the majority of participants were employed in the banking sector or within the "Big Four" auditing and consulting firms (Deloitte, KPMG, EY, and PwC), reflecting these sectors' early adoption of and investment in AI-driven solutions. This concentration provides valuable insight into how highly regulated, data-intensive industries are navigate the challenges and opportunities of AI implementation.

Participant recruitment was based on two primary criteria. First, individuals needed to have prior experience with the implementation or use of AI tools for ESG-related purposes. Second,

participants were required to identify with at least one of the predefined internal stakeholder groups: ESG experts, AI specialists, managers, risk managers or partners within the company or be external stakeholders, employed in government agencies. 25 identified individuals were contacted in the middle of March 2025 via email, which included a brief description of the study's purpose and a request for participation. The email also contained a link to a short questionnaire created via Google Forms, where participants could respond and propose suitable dates and times for the interviews. Some recipients declined the invitation due to a lack of interest or scheduling conflicts. In total, 16 individuals who met the criteria agreed to participate. Of these, seven are employed in the banking sector and five are working in the auditing and consulting industry. Furthermore, one participant is a partner in the insurance industry and one is employed in the pharmaceutical industry. Additionally, two participants working in governmental supervisory roles were interviewed to offer insights into the Austrian market from a governmental and regulatory perspective.

The study aims to engage internal and external stakeholder groups to gain a comprehensive understanding of the implications of AI integration within corporate ESG frameworks. Among the 16 participants: five are ESG experts, directly involved with the use of AI in ESG-related processes. Two participants are AI specialists, responsible for the design, development, and implementation of AI technologies. Three participants are risk managers, in charge of risk identification, analysis and measurement within the companies. One participant is a company manager, overseeing staff during transitions toward automation. The other three participants are company partners, involved in decision-making and innovation across various departments to ensure the successful integration of AI tools within ESG frameworks. Lastly, two participants are employed in the government agencies in supervisory roles. All participants in the study had at least a basic level of education. The working experience of the interviewees ranged from 5 to 35 years, and an equal number of women and men were interviewed. A detailed overview of the participants is provided in Table 1.

| Participant | Job title       | Education level | Gender | Industry Sector     | Experience (yrs.) |
|-------------|-----------------|-----------------|--------|---------------------|-------------------|
| A1          | ESG specialist  | 7               | Female | Pharma              | 5                 |
| A2          | Manager         | 7               | Female | Banking             | 30                |
| A3          | Finan.Regulator | 6               | Female | Government          | 20                |
| A4          | Partner         | 7               | Male   | Auditing&Consulting | 30                |
| A5          | Risk-manager    | 7               | Male   | Banking             | 25                |
| A6          | Risk-manager    | 7               | Male   | Banking             | 35                |
| A7          | AI specialist   | 8               | Male   | Banking             | 30                |
| A8          | Risk-manager    | 7               | Female | Banking             | 10                |
| A9          | ESG specialist  | 7               | Male   | Auditing&Consulting | 5                 |
| A10         | ESG specialist  | 6               | Female | Auditing&Consulting | 5                 |
| A11         | Partner         | 8               | Male   | Auditing&Consulting | 25                |
| A12         | ESG specialist  | 6               | Female | Banking             | 5                 |
| A13         | ESG specialist  | 6               | Male   | Consulting          | 5                 |
| A14         | AI specialist   | 7               | Male   | Banking             | 10                |
| A15         | Partner         | 7               | Female | Insurance           | 35                |
| A16         | Finan.Regulator | 7               | Female | Government          | 20                |

**Table 1:** Descriptive summary of the interviews realized.

Source: own elaboration, adopted from Stoian et al. (2018, p. 771).

Before each individual interview, participants were asked for consent to record the session for documentation and data coding purposes. After consent was obtained, the author introduced himself, explained the purpose of the interview, and asked participants to share their educational background, work experience, and current job role. Each interview followed an open, semi-structured format and lasted approximately 30 to 45 minutes, with one interview extended to one hour. Two interviews were conducted in person, while the remaining 14 were held online, 12 via the Microsoft Teams application and two via Zoom. Regarding the language of the interviews, nine were conducted in English and the remaining seven in German language. The German interviews were subsequently translated and transcribed into English to ensure consistency in the analysis. A comprehensive database containing participant responses, audio recordings, and interview transcripts was completed before the data analysis phase commenced (Stoian et al., 2018, p. 772).



## 3.2 Data analysis

The following chapter presents and outlines the four steps of data analysis based on the Gioia method, following the approach outlined in studies by Stoian et al. (2018) and Gioia et al. (2013). The analysis and management of the interview transcripts were conducted using the MAXQDA qualitative analysis software. The software facilitated the coding process, during which 1<sup>st</sup> order, and 2<sup>nd</sup> order codes were developed. MAXQDA provided a comprehensive overview of the interviews and enabled seamless navigation across different sources of evidence from the samples. It also facilitated the identification of relevant phrases and paragraphs within the transcripts and supported efficient data coding of the collected interviews (Stoian et al., 2018, P. 772).

The first step of the data analysis in this study involved transcribing the interviews and implementing the 1<sup>st</sup> order codes. The recorded interviews were transcribed primarily using two software tools: F4x and the Turboscribe program. For some interviews that were recorded directly through Microsoft Teams, the transcription was generated automatically, then reviewed and finalized for use. After completing the transcriptions, seven interviews originally conducted in German were carefully translated into English language. In total, the final transcripts comprised more than 216 A4 format pages, printed single-sided. The author reread the transcripts multiple times and created short summaries of data and form categories of repetitive words and concepts. This approach proved useful for reinterpreting the data and identifying the 1<sup>st</sup> order codes. For the first research question, the relevant 1<sup>st</sup> order codes are: resistance of use of AI, adoption and purpose, organizational and technical barriers and perception and trust issues. Additionally, three following codes are addressed with the first research question: high implementation costs of the tools, ethical and privacy concerns and treats of data training- biases and hallucinations. Therefore, in total, seven 1<sup>st</sup> order codes were created for the first research question of the study. For the second research question, the 1<sup>st</sup> codes are divided into three E-S-G pillars. For the E-pillar, the writer created three codes: energy resource optimization and efficiency, efforts to lower emissions and forecast environmental risks, and prediction of environmental hazards. For the S-pillar, the importance of the training policy, diversity of the company, and potential of job losses are essential. For the G-pillar, regulatory complexity, a framework for AI governance, and legal support are key. In total, for the second question, there are nine 1st-order codes created. For the third research

question, the first codes are improving reporting processes, disclosure processes, decision-making in the companies, and future opportunities within companies.

The next step of Gioia method involved repeatedly rereading the transcriptions and grouping the 2<sup>nd</sup> order codes from the 1<sup>st</sup> order codes, based on theoretical level themes. In this step, abstract categories were formed by assembling several 1<sup>st</sup> order concepts. After creating and labeling the 2<sup>nd</sup> order codes, the author specifically searched for appropriate theoretical frameworks. This research in existing literature proved challenging due to the novelty of the research thesis. Ultimately, the author identified and applied codes to data segments considered interesting and relevant to the study. Therefore, for the first research question, the relevant 2<sup>nd</sup> codes were divided into challenges and implementation as well as problems/ barriers of AI tools. For the second research question 2<sup>nd</sup> codes ESG- pillars and for the last research question, the 2<sup>nd</sup> codes are advancing disclosure and reporting efficiency and improving decision making.

The third step of the data analysis was integrating and merging the 2<sup>nd</sup> order codes. The transcripts were reread once more, and the 2<sup>nd</sup> codes were summarized into knowledge components, which led to the formation of aggregate dimensions and the emergence of three theoretical dimensions. For the first research question of the paper, the adoption and performance of AI in terms of aggregate dimensions was selected, followed by key expectations of stakeholders regarding integrating AI tools in corporate ESG strategies. The last aggregate dimension of the paper is the future and potential of the ESG performance of companies with AI tools. Finally, the last step of the Gioia method was the construction of the data structure, allowing readers to gain a clearer understanding of the complete data analysis. Figure 1 presents examples of relevant quotes of interview participants, which were selected for the 1<sup>st</sup> order codes. These are followed by the 2<sup>nd</sup> order codes derived and the three resulting aggregate dimensions, which are related to the three research questions of the paper. A detailed overview of participant quotes, organized by 1st-order codes, 2nd-order codes, and aggregate dimensions according to Gioia et al. (2013, p. 7), is presented below in Table 2 (Data Structure).

| Quoting of interview participants                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1st- order Codes                       | 2nd- order Codes               | Aggregate dimensions           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|--------------------------------|--------------------------------|
| <p>"We had a project where we looked at whether it was possible to analyze our reports or financial reports or non-financial reports with AI, and we didn't come to very successful results. Because with the keyword in PDF it is faster to search than it is to find something that you actually meant differently." (A3)</p> <p>"I barely need AI tools. I have my standards of research methods which, of course, by now also in the background there is some AI things you can type in fairly smart questions and you get some answers and then you can dig deeper in the databases and they are combining the data questions to some extent but that's not the deep use of AI, the number crunching data analysis, these kind of things." (A4)</p>                                                                                                                                                                                                                                           | Resistance of use of AI                | Challenges and implementation  | Adoption and performance of AI |
| <p>"Well, to be honest, we do use AI tools. The most simple and classic one is of course the Chat GPT, models on the market. So, the large language models, we have quite a few of those in our portfolio" (A11)</p> <p>"So yes, I do use AI tools, every day, for example to convert bullet points into text. To create draft emails when it's a longer message. To generate summaries from websites where I don't have time to read everything. To generate summaries of videos, so a lot of large language models. I have an add-on for my emails in my email account, where I also generate summaries of emails, so I actually find it to be a very supportive role." (A13)</p> <p>"We have even specified tools, especially in the claims or in risk engineering, where you usually get reports like 200, 300 pages, where we let the according to a trained version of the AI, then the AI summarizing these reports in a very structured way." (A15)</p>                                    | Adoption and purpose                   |                                |                                |
| <p>"As a consultant, I have not used AI tools, also because everything is initially set up by the creator, like setting up the reporting, which requires a lot of expert assessments, I would say, that is not all standardized yet. I think that if the materiality analysis remains similar to what it is now, we won't be able to use AI much there. It will most likely continue to be based on expert assessment." (A12)</p> <p>"We're trying or testing right now is a chatbot, so to speak. We're currently focusing on our internal documents and trying to ask questions. Let's see what the answers are, is it, does it fit or not? It's still in the testing phase." (A2)</p>                                                                                                                                                                                                                                                                                                           | Organizational and technical barriers  |                                |                                |
| <p>"They have limits in terms of what they can do and people need to know what those limits are, so you can't make decisions based solely on what the output of is. I'm always cautious when I make full decisions based on." (A1) Certain results come but not necessarily the ones you expect." (A3)</p> <p>"Basically, as far as I know, we don't have any real AI tools; I mean, Deloitte has developed its own ChatGPT, so to speak. Generally, in auditing it has been a topic for a while now whether a bit more will be used because we compare a lot in auditing and for example check whether things match up, and how the question is what will change in the coming years..." (A10)</p>                                                                                                                                                                                                                                                                                                | Perception and trust issues            | Problems/ barriers of AI tools |                                |
| <p>"We have to fight for the budgets. We are analyzing all the time the business cases and the use cases when we have such products. So, it's not that it's for free. We have to argument about other savings if we implement the AI." (A15)</p> <p>"And of course, those AI add-ons are usually quite expensive, you can see, between the firms that don't utilize it and the firms that do, it's very different. It's a big difference in the price of the license or the tool itself...." (A1)</p> <p>"Sustainability costs money and that's not an area that is, or perhaps formulated, important for the future of the company. But it's not currently so urgent that it has to be implemented immediately." (A13)</p> <p>"A set of AI is associated with very high costs, but also with potentially high efficiency, and then later on many companies have to use and deploy a lot of resources now, so to speak, to set up the AI correctly and generally to access the data...." (A10)</p> | High implementation costs of the tools |                                |                                |

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| <p><i>"Ethical risks due to algorithms, etc. that's exactly where we're not quite there yet, as they simply say. So, we haven't deployed it that extensively yet. Those are some of the issues we have to address. We're working on them." (A2)</i></p> <p><i>"We use them consciously or we have to consciously use them for general topics, ESG data or topics that are publicly accessible, not the places where there is a lower risk than data, as data points and we never treat data directly in AIs or anything like that... We would never put this data into an AI tool or only put it in an anonymized form, so we try to do this specifically in order to minimize the ethical risk." (A9)</i></p> <p><i>"What we do in the modeling using AI tool is the same as we used to do before using statistical methods. What we have gained with that is more efficiency, I would say more precision, and it was the overall improvement of the quality that we observed over time, our predictability models the predictability of our models is now better. So, I wouldn't say that it could trigger any ethical issue, in any party or stakeholder." (A5)</i></p> <p><i>"Yes, it's actually not really an issue in our company. There is an IT company there, almost no one objects to it. AI doesn't use my data to train itself or to train the data model with it, and that you have to train your own employees to then use the AI in a targeted manner, so that we, for example, don't enter customer-specific data into an AI in consulting or sustainability reports." (A13)</i></p> <p><i>"So from a principal perspective, there is no ethical issue with AI other than you need to understand what the AI knows, what the databases is for the AI of what you feed it with and how you train it." (A11)</i></p> <p><i>"I don't see this very much as a risk because if you use what is publicly available, then it's appropriate to use it. There's no ethical concerns. If you start digging into information that you should not have and use that information, then it's not only an ethical issue, but then it's a legal issue because illegally obtaining information through hacking or exploiting data that you are not allowed to have or not allowed to use, for instance, because of privacy agreements...." (A4)</i></p> | <p><b>Ethical and privacy concerns</b></p>                       | <p><b>Additional costs and concerns regarding implementation</b></p> | <p><b>Adoption and performance of AI</b></p> |
| <p><i>"We started our AI transformation at the top of Data-driven transformation. So, the AI transformation in no specific areas, so the risk of course is that was the first and main area to adopt AI tools, but nowadays we have a group wide project to promote AI app skilling and of course some of the areas that are using this are related to. There are topics that are also discussed because the use of AI tools can lead to GDPR (General Data Protection Regulation) issues. So, we have to be very, very careful in how we handle information. Also, models are biased. We have to make an assessment on the biases, present in the models... Yeah, there are tools, you can easily train tools to do this course analysis" (A7)</i></p> <p><i>"You have to train your employees on what a prompt should actually look like. And maybe I'll ask again, maybe with the AI again and not trust the first result like with a Google search, what an awareness arises there, that is the AI is not a replacement for Google, so the direction has to be very, very careful, otherwise my racial Bias is probably already included in the data models or in the AI models." (A13)</i></p> <p><i>"The main concern is that you are feeding incorrect information into our core in this case is the questionnaire and then therefore also scoring rating, final submissions and so on. It's really data validity and that you get the exact results and that you. So, we have seen for example other solutions where people get 40% or 50% correct results, which is of course unusable because nobody has the time to hunt for the other. 50% you will never know what is correct and what is not so really. Being super diligent in first of all picking the correct technology and making sure that the system itself is able to check, maybe in the first round, the information itself and then you building additional checks, but you also have the human component of course inside to validated data and to build this process and also nice user interface that, the most important thing you know." (A6)</i></p>                                                                                                                                                                                                                    | <p><b>Treats of data training- biases and hallucinations</b></p> |                                                                      |                                              |

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| <p><i>"When you talk about AI and sustainability in the same sentence, you have to keep in mind that AI is an enormous environmental burden, so what the data centers ultimately produce, exactly what the data center emissions are, you must not forget and every thank you chat and every hello chat is energy that is basically wasted, so that's what you want to keep in mind especially when it comes to the topic of ESG." (A13)</i></p> <p><i>"It's in the center of our discussion because it's not only technological, but also societal, geopolitical and we are also discussing the how finance will be affected by AI technologies and of course some of these topics touch the environmental governance and sustainability topics. One very, very specific topic related to this, regards to the fact that the AI models are extremely environmentally unfriendly, the use of energy is the use of cooling liquids and data centers, for lots of people, is an unsustainable practice...." (A7)</i></p> <p><i>"We have a huge consumption of, for example, water or electricity by the data centers running these clusters." (A14)</i></p> <p><i>"I always wonder, the amount of data requires an insane amount of energy, right? I have the feeling that in the past, people were very careful even in daily life, not to send attachments, to keep things as smart as possible, by email or only then. So that you just really look. Only the essentials, that is getting out of hand now. Even if you ask, the amount of energy used and thus the CO2 emissions...." (A2)</i></p>                                                                                                                                                          | <p><b>Energy resource optimization and efficiency</b></p>                 |                             | <p><b>Key expectations regarding integration of AI tools in ESG strategies in the Austrian market</b></p> |
| <p><i>"AI can certainly be used to create the report when it comes to transformation, when it comes to reducing greenhouse gas emissions or getting data for a climate risk analysis or something similar." (A12)</i></p> <p><i>"Optimizing accounting of the corporate CO2 emissions and collecting data and optimizing that. A lot are the companies that are startups mostly utilize AI for ESG data management or for different decarbonization, solutions and especially now where I was choosing the vendor for the ESG data management for the reporting that we have to do a lot of them had AI as an add on into the tool" (A1)</i></p> <p><i>"We also use the CO2 emission data for finance emissions in the bank, so it's more or less like the centerpiece of this collection effort of the manual collection effort. But it's also has repercussions into the rating. So, because the scorecard drives soft facts and the soft facts are part of the rating process." (A6)</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <p><b>Efforts to lower emissions and forecast environmental risks</b></p> | <p><b>Environmental</b></p> |                                                                                                           |
| <p><i>"The models that we are building are all related to assessing the risk. Some of them are built based on AI. It measures the correlation between different factors. So, it measures the relation between factors and measures also the grade where the change in one factor led to change of the others. It searches for trends, analyzes trends and based on that, builds the model to predict based on this historical learning. And, to predict what will happen in the future" (A5)</i></p> <p><i>"Yes, I used them to write text in a normal large language model, in a whole bank, and what we have developed as a team are two machine learning models to estimate the energy index of classes." (A8)</i></p> <p><i>"Physical risk data, where we try to collect the locations of clients and where we try to assess the physical risks because of changing weather patterns and stuff like this of all the locations. So you look is what is on this in this location, is it important? Is it not important, for example, when LLM is used to assess if the building the IAI seeing is a factory or is it for example an office building..." (A6)</i></p> <p><i>"The other thing that I know of that is used in the bank is databases for physical risks. We also have one. Munich Re is the insurer that provides us with data that I say, okay, I'll enter the company and a location and then I can see what's relevant for me. So, is it more likely to be heat? Is it more likely to be stormy, is it more likely to be flooded? What factors are affecting me? What do I need to be prepared for? That's important for us, of course. On the one hand, to assess whether operations will be able to continue in the future." (A2)</i></p> | <p><b>Prediction of environmental hazards</b></p>                         |                             |                                                                                                           |
| <p><i>"A training session was held on the topic of immediately raising awareness of how to use the tools. This was also repeatedly communicated to us afterwards by those at the top...The company place great value on this." (A9)</i></p> <p><i>"There is a wide range, so that we can get an overview and then build on it, for example creating an e-learning course for all employees, that is our current focus, and we are working on it intensively, so the project will last six months." (A13)</i></p> <p><i>"What how we basically marry this technology with people to really still have people around who cannot only use it but understand what's happening. But also, we need to build up expertise, nevertheless. Also, with young colleagues, of course, because otherwise you end up maybe with AI and lots of old people, and then the old people disappear, and then there's nothing. So, but I think so there needs to be a lot of social." (A6)</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <p><b>Importance of the training policy</b></p>                           |                             |                                                                                                           |

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| <p>"When we're talking about diversity, we should report also the numbers of women in the management, the numbers of people with disabilities within the head count of the company, these are all data that must be captured somewhere. It exists in some systems and here maybe I can say that, but it's also not a matter of AI. It is just off one time giving the framework and the criteria how this data is collected from different systems and put into a report, but it's not an AI because there is no decision whether this is something or not." (A5)</p> <p>"...Topics such as maybe workers in the value chain as a topic you know, and there are a lot of teams. Now I don't exactly know where this tool picks up information." (A1)</p> <p>"If you ask to some models to generate an image of a CEO, you may know that 87% of them the images will generate a male figure. And if you ask the model to generate an image of a housekeeper or a social worker, you have much, much more females represented in the images. So, these biases are present in the models. And if we rely on the models to help uncover. These types of known desired behaviors that are imported in environmental sustainability and governance controversies. You may fail shortly because of the problems of the models themselves." (A7)</p> | <b>Diversity of the company</b>    | <b>Social</b>       | <b>Key expectations regarding integration of AI tools in ESG strategies in the Austrian market</b> |
| <p>"It will have a tremendous impact or there's, at least my expectations, because it will shift the roles, what people are doing. In the indigo wave, you're not writing and summarizing, but you maybe try to get more business done in the bank. So, shifting people to be more productive. Jobs would be one of the big repercussions..." (A6)</p> <p>"There are some long-term aspects related to the substitution of human expertise and jobs, job related issues because the ultimate decision of the process can lead to the elimination of some entire sections of the organization, especially the most repetitive and non-creative jobs. So it's a huge, huge topic to discuss." (A7)</p> <p>"People who are maybe resisting this as a threat against their job or the importance of their job and the roles they get. So I would think this is pretty flexible and there is no resistance in the narrow sense of the word." (A4)</p> <p>"AI will definitely reshape the way consulting is done in the future. So there will be a change of our whole business." (A11)</p>                                                                                                                                                                                                                                                        | <b>Potential of job losses</b>     |                     |                                                                                                    |
| <p>"Nobody has additional, you know, half a day to commit to ESG data you know...Companies are unfortunately pushed to do this due to the regulatory complexity, that is, the EU regulation on ESG data collection and how it looks like." (A1)</p> <p>"Under the current ESG performance of retail exposures, so when we give loans and have exposure towards corporates or financial institutions, we have to monitor what happens with ESG. And the regulators also require that it's not just monitoring, but for example, even in the pricing of these products, you have to have an ESG relevant component. And that's a part of incentivizing greener investments." (A14)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Regulatory complexity</b>       |                     |                                                                                                    |
| <p>"We have very clear guidelines when and how we can interlink the AI on the topics. Secondly, we have to have checks, or we really check whatever the outcome is. And then we have organized in a way of use cases where we have to define end to end the outcome of this use case and on which fields it's influencing it. So it's a high transparency on how we finally reuse it and how we reuse data wherever they are generated." (A15)</p> <p>"For the AI governance, we have established a framework, AI initiatives. This now includes key aspects, we will have to even report what is the CO2 footprint of the AI usage of our company. This is one of the topics that we are now, and these topics can get quite tricky because we are just in some way deploying the tools and we don't have the full transparency of the carbon footprint of a server hosted by provider that we have somewhere in the EU... The governance related to just the biases that are inherent to AI, mostly during the development or deployment of AI services. And there are frameworks within the deployment practices...." (A14)</p>                                                                                                                                                                                                           | <b>Framework for AI governance</b> | <b>Governmental</b> |                                                                                                    |
| <p>"Since we work a lot with legal texts, which is very time-consuming, we are currently planning to use AI for that. We haven't yet addressed our company-specific AI, which we want to feed ourselves with sources and data so that we can ensure that all the data in our reporting is reliable." (A12)</p> <p>"It depends very much on what tool you use; they might not have the most recent data. And which means if you ask the AI tool for support on a specific regulation, they tend to change every other week. So, you need to make sure that you have the most recent information available for the AI tool, otherwise it's of no use." (A11)</p> <p>"I have not noticed. Make a disclaimer about its interfacing and that is usually in banking where use of AI gets limited because the regulator is not yet ready to accept AI-generated reports without some human in the loop, at least human in the loop, involved. So this could be one area, but I cannot say myself." (A14)</p>                                                                                                                                                                                                                                                                                                                                        | <b>Legal support</b>               |                     |                                                                                                    |

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------|-------------------------------------------------|
| <p>"I can certainly imagine that in the future, the data situation will make it easier to do this in a standardized way." (A12)</p> <p>"It can greatly simplify data analysis and help us to connect data well, to make use of it, and to interpret it correctly." (A2)</p> <p>"Where we are building, which is able to read, for example, sustainability report and is able to automatically answer our own questionnaire of about 8080 pages. The most important thing we are designing into it is that it's able to properly integrate citations. Because the job shifts from summarizing and reading the main documents yourself, to a validation job." (A6)</p> <p>"So, it could optimize a lot of processes, when it comes to this ESG, like the sustainability report. It could optimize how we get data from, let's say maybe our subsidiaries." (A1)</p> <p>"First, I think the idea was mainly to have an automated process to go through all these documents. But now we are having the experience that these AI tools are more powerful if they are used. In like a conversation so that you get questions and ask further questions and get deeper into a topic and not get an automated report out of the documents." (A16)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <p><b>Improving reporting and disclosure processes</b></p> | <p><b>Improving processes</b></p>              | <p><b>Future opportunities and benefits</b></p> |
| <p>"Especially in the large customer field where you have a lot of tailor-made product solutions and so on, here the AI can prepare a lot of stuff, can analyze all the data we have so far, connect it also with external data we provide and then prepare a kind summary, prepare decisions." (A15)</p> <p>"I would find it very difficult to imagine that an AI can simply replace humans 1:1 in the foreseeable future. I imagine that an incorrectly used AI tool could certainly also potentially contradict, let's say, the purpose of transfer or maximum transport transparency in these ESG issues. That is certainly also a risk." (A9)</p> <p>"It might help you guide your decision-making process, but in principle you shouldn't rely on that because AI is not yet developed to such an extent that you can base especially investment decisions purely on AI." (A11)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <p><b>Decision-making in the companies</b></p>             |                                                |                                                 |
| <p>"The focus of AI use in banking has somewhat shifted when GPT came out, from kind of top line impact to a bottom-line impact. So, on the top line in banking, it would mean additional gross income. And traditionally, machine learning has been always focused on that. So we have predictions of potential sales or things like that. With GPT, it's now more and more seen as an efficient tool. So we improve the speed of the processes, and we decrease the mistake or error rate that having too many human interactions usually brings into the processes. Because the more human interaction we have, the more error prone they become. And the use of AI, while still it can hallucinate and produce some errors, usually can be at least somehow systematically traced. So, these are probably, this is the biggest value generating aspect of AI." (A14)</p> <p>"AI tools help in analyzing trends, analyzing portfolios and building relations between the portfolios that, otherwise, would have been very hard to detect, so especially for risk management, it's important to have this type of analysis on a portfolio to understand what the trends are and where the risks lie so that they can be then managed and mitigated in a proper way. So having implemented something like this would improve the credit quality and it would improve the quality of the credit portfolio of the bank, ultimately leading to a better standing and a better financial result of the organization. I see a very positive impact and a very positive effect of implementing such tools." (A5)</p> <p>"I think that ESG data, regarding supply chains and when third countries are included, I would be happy in my consulting work if AI could also help in the future, so that it is easier to obtain data, even from abroad, even if you include stakeholders who do not report themselves. Things like that would certainly pose a problem for reporting in the future." (A12)</p> | <p><b>Future opportunities within companies</b></p>        | <p><b>Opportunities in corporate field</b></p> |                                                 |

**Table 2:** Data structure

Source: own elaboration, adopted from Gioia et al. (2013, p. 7).

## 4. Presentation of findings

### 4.1 Application of the AI tools in the corporate sector

This section will cover not only the general purpose and use of AI tools in the corporate sector among Austrian companies, but the resistance and potential challenges related to concerns about accuracy and trust issues as well.

#### 4.1.1 The use and objectives of AI tools in the corporate field

Most interviewees agreed that AI tools are well suited to replace roles involving repetitive and routine tasks, enabling employees to concentrate on more complex and strategic responsibilities (Chen et al., 2024, p. 1082). Interviewees one consultant A13, an AI expert A7, and ESG expert A1 mentioned that they use various AI tools on a daily basis to minimize routine tasks.

*“So yes, I do use AI tools, every day, for example to convert bullet points into text. To create draft emails when it's a longer message. To generate summaries from websites where I don't have time to read everything. To generate summaries of videos, so a lot of large language models. I have an add-on for my emails in my email account, where I also generate summaries of emails, so I actually find it to be a very supportive role.” (A13)*

*“I have used it (AI tools) in revising more for this communication purposes. So, in ensuring because we also had a newsletter concerning the regulatory developments that we sent out to our clients, so it helped us summarize the history topics. In articles, of course, we would always proofread and ensure that consistency.” (A1)*

*“By analyzing hundreds of thousands of texts that would be humanly, possibly analyzed so you wouldn't have enough people to analyze hundreds of thousands of Daily News that are collected in the media for ESG controversies. So, we are using AI to filter, monitor and classify these events and then we can take actions based on the triggers and early warnings that are given using these tools. This is the type of thing that we will not be able to do without AI tools.” (A7)*

A study by Norzelan et al. (2023, p. 1) concluded that, to ensure the smooth integration of future technologies, organizations should highly sequence performance expectancy, employee attitudes, and technical skills and capabilities. These three factors were confirmed by



participants risk manager A6, partner of an insurance company A15, partner at a Big Four firm A11, and ESG expert A9 who agreed that the use of AI tools helps them improve their job performance and achieve better outcomes.

*“Especially in the large customer field where you have a lot of tailor-made product solutions and so on, here the AI can prepare a lot of stuff, can analyze all the data we have so far, connect it also with external data we provide and then prepare a kind summary, prepare decisions.” (A15)*

*“The large language models, we have quite a few of those in our portfolio. But to be very precise, we have developed one specifically for us which is a custom designed LLM with AI capability which is basically built on the ChatGPT logic. So it's called Maple vaults, and this is specifically designed for us. It can do quite a few things. It can do the classic chatbot interface thing with question and answer. It can do translations of course; in I don't know how many languages it can even design some charts for us. It can do some adjusting of large documents.” (A11)*

*“You can ask all kinds of questions and connect everything from SWOT analysis to building tables for peer groups. So that's also now rolled out in in the user base of the large corporate side. And on the risk side, we are also now building in house, something called the Automatic Credit memo. But basically, it's you can give this AI any kind of questionnaire and then it works through the questionnaire. Answer all the questions you have posed, and this automatically feeds them into our systems. So for us, it's you know efficiency and speeding up the process. Better decisions, better quality.” (A6)*

*“We use an internal tool from Deloitte Austria, the E-buddy Tool. This is an AI tool which often helps us during research, although we would never go into company-relevant information because if we look for something there, we always paraphrase it but never name the exact company or company details, as is the case with Independence, we end up there. But of course it is often about speeding up processes, getting an overview, not just of this sector, but in most cases simply getting an initial overview of what the sector looks like or what exactly could be problematic in this industry, or simply taking a look around, not knowing where the regulations or what could be relevant, what particular attention could be paid to in the audit.” (A9)*

The partner at the insurance company (A15), a risk manager (A6), and an ESG specialist (A14) emphasized the importance of using AI tools to enhance the efficiency of data collection and analytical processes through comprehensive reports. This observation is supported by a study

from Villiers et al. (2023, p. 111), which found that AI holds significant potential for streamlining non-financial reporting.

*“We have even specified tools, especially in the claims or in risk engineering, where you usually get reports like, I don't know, 200, 300 pages, where we let the according to a trained version of the AI, then the AI summarizing these reports in a very structured way. Then you reduce your reading time and then you chat with this specific tool on certain questions where you do not see this answer. And you reduce your reading time because most of the time out of these 300 pages, it's not necessary, I would say 180 or 280 are not important. And to find out the 20, which are really relevant, it's quite difficult. So you have to read it through. And we train the AI exactly to help us to identify these parts.” (A15)*

*“In annual review process for all the exposures that we have on the non-retail side, we can already process all the published sustainability reports and annual reports for ESG relevant aspects that our colleagues defined on both risk management and the portfolio management side, on the sales side. And this is now integrated into our processes. So, these tools are already running, and they contribute a great deal to saving the time needed to run these checks because, especially for big companies, what we get are hundreds and hundreds of pages of documents and finding answers to all ESG relevant questions takes time. If it's done manually, then someone actually has to open a sustainability report of 300 pages, which is full of pictures and mentions the same things over and over again in different forms. And now they actually get a draft response to all the important aspects provided by AI.” (A14)*

*“We also have access to notebook LM, which is another Google service. This one we use mostly for uploading financial data and being able to talk to this financial data, because notebook LM is able to summarize and does a nice way. It allows you to incorporate citations and stuff like this.” (A6)*

This research also has found that, some departments in Austrian companies are still in the early phases of implementing these tools. This was accentuated during the interviews by the Manager (A2) and one ESG specialist (A10), who both noted the initial stage of adoption:

*“We're trying or testing right now is a chatbot, so to speak. We're currently focusing on our internal documents and trying to ask questions. Let's see what the answers are, is it, does it fit or not? It's still in the testing phase.” (A2)*

*"Deloitte has developed its own Chat GPT. Generally, in auditing, it has been a topic for a while now whether a bit more will be used because we compare a lot in auditing and for example check whether things match up, and now the question is what will change in the coming years..." (A10)*

#### **4.1.2 Accuracy and trust concerns**

Even though the study from Seok et al. (2024, p. 9) suggests that AI can improve ESG transparency by automating data collection enhancing data quality and enabling real-time monitoring and reporting, a few participants from different industries, one partner from tax advisory firm, four ESG experts, one partner of insurance firm and one financial regulatory officer, pointed out potential challenges related to accuracy and trust.

*"You need to really think how you even check and how you monitor whatever is the outcome. And I would say it has to be at the end, it has to be a supporting tool at this stage of development to humans. I do not see that the stage that we 100% can say ok, the AI is generating reports, and these reports are going out and nobody is really checking them and nobody's really taking care of them." (A15)*

*"Of course, there is a certain willingness, but it needs to have an expectation that the responses are meaningful, and the analysis becomes meaningful. And based on what we currently have as a basis, I'm not so sure that this can already be considered a meaningful analysis." (A4)*

*"In order for AI to work properly, we need lots of data, and this data must also be correct and accurate. Personally, I see that ESG reporting affects me, and I see the potential risk that this data is not 100% accurate." (A10)*

*"The use of AI is limited. You can use it in certain, let's say support processes like in reporting, maybe even HR if you're good enough. But now that is your core business and no investor or a stakeholder would be too much concerned if it's not addressed in the core of my business." (A11)*

*"The aim has always been to simply use these AI tools to get information that is and should be publicly accessible and that saves time or securely gets contextual information that would otherwise be a bit more difficult to get, but with regard to data protection or sensitive information, we are very deliberate in that regard." (A9)*

*"That ESG are so extensive or so large and the AI doesn't really find what you're asking about. Certain results come but not necessarily the ones you expect." (A3)*

*"They have limits in terms of what they can do and people need to know what those limits are, so you can't make decisions based solely on what the output of is. I'm always cautious when I make full decisions based on. " (A1)*

*"So far, we are dealing mainly with the accuracy of the answers. Mainly you must have good experience of how to pose questions to the large language models, in this case, to get reliable answers on this. And especially, not for both cases. We had the experience that it's difficult for AI to decide whether a company is providing its own information on ESG related topics or whether it is only citing some legal aspects, so they are telling us we had to fulfill these legal aspects. It's difficult for the AI to concern if this is the own information from the company or is it only the legal texts." (A16)*

Even though the study by Naveed et al. (2025, p. 723) confirmed that the use of AI tools can bridge departmental and organizational gaps, helping sustainability reporting managers gather and analyze dispersed and fragmented data more effectively, some of the interviewers, which are employed in auditing and consulting industry have had the opposite experience and opinions:

*"I barely need AI tools. I have my standards of research methods which, of course, by now also in the background there is some AI things you can type in fairly smart questions and you get some answers and then you can dig deeper in the databases and they are combining the data questions to some extent but that's not the deep use of AI, the number crunching data analysis, these kind of things." (A4)*

*"As a consultant, I have not used AI tools, also because everything is initially set up by the creator, like setting up the reporting, which requires a lot of expert assessments, I would say, that is not all standardized yet. I think that if the materiality analysis remains similar to what it is now, we won't be able to use AI much there. It will most likely continue to be based on expert assessment." (A12)*

*"As auditors, we always see a higher risk, especially when it comes to ESG-related issues, and from my perspective, that's exactly what it is. Lack of transparency, and generally, the accuracy of the data, and can we even rely on it." (A10)*

Only one participant, financial regulatory officer, who is employed in the government sector, out of all 16 interviewees, mentioned resistance to the use of AI, explaining that the use of such tools was not feasible. No evidence supporting this conclusion was found in previous studies.

*"We had a project where we looked at whether it was possible to analyze our reports or financial reports or non-financial reports with AI, and we didn't come to very successful results. Because with the keyword in PDF it is faster to search than it is to find something that you actually meant differently." (A3)*

#### **4.1.3 Major challenges in the use of AI tools and risks linked to data training**

In this subchapter, the noteworthy challenges in the use of AI tools, namely, high implementation costs, as well as ethical and privacy concerns, will be presented. Furthermore, the primary risks associated with data training threats are addressed in a separate section.

##### **4.1.3.1 High implementation costs of the tools**

Although larger enterprises are well-positioned to capitalize on the advantages offered by advanced technological tools, smaller firms often face constraints in terms of resources and technical expertise, limiting their ability to implement such technologies on a scale (Asif et al. 2023, p. 9). This was confirmed by several participants from different industries: banking, auditing and consulting, insurance and the pharmaceuticals industry:

*"We have to fight for the budgets. We are analyzing all the time the business cases and the use cases when we have such products. So, it's not that it's for free. We have to argument about other savings if we implement the AI." (A15)*

*"And of course, those AI add-ons are usually quite expensive, you can see, between the firms that don't utilize it and the firms that do, it's very different. It's a big difference in the price of the license or the tool itself. So, it's it might not be very accessible to smaller companies." (A1)*

*"Sustainability costs money and that's not an area that is, or perhaps formulated, important for the future of the company. But it's not currently so urgent that it has to be implemented immediately." (A13)*

On the contrary, although the implementation of AI tools is costly and often unaffordable for small and medium-sized enterprises, their use can lead to cost reductions in the future by helping to optimize data collection, analysis systems, and processes (Naveed et al., 2025, p. 732). Two ESG experts, A12 and A10 emphasize this fact and the potential future benefits in the interviews:

*“What has been a topic is, when customers realized how much work it is and how much data an ESRS report contains, many customers have already asked whether it can be outsourced to software in the future. So it's always a question of cost: what ultimately requires fewer resources for the company?” (A12)*

*“A set of AI is associated with very high costs, but also with potentially high efficiency, and then later on many companies have to use and deploy a lot of resources now, so to speak, to set up the AI correctly and generally to access the data. But ultimately, I think it's a win-win situation, because then you work more efficiently and maybe you can also analyze the data much, much faster and better.” (A10)*

One risk manager, A6, notes that AI capabilities have rapidly improved while becoming significantly cheaper, which is both exciting and somewhat unsettling.

*“When you look at it, what half a year ago was possible and what is possible today, it's not only much better, but it only also costs a fraction of the price a couple of months ago. And if this continues, yeah, this is yeah, it's quite exciting, but it's also a little bit scary.” (A6)*

Additionally, one AI expert, A14 employed in the banking industry highlighted that individual companies are encouraged to invest in AI to remain competitive:

*“And on some microeconomic level, we do have to invest in it because every individual company cannot allow itself to get stuck behind the market when the rest of the market is investing in it. So, every company has an incentive to invest in it. But on a high level, the ESG market overall, especially with AI, that is where it becomes blurry because there are aspects to consider on both positives and negatives.” (A14)*

#### 4.1.3.2 Ethical and privacy concerns

Maintaining human supervision must remain essential in the implementation of AI systems, guaranteeing that their operations adhere to ethical principles. Continuous monitoring and evaluation of AI-driven decisions are crucial to uphold moral standards and to address any emerging ethical concerns. (Lehner et al. 2022, p. 126). The importance of ethical concerns was also addressed by participants manager, A2 and one ESG expert, A9.

*“Ethical risks due to algorithms, etc. that's exactly where we're not quite there yet, as they simply say. So, we haven't deployed it that extensively yet. Those are some of the issues we have to address. We're working on them.” (A2)*

*“We use them consciously or we have to consciously use them for general topics, ESG data or topics that are publicly accessible, not the places where there is a lower risk than data, as data points and we never treat data directly in AIs or anything like that...We would never put this data into an AI tool or only put it in an anonymized form, so we try to do this specifically in order to minimize the ethical risk.” (A9)*

On the contrary, many other interviewees emphasized that there are no ethical concerns in any stakeholder group regarding the application of AI tools within companies:

*“What we do in the modeling using AI tool is the same as we used to do before using statistical methods. What we have gained with that is more efficiency, I would say more precision, and it was the overall improvement of the quality that we observed over time, our predictability models the predictability of our models is now better. So, I wouldn't say that it could trigger any ethical issue, in any party or stakeholder.” (A5)*

*“Yes, it's actually not really an issue in our company. There is an IT company there, almost no one objects to it. AI doesn't use my data to train itself or to train the data model with it, and that you have to train your own employees to then use the AI in a targeted manner, so that we, for example, don't enter customer-specific data into an AI in consulting or sustainability reports.” (A13)*

*“I don't believe that we've had issues in terms of ethics when it comes to using these different tools you know. I think we're very open to this. It's just that our focus was to manage the resources that we have. So not to overburden the teams with this new topic because they also have other priorities such supply chain management.” (A1)*

*“So from a principal perspective, there is no ethical issue with AI other than you need to understand what the AI knows, what the databases is for the AI of what you feed it with and how you train it.” (A11)*

*“I don't see this very much as a risk because if you use what is publicly available, then it's appropriate to use it. There's no ethical concerns. If you start digging into information that you should not have and use that information, then it's not only an ethical issue, but then it's a legal issue because illegally obtaining information through hacking or exploiting data that you are not allowed to have or not allowed to use, for instance, because of privacy agreements or other things. So I'm a little bit hesitant with the ethical issues.” (A4)*

As Asif et al. (2023, p. 9) pointed out in their study, AI and data-driven systems must be designed to uphold privacy, transparency, and accountability. Interviewees two ESG experts, A9, A1 and partner from tax advisory firm, A4 confirmed that in their companies, privacy is given the highest priority.

*“We have very strict guidelines on how to use so we cannot even log into our e-mail on the web computer like we are very strict in terms of what we can do on our devices. We cannot just go in and log in with our company e-mail. And our company device into ChatGPT like that was very forbidden. But because we have a license as a company, we can use this one and it. And we can, according to it, safely also upload company related documents there.” (A1)*

*“From my point of view as an auditor, there are of course data protection problems and independence problems. We handle very sensitive company data, so that this data must not be made known to the outside world, that this data must be handled very carefully and of course if it is to be used in an external AI tool, then there is of course a clear risk that this information will benefit someone who does not actually have it, as is often the case, or simply as a reason for independence, that we are not allowed to pass this data on, so that we as auditors have a clear dividing line here. We have to accept that we have an obligation to treat this data confidentially and from our point of view that is of course always the first issue and one that is very important.” (A9)*

*“I do expert opinions on one end and while doing the expert opinion, I obtain information which could be used in a different other project. But obviously, I may not use that information because just because I've learned something at one project, this is covered by privacy and*



*secrecy rules. I have legally available on the same computer, but I'm not supposed to use it for the other project. So that's the same thing on ESG and AI, I would think.” (A4)*

One risk manager from the banking industry expressed no concerns regarding privacy issues, instead highlighting the importance of regularly informing different stakeholders parties.

*“We are completely transparent in our business, and we are keeping all of the stakeholders, being shareholders or clients, or so we are keeping them informed. And we share all the information that is relevant for that purpose. So, from this side, from my experience that I have had already in Santander there we didn't have any kind of conflict related to the introduction or the usage of the AI-Tools for the ESG as well.” (A5)*

An AI expert, A7 mentioned additionally that his company has an AI Center of Excellence where all important concerns related to the use of AI tools are discussed:

*“We have an AI center of excellence and there's a board of stakeholders, where all the important questions are discussed. This board of stakeholders and experts discuss the current questions. We have rule books, AI literacy programs, but also all the ad hoc questions are discussed in the scope of this cross the pertinent board of experts. Which is not the board of the bank itself, it's a board of experts in AI. So, these things are discussed in a specific context.” (A7)*

#### **4.1.3.3 Treats of data training- Biases and hallucinations**

Villiers et al. (2024, p. 112) accentuated in their study that processing technologies are only as effective as the data used to train them. When the training data lacks diversity or completeness, different systems can become biased or inaccurate, potentially resulting in the dissemination of misleading information. An AI expert, A7, who works in the banking industry and lectures at the University of Vienna, emphasized the importance of training AI applications and concerns regarding data protection regulation:

*“We started our AI transformation at the top of Data-driven transformation. So, the AI transformation in no specific areas, so the risk of course is that was the first and main area to adopt AI tools, but nowadays we have a group wide project to promote AI app skilling and of course some of the areas that that are using this are related to. There are topics that are also*

*discussed because the use of AI tools can lead to GDPR (General Data Protection Regulation) issues. So, we have to be very, very careful in how we handle information. Also, models are biased. We have to make an assessment on the biases, present in the models... Yeah, there are tools, you can easily train tools to do this course analysis” (A7)*

One consultant, A13 and one risk manager, A6 also emphasized the importance of the accuracy of the information input into the tool, highlighting the importance of train workers properly (Stone et al., 2024, p. 1)

*“You have to train your employees on what a prompt should actually look like. And maybe I'll ask again, maybe with the AI again and not trust the first result like with a Google search, what an awareness arises there, that is the AI is not a replacement for Google, so the direction has to be very, very careful, otherwise my racial Bias is probably already included in the data models or in the AI models.” (A13)*

*“The main concern is that you are feeding incorrect information into our core in this case is the questionnaire and then therefore also scoring rating, final submissions and so on. It's really data validity and that you get the exact results and that you. So, we have seen for example other solutions where people get 40% or 50% correct results, which is of course unusable because nobody has the time to hunt for the other. 50% you will never know what is correct and what is not so really. Being super diligent in first of all picking the correct technology and making sure that the system itself is able to check, maybe in the first round, the information itself and then you building additional checks, but you also have the human component of course inside to validated data and to build this process and also nice user interface that, the most important thing you know.” (A6)*

Even though the study by Chen et al. (2024, p. 1093) spotlighted the impressive ability of the large language model to autonomously generate financial factors that reliably forecast company performance across various industries, interviewee A16, financial regulatory officer, held an opposing view. She explained that the potential for bias arising from the specific use of terminology across different industries may lead to confusion for AI tools:

*“I think one point is that there are some industry dependent specificities in the terminologies in the document. So we had a little bit of trouble with the special terms that are used. For example, for industry companies. So not for the financials for the non-financial companies because these are not yet these may be very specific, and it may be confusing for AI tools. And the second ones are the specificities. For example, for Austrian funds that there are lots*

*of funds that are concerning with ethical aspects in their investments and also these this governance aspects, I think they are rather difficult to grasp these concepts. So a lot of information contained in the documents may be misleading or misinterpreted by AI tools because they're really very specific to the company or to the industry. So I think there will be no issue with data confidentiality or things like this, but there's a little bit of maybe discrepancy. When we are looking at the description, what the company gives on their for example investment goals or climate related goals and if you're looking at the real investments the companies are taking and we have, we are having external ESG ratings on these investments and maybe there's be some discrepancy between these external ratings and the classification given by the AI.” (A16)*

Participant A6, the risk manager, added that the biggest threat of the AI tools are the hallucinations, that may generate errors or present information inaccurately (Magesh et al., 2025, p. 218) and that they must be mitigated entirely.

*“We may make sure that you always are able to make each statement the AI is making has to be. You need to have the source document for this, so you need to be able to click on it and be able to read where the AI got the information from, because hallucinations have to be brought down to 0. And that's also the biggest threat. Hallucinations. And that people rely on them and don't properly validate the data.” (A6)*

One AI specialist employed in the banking industry also brought to light that bias can occur not only in trained AI tools but also in human resolution processes.

*„So, we always say, oh, there can be a bias. Yes, but at the same time, there is a bias of every human being doing an assessment as well, because we all come with our prior beliefs ourselves. So the same way that we have prior beliefs, it can happen that AI has prior beliefs, but we are handling them in a similar way under the governance frameworks... It's threat of people not understanding the ability and capability of AI. And that's what we are facing because of these, especially large language models, the way that they interact with humans looks very human-like. And that creates a sense that you are talking to something that has a human type of intelligence. Therefore, people tend to over-rely on it without understanding that it's still a model which is not intelligent in a human way.” (A14)*

The study by Wang et al. (2024, p. 1476) revealed that current AI code generation tools often lack features that help users efficiently assess trustworthiness, leading to challenges such as misplaced expectations and suboptimal use. The paper concludes with practical design recommendations and emphasizes the importance of appropriate processes. Two participants, one risk manager, A8 and one ESG specialist A10, also believe that the right processes and tool design play an important role.

*“I think the biggest danger is that the functionality of AI models is overestimated, and then things are done that are not designed for it, or the data behind it is not designed for it. I can only add that it will be important for ESG to come up with a data strategy, how to collect and retrieve data, and that these data-driven AI models cannot be completely replaced.” (A8)*

*“It is generally very important that the processes are designed correctly, that the internal control system is built in, so to speak, so that a certain level of trust is gained from the auditor, and when the report has then been audited, there is also greater trust from the readers of the report, whoever the reader may be.” (A10)*

One consultant, A13 and one financial regulatory officer, A16 emphasizes the problem of tools output uncertainty (Zhang & Hußmann, 2021, p. 3) and believes that the people should not completely rely on the results of the tools:

*“The danger is always that you switch off your brain and just let the AI do everything and no longer questions it critically. Ok, it's a trained model that has a bias. You do have to be careful, but it does result in more time being saved and more effective work.” (A13)*

*“I would emphasize the need that everything that comes out from any AI tool has to be checked twice and must not be used out-of-the-box, but has to be adapted to the needs of the company and has to be checked on reliability and accuracy before it is before it is used to the public.” (A16)*

## 4.2 Key expectations of stakeholders, integration of AI in ESG-strategies

Even though the study from Zhang & Yang (2024, p. 14) came to conclusion that the AI enables firms to achieve higher ESG ratings and advance their sustainable development goals, there are no evidence, that the use of AI has influence on development of ESG ratings in the Austrian market. Additionally, a study from Seok et al. (2024, p. 2) support that the impact of ESG on firm value and customer satisfaction is stronger in sectors with high environmental impact, such as oil, mining, construction, and manufacturing. In these industries, consumers and stakeholders are more attuned to ESG issues, making responsible practices a key determinant of competitive advantage. Unfortunately, there are also no relevant studies or indicators showing that ESG pillars make a meaningful contribution to firm value or customer satisfaction in Europe and specially in Austria. However, one participant, who works as a consultant mentioned that companies aiming to stand out are placing greater emphasis on ESG pillars:

*“I know of a company that says OK, we want to do it because they simply have to stand out from the competition because the products are so similar. But it's not the thought that I want to become greener, it's the thought that I want to be better than the competition, that's what I'm going to do. I want to increase my profit, it's not that I want to keep the world, but I want to earn more money, which one doesn't exclude the other, but yes.” (A13)*

### 4.2.1 Environmental

#### 4.2.1.1 Energy resource optimization and efficiency

In the study from Zhang and Yang both authors came to the conclusion that, that within the use of AI tools, there is a high potential for improvement of the ecosystem, leading to more efficient energy use, reduced waste, and lower emissions (Zhang & Yang, 2024, p. 3). On the contrary, most of the interviewers from this paper disagreed with the study, pointing out how the use of energy of the tools can be extremely environmentally unfriendly.

*“When you talk about AI and sustainability in the same sentence, you have to keep in mind that AI is an enormous environmental burden, so what the data centers ultimately produce, exactly what the data center emissions are, you must not forget and every thank you chat and every hello chat is energy that is basically wasted, so that's what you want to keep in mind especially when it comes to the topic of ESG.” (A13)*

*“It's in the center of our discussion because it's not only technological, but also societal, geopolitical and we are also discussing the how finance will be affected by AI technologies and*

*of course some of these topics touch the environmental governance and sustainability topics. One very, very specific topic related to this, regards to the fact that the AI models are extremely environmentally unfriendly, the use of energy is the use of cooling liquids and data centers, for lots of people, is considered to be an unsustainable practice. So, we also try to balance the use of the need in a sustainable way. It's a complex topic to try to summarize in a simple answer but yeah, it's totally intertwined when, when you discuss sustainability and the use of AI in, in many aspects, human aspects, environmental aspects and so on.” (A7)*

*“We have a huge consumption of, for example, water or electricity by the data centers running these clusters.” (A14)*

*“I always wonder, the amount of data requires an insane amount of energy, right? I have the feeling that in the past, people were very careful even in daily life, not to send attachments, to keep things as smart as possible, by email or only then. So that you just really look. Only the essentials, that is getting out of hand now. Even if you ask, the amount of energy used and thus the CO2 emissions is many times greater than if I quickly search for something on Google. So, in that respect, I believe that this development is placing great demands on us, in terms of the resources we have and probably also what is now too little, what the CO2 footprint is, but also not negligible.” (A2)*

#### **4.2.1.2 Efforts to reduce emissions**

AI monitors emissions in real time, and predicts environmental risks, aiding firms meet environmental targets more effectively, whereby AI-driven analytics can identify inefficiencies and automate corrective actions, directly supporting environmental objectives (Naveed et al., 2025, p. 6). Three interviewers, two ESG specialists A12, A1 and one risk manager A6 agreed that AI tools can be helpful by reduction of greenhouse gas emissions and CO2 emissions.

*“AI can certainly be used to create the report when it comes to transformation, when it comes to reducing greenhouse gas emissions or getting data for a climate risk analysis or something similar.” (A12)*

*“Optimizing accounting of the corporate CO2 emissions and collecting data and optimizing that. A lot are the companies that are startups mostly utilize AI for ESG data management or for different decarbonization, solutions and especially now where I was choosing the vendor*

*for the ESG data management for the reporting that we have to do a lot of them had AI as an add on into the tool” (A1)*

*“We also use the CO2 emission data for finance emissions in the bank, so it's more or less like the centerpiece of this collection effort of the manual collection effort. But it's also has repercussions into the rating. So, because the scorecard drives soft facts and the soft facts are part of the rating process.” (A6)*

#### **4.2.1.3 Prediction of environmental risks**

The use of AI-powered predictive analytics allows companies to model various scenarios, optimizing resource allocation and operational efficiency while minimizing environmental footprints (Ameh, 2024, p. 2744). Participants A5, A8, A3 and A6 also pointed out that with the use of AI tools, there is measurement of prediction of environmental risks based on location.

*“The models that we are building are all related to assessing the risk. Some of them are built based on AI. It measures the correlation between different factors. So, it measures the relation between factors and measures also the grade where the change in one factor led to change of the others. It searches for trends, analyzes trends and based on that, builds the model to predict based on this historical learning. And, to predict what will happen in the future” (A5)*

*“Yes, I used them to write text in a normal large language model, in a whole bank, and what we have developed as a team are two machine learning models to estimate the energy index of classes.” (A8)*

*“Physical risk data, where we try to collect the locations of clients and where we try to assess the physical risks because of changing weather patterns and stuff like this of all the locations. So you look is what is on this in this location, is it important? Is it not important, for example, when LLM is used to assess if the building the LLM seeing is a factory or is it for example an office building? And then you assess based on the size of the property. For example, how important it is for company and then you add information on physical risks like you know, is it in a flat plane or is it maybe next to a mountain where it could be, but there could be an avalanche or landslide. And then you connect it with data from insurance companies to assess the physical risk or the probability that something happens at this location and this we need to do for thousands of locations, and we need to aggregate it. That's another thing which most*

*likely will help in the disclosure of physical risks we are facing in the portfolios or in our portfolios, not where we found clients.” (A6)*

*“The other thing that I know of that is used in the bank is data bases for physical risks. We also have one. Munich Re is the insurer that provides us with data that I say, okay, I'll enter the company and a location and then I can see what's relevant for me. So, is it more likely to be heat? Is it more likely to be stormy, is it more likely to be flooded? What factors are affecting me? What do I need to be prepared for? That's important for us, of course. On the one hand, to assess whether operations will be able to continue in the future.” (A2)*

A study by Zhang & Yang (2024, p. 12) pointed out that AI fosters research and development (R&D) in green technologies, supporting the creation of innovative solutions for environmental challenges. Interviewers A3, A5 and A2, who are working in the banking industry, agree that there is a focus on green technologies within their companies, and that AI tools are being used to support green investments:

*“We look at which financing we can classify as Green Investments or Green Finance Solutions and there is a certain methodology for how to do that. That's what we call our tool, our Green Asset Screening. Starting with the user manual and going on to how it can be used. What does it look like? What is the to-do for the customer services representative, we have tried to map out all of these steps in our so-called library. This means that there is now a lot of information, a lot of documents that are stored, less so.” (A3)*

*“If the society and the market is expecting that the organizations will invest more in greener assets, that was, I haven't checked this trend, but couple of years ago it was like quite strong within the banking like there was this very strong demand of searching and buying and investing in green businesses and green banks like also there was a survey performed by I think.” (A5)*

*“We are also working internally on a so-called Green Zone. That we say you can do business there and that we say okay, maybe we can also provide tools etc. that still keep the entrepreneur at heart like we do. There is a lot of discussion at the moment about whether we should call it something else. A bit of resilience for or strengthening competitiveness. But there are starting points, including the physical location. So physical risk, the carbon footprint-I don't know if that will be pursued further, but perhaps we can either offer a simple calculation ourselves based on the data we have, or work with a partner so that we can say okay, dear company, you*



*can determine the carbon footprint, the carbon footprint. These are considerations that are still in the process. They have not been approved yet. So whether it will be implemented or not. But energy efficiency is also a tool where we say it might make sense to provide assistance.”* (A2)

Participants A7 and A8 also emphasized the effective implementation of AI tools within the company and the development of models.

*“We have internal projects that tries to identify ESG controversies. We don't do business with any company or try to avoid business with companies that are hurting or promoting activities which are not ESG compliant. And for this we are using AI tools. We are scanning documents; we have trained lots of tools and processes and workflows to identify. I'm not directly involved in this process, but I have participated in the ideation and the choice of tools of models of NLP analysis.”* (A7)

*“I think that the first phase promotes innovation, but you always have to be careful with regulatory requirements in terms of being able to meet them. We as a bank are often highly regulated in terms of innovation. But in this framework, I think the first phase is already very ready, so we support it a lot.”* (A8)

## **4.2.2 Social**

### **4.2.2.1 Importance of the training policy**

The study from Xie et al. (2018, p. 295) highlighted the significance of employee training programs, emphasizing that such initiatives not only enhance workforce knowledge and skills, but they also contribute to improved organizational efficiency. Firms that implement training programs tend to exhibit higher efficiency scores compared to those that do not. Norzelan et al. (2023, p. 8) came to conclusion in their study, that the organization and government support, training can influence AI acceptance. Two ESG specialists, A9, A13, and one risk manager, A6, pointed out the importance of the training sessions within their companies and brought attention to AI tools:

*“A training session was held on the topic of immediately raising awareness of how to use the tools. This was also repeatedly communicated to us afterwards by those at the top. This was done so that these tools could be used here, or that they wanted to use them carefully, so that*

*it never came up that sensitive internet data from third parties was passed on to these systems, that this data was always blacked out or practically crossed out, that the data was always anonymized when it was used in a credit. The company place great value on this.” (A9)*

*“There is a wide range, so that we can get an overview and then build on it, for example creating an e-learning course for all employees, that is our current focus, and we are working on it intensively, so the project will last six months.” (A13)*

*“What how we basically marry this technology with people to really still have people around who cannot only use it but understand what's happening. But also, we need to build up expertise, nevertheless. Also, with young colleagues, of course, because otherwise you end up maybe with AI and lots of old people, and then the old people disappear, and then there's nothing. So, but I think so there needs to be a lot of social.” (A6)*

Participant A4, a partner at an auditing and consulting tax firm, emphasized the importance of improving education to foster a better understanding of emerging tools. This conclusion aligns with findings from a previous study by Imjai et al. (2024, p.1), which highlighted the current AI knowledge gap and the need to enhance educational curricula.

*“Over the last year or so is how can this technology, this AI type thing be integrated in the education, both at the university level, but also maybe already slightly before that. Because if this is what's going to be around for the next decades, you need to start getting your feet wet with it soon.” (A4)*

#### **4.2.2.2 Diversity within the companies**

AI-driven analytics improve workplace safety, health monitoring, and employee management. In the social domain, AI can assess labor conditions, monitor supply chain practices, support diversity and inclusion initiatives, strengthening a company's social responsibility profile (Zhang & Yang, 2024, p. 9). Two interviewees, one risk manager, A5 and one ESG expert, A1, currently see no potential for the use of AI tools in the social domain:

*“When we're talking about diversity, we should report also the numbers of women in the management, the numbers of people with disabilities within the head count of the company, these are all data that must be captured somewhere. It exists in some systems and here maybe I can say that, but it's also not a matter of AI. It is just off one time giving the framework and*

*the criteria how this data is collected from different systems and put into a report, but it's not an AI because there is no decision whether this is something or not.” (A5)*

*“There are a lot of qualitative data points, so they're not, just put your CO2 emissions, your scope 123. It also described processes, actions and policies related to material. Topics such as maybe workers in the value chain as a topic you know, and there are a lot of teams. Now I don't exactly know where this tool picks up information.” (A1)*

The application of AI tools can also be supportive in human resource management (HR), while analyzing job descriptions, recruitment and hiring processes within the organizations (Stone et al., 2024, p. 1). Interviewee A7, an AI expert, acknowledges the potential of the topic while highlighting that it remains in its early developmental stages:

*“Gains in terms of quality of life and satisfaction and so on, this is a nice collateral effect of the AI-Transformation. So it's a group wide discussion that includes not only technical professions like me, but HR in general, change management and so on, so that the whole organization is discussing these consequences at the right moment.” (A7)*

The study by Zhang & Yang (2024, p. 9) has shown, that AI can play a positive role in improving social performance by fostering stronger stakeholder engagement and optimizing workforce management strategies. Interviewee A 10, an ESG specialist emphasized that the absence of social data in many companies within the Austrian market can be attributed to the lack of previous obligations to disclose non-financial sustainability information:

*“In my opinion the most important thing for AI is that we have a certain database that we can use to ultimately write our report. And then also to disclose the correct data and yes, this probably mainly concerns quantitative information anyway. This is mainly missing in many, many companies. We saw this with our clients too, that a lot was missing from the S Standards because they simply didn't start collecting data, and then they simply didn't disclose and write in the report that they basically had nothing,” (A10)*

Additionally, another ESG specialist, A2, finds it difficult to prioritize the situation within the company:

*“There are thousands of issues in the middle that are more important than thinking about a strategy: how do I deal with the environment or how do I deal with society... It seems to me that this is how we as humanity are. We know there is a serious situation, but we find it difficult to prioritize these issues because more relevant short-term issues dominate our lives.” (A2)*

Study from Naveed et al. (2025, p. 15) described that AI monitors labor conditions and supports inclusive HR practices by identifying and mitigating biases in recruitment and promotion. These advances improve companies' social responsibility profiles and stakeholder relations. On the contrary, participant A7 expressed the view that it is not possible to rely on social data produced by AI tools if the underlying model is programmed differently:

*“If you are working with a model that helps you identify ESG controversies, you have to know that some things that could be identified as an ESG controversy can be explicitly muted or altered by the policies that were introduced in the model. The model will not consider the use of child labor to give a silly example as a problem if it's on the main producers of the country that has created the model, the ability or the liberty to use this as a resource. Models are biased and if you want to use models to help you detect them, ESG controversies which are kind of bias in society, you have to understand the biases of the models themselves. Image models are trained with very specific imagery data. If you ask to some models to generate an image of a CEO, you may know that 87% of them the images will generate a male figure. And if you ask the model to generate an image of a housekeeper or a social worker, you have much, much more females represented in the images. So, these biases are present in the models. And if we rely on the models to help uncover. These types of known desired behaviors that are imported in environmental sustainability and governance controversies. You may fail shortly because of the problems of the models themselves.” (A7)*

#### **4.2.2.3 Potential of job losses**

Even though partners at audit firms gain from improved product quality, increased efficiency, and reduced personnel costs, junior employees may face the consequences of displacement from their current positions (Fedyk et al., 2022, p. 944). This may also result in a decrease in the workforce. The participants had opposing views on this topic. Interviewers, one AI expert, A7 and one risk manager, A6 strongly believe that there is potential for job losses, and that the automation of daily tasks with the help of AI tools will lead to changes in professions:

*“There are some long-term aspects related to the substitution of human expertise and jobs, job related issues because the ultimate decision of the process can lead to the elimination of some entire sections of the organization, especially the most repetitive and non-creative jobs. So it's a huge, huge topic to discuss.” (A7)*

*“It will have a tremendous impact or there's, at least my expectations, because it will shift the roles, what people are doing. In the indigo wave, you're not writing and summarizing, but you maybe try to get more business done in the bank. So, shifting people to be more productive. Jobs would be one of the big repercussions I'm expecting, and for decision makers. This is to present complicated information in a very comprehensive, but the exact way that's also a target.” (A6)*

Conversely, one partner from an advisory and tax consulting company, A4, also mentioned that the existing resistance to the use of AI tools can be attributed to a fear of replacement (Ballantine et al., 2024, p. 9).

*“People who are maybe resisting this as a threat against their job or the importance of their job and the roles they get. So I would think this is pretty flexible and there is no resistance in the narrow sense of the word.” (A4)*

One partner of one Big4 company, A11, also believes that the AI tools will reshape the consulting industry in the near future:

*“AI will definitely reshape the way consulting is done in the future. So there will be a change of our whole business.” (A11)*

Other participants, one partner of an insurance company A15, and two ESG experts A1, A13 perceived only benefits regarding the impact of AI tools on daily tasks within their companies. Interviewers also expressed no personal concerns regarding the issue of job replacements and job losses:

*“AI can at this stage support very much but cannot take over the job entirely from humans. It needs to, what I have seen so far in our area, it needs the human check still. It can help to summarize, it can help to found a ground in being much faster in preparing the information from several systems, structuring it to the final decision, especially in the reporting has to be by the humans, the final check.” (A15)*

*“So, I would say the willingness to work is ChatGPT as an incorporating to ensuring that workers have more efficiency with performing their daily tasks.” (A1)*

*“I have the technical knowledge, but now that I'm actually dealing with AI and sustainability, I can only advise in that direction.” (A13)*

### 4.2.3 Governance

A study from Naveed et al. (2025, p. 18) showed the negative effect of governance focused committees on AI tool adoption and the governance (G) pillar in disclosure quality. The explanation provided was that there is a lack of willingness to invest time and resources in improving the quality of non-sustainability reports. One ESG expert, A1 and one AI expert, A14 highlighted governance requirements and regulatory complexity as a time-consuming factor:

*“Nobody has additional, you know, half a day to commit to ESG data you know...Companies are unfortunately pushed to do this due to the regulatory complexity, that is, the EU regulation on ESG data collection and how it looks like.” (A1)*

*“Under the current ESG performance of retail exposures, so when we give loans and have exposure towards corporates or financial institutions, we have to monitor what happens with ESG. And the regulators also require that it's not just monitoring, but for example, even in the pricing of these products, you have to have an ESG relevant component. And that's a part of incentivizing greener investments.” (A14)*

AI supports robust governance by providing advanced risk management, compliance monitoring, and decision-support systems. Natural language processing tools can proofread legal documents and flag compliance risks, while data analytics enhance transparency and accountability in corporate governance structures (Zhang & Yang, 2024, p. 15). Some participants reported using the tools, but noted that additional checks are performed:

*“We have very clear guidelines when and how we can interlink the AI on the topics. Secondly, we have to have checks, or we really check whatever the outcome is. And then we have organized in a way of use cases where we have to define end to end the outcome of this use case and on which fields it's influencing it. So it's a high transparency on how we finally reuse it and how we reuse data wherever they are generated.” (A15)*

*“Of course, there is still a lot of uncertainty and clarity about all the regulatory issues at the moment. But from what I have seen, there is actually a great deal of eloquence here. To use AI tools, both for us and from the perspective of the companies we advise or review. We see that a relatively high value is placed on it.” (A9)*

*“One side, summarizing the most important regulatory conditions, and one side, our services and what we offer in this area.” (A2)*

Interviewer A16, who works as a financial regulatory officer in Austrian governance, mentioned that they are using AI tools in relation to the EU Taxonomy regulation:

*“We have used a large language model for the questions on the EU-Taxonomy regulation on the financial reports. So we have a list of questions where what we have to look at what the company is seeing on their, on their ESG-related activities and what their climate goals and things like this and to extract the answers to these questions from the financial reports we use language models and for the funds for the classification of the funds. We've used natural language processing algorithms, so far. So, a rule-based approach to extract information based on a specific ESG dictionary we prepared.” (A16)*

AI can automate ESG data collection, enhance data quality and provide real time monitoring and reporting, helping companies comply with regulations (Seok et al., 2024, p. 9). Also, an AI expert A14, who is employed in the banking industry, confirmed that the framework for AI governance is being established within the company:

*“For the AI governance, we have established a framework, AI initiatives. This now includes key aspects, we will have to even report what is the CO2 footprint of the AI usage of our company. This is one of the topics that we are now, and these topics can get quite tricky because we are just in some way deploying the tools and we don't have the full transparency of the carbon footprint of a server hosted by provider that we have somewhere in the EU... The governance related to just the biases that are inherent to AI, mostly during the development or deployment of AI services. And there are frameworks within the deployment practices, within the libraries for the code of how to monitor the behavior of AI. We try to see what current standard is, what to do, and then do it that way until we get more regulatory transparency.” (A14)*

One ESG expert, A12, stated that the company is willing to adopt AI tools for processing legal texts. However, this initiative is still in its early stages:

*“Since we work a lot with legal texts, which is very time-consuming, we are currently planning to use AI for that. We haven't yet addressed our company-specific AI, which we want to feed ourselves with sources and data so that we can ensure that all the data in our reporting is reliable.” (A12)*

Other interviewers, two ESG specialists, one partner of a Big Four company and one AI expert, expressed skepticism regarding the meaningful application of AI tools within the G- pillar:

*“Where did you get this paragraph, this legal text from? And sometimes it cannot even like give me the right reference, and that is very for me as someone who's, like, used through academic, through my education that you need to know the source. It needs to be a credible source.” (A1)*

*“It depends very much on what tool you use; they might not have the most recent data. And which means if you ask the AI tool for support on a specific regulation, they tend to change every other week. So, you need to make sure that you have the most recent information available for the AI tool, otherwise it's of no use.” (A11)*

*“I have not noticed. Make a disclaimer about its interfacing and that is usually in banking where use of AI gets limited because the regulator is not yet ready to accept AI-generated reports without some human in the loop, at least human in the loop, involved. So this could be one area, but I cannot say myself.” (A14)*

*“When I think of ESG assessment, I immediately think of the evaluation of ESG data as material and non-material. This requires a materiality analysis, and I can imagine that there could be potential conflicts, as the materiality analysis is very complex and often requires expert assessment. I'm not sure whether an AI would be capable of conducting the assessment the first time a materiality analysis is conducted. By "like an expert," I mean, there is ESG and G data, both qualitative and quantitative.” (A12)*

As artificial intelligence pursues to advance, it is crucial to establish new frameworks and governance structures to harness its benefits while keeping it under effective control (Lehner et al., 2022, p. 127). Participant A7, an AI expert emphasizes that the EU has one of the most advanced and human-centric AI regulations in the world, particularly referring to the EU AI Act, which categorizes AI systems based on risk and prohibits those that violate GDPR or engage in high-risk practices like social monitoring. However, he is apprehensive about the EU standing alone in this approach, facing criticism from both the U.S., which favors big tech and China, which empowers state control. While proud of the ethical stance, interviewer A7 warns that this strict regulation may hinder innovation, leaving Europe technologically dependent on foreign AI and at risk of being left behind:



*“We have one of the best AI regulations on the planet because it's a human centric that I don't know if probably you are aware of the EU AI act and how the EU Act forbids any type of GDPR, non-compliant and in the levels, so the EU Act is divided in levels of risk. We have a pyramid of risks and some activities like social monitoring and the use of behavioral traits of individuals are on the on the most difficult and problematic aspects of AI. But we are alone in the world with this view because we have in the USA legislation that that protects the big Tech's, especially now with Trump and we have in China and in other countries the legislation that ensures the power of the states, as all controlling institution. So we are suffering extreme criticism from both sides that our legislation hinders innovation, and we are trying to tackle this problem into being behind the curve in terms of innovation, we don't have big companies in Europe, spearheading AI initiatives. We have Mistral, the French company, but it's not one of the main players. But on the other hand, we have one of the most modern and human centric legislations. But what if this legislation that protects people that are fully ESG compliant will be also our doom, because we will be dominated by the technology that we are buying, that we are going to, we are obliged to use because this is state-of-the-art. So, I see ourselves as block, as a continent, as a block, in a deep existential threat.” (A7)*

For capital-intensive enterprises, the government could encourage AI adoption by investing in infrastructure, thereby lowering the financial and technical obstacles to implementation (Chen et al., 2024, p. 1093). In this study, there are no indications of government support regarding AI adoption on the Austrian market. One risk manager, A6, added that the cost of collecting the data is seen as an unnecessary additional cost:

*“A lot of people might see this as an administrative effort. So of course it's a regulation, so you have to collect this information. It's seen as an unnecessary additional cost. But of course, you have to do it because the regulator requires it.” (A6)*

Two AI experts, A14, A7 and one risk manager, A8, also expressed different regulatory requirements, which are obstacles to the use of AI in G-pillar:

*“Of course, the considerations are not just limited to the cost of just the cluster and the benefit just in terms of the business benefit, but because we are in a highly regulated industry, we have to consider all reporting and security arrangements that we have to cater to. So, for example, there is a DORA regulation in the EU, there is GDPR, there are banking-specific regulatory requirements, and we have to behave in a compliant way for all of them. So it's decisions on which tools to use depends to a large degree on these limitations.” (A14)*

*“It's time to pay attention to small things that are already done and even the more laws, the scaling laws that apply to AI in general have only accelerated the pace in which traditional processes are being substituted so.” (A7)*

*“I think the most important points are always, it does not replace complete data collection, it must be accepted by the regulator, and it must be proven again, that it leads to an improvement in the calculation. And I think if these three points are given, then there is also high acceptance, if you, as an operational unit as we are, manage old management systems.” (A8)*

One financial regulatory officer, A3, two ESG experts A1, A10, and one risk manager, A6 highlighted the importance of regulatory stability (Xie et al., 2018, p. 294):

*“It's important to have this regulatory stability. So that this whole system makes sense and is profitable and beneficial for everyone because ESG fitness and consideration of ESG topics is in the long run beneficial for companies.” (A1)*

*“At the moment there aren't that many regulations, and there's also this lack of transparency. How do you collect this data? Where does this data come from? How can we rely on it being correct? And generally, when it comes to ESG issues, what we see in many of our clients' companies is that they haven't yet properly designed their processes” (A10)*

*“...Omnibus. I think the biggest uncertainty currently is who must collect what and are they still obligated to collect information. And there's also the discrepancy with maybe by law, companies have to report or not to report, and what banks need, because our regulations still require us to collect information. So, we have to explain this problem to them that for our purposes, for our scoring, for our applications and for them being allowed to borrow money, they need to provide us with information. On the other hand, they might not be required by law to collect the information, so, this is maybe the biggest problem.” (A6)*

*“So also regulatory, but more the regulation to which we are subject as a bank. That is primarily the EBA guideline, and these are the taxonomy regulations and, in the conversation, compass we also have the most important regulatory requirements for companies. It is the CS-Triple, the Deforestation Ordinance taxonomy also in relation to companies.” (A3)*

Participant A14, who is employed in the banking industry, noted that the connection between AI and ESG has often been driven by marketing rather than substance, with many inappropriate linkages due to hype. However, there's now a purposeful shift toward focusing on the ESG

implications of AI itself and how to position AI as ESG-friendly. No evidence supporting this conclusion was found in previous studies.

*“The connection between AI and ESG has been for some time more of a marketing topic. And because both topics are somewhat hyped overall, there have been many attempts to link them in spaces where they shouldn't be linked. Especially about the questions we moped, there are challenges on ESG aspects of AI use itself. So how can we sell AI as something that's ESG friendly. That shift is happening right now, so I think this, this decoupling is in purpose.” (A14)*

### **4.3 Future and potential of ESG performance of companies with AI tools**

Despite limited evidence of current impacts of AI tools on ESG performance in the Austrian market, nearly all participants anticipated that these tools would have a substantial influence on the relevant areas in the future. Interviewees generally reported a positive outlook regarding the potential of AI, while also voicing concerns about the rapid transformation of work processes as well as the accuracy of data in the future, emphasizing that corporate decision-making should not rely solely on programmed tools. Three key sub-themes emerged under the broader theme of major anticipated future impacts: enhancements in reporting and disclosure processes (4.3.1), support for corporate decision-making (4.3.2), and emerging future opportunities within companies (4.3.3).

#### **4.3.1 Improvements in reporting and disclosure processes**

Villiers et al. (2024, p. 111) found in their study that AI can support organizations with better analysis and interpretation of non-financial data, leading to more accurate and reliable reporting. Most of the participants agreed that the reporting process, the collection of the data needed, and the evaluation can be accelerated with the use of different tools. Thus, labor hours can be significantly reduced in the future.

*“I can certainly imagine that in the future, the data situation will make it easier to do this in a standardized way.” (A12)*

*“In every current report, for example, quantitative information, current figures, plus previous year's figures must be disclosed. AI can be used very well for that, and it saves us a lot of time.*

*Certain audit procedures can be carried out with the help of AI, especially when it comes to evaluating data from various databases” (A10)*

*“It can greatly simplify data analysis and help us to connect data well, to make use of it, and to interpret it correctly.” (A2)*

*“If they have to write a CSRD report, it will not take months, it will now take days. AI helps in bringing transparency and reporting about ESG to be faster and more streamlined and quicker. So, the business value generation is in addressing the reporting requirements in a more efficient way.” (A14)*

*“So, it could optimize a lot of processes, when it comes to this ESG, like the sustainability report. It could optimize how we get data from, let's say maybe our subsidiaries.” (A1)*

*“When I think of the CFO who has to write the sustainability report, that person will not have the time to write it 200 pages in Word , but with AI we will probably be fed with data, then an initial connection will be created and then you read it again and improve a few points, so that this report generation works much faster than if I start from scratch.” (A13)*

AI enables more accurate, efficient, and timely collection of ESG data, reducing manual errors and enhancing the reliability of disclosures (Naveed et al., 2024, p. 6). The interviewer, A6, also added that AI tools could support reading non-financial reports and therefore directly answer the questions from the questionnaire created.

*“Where we are building, which is able to read, for example, sustainability report and is able to automatically answer our own questionnaire of about 8080 pages. The most important thing we are designing into it is that it's able to properly integrate citations. Because the job shifts from summarizing and reading the main documents yourself, to a validation job.” (A6)*

One financial regulatory officer, A16 and one ESG expert, A9 agreed and confirmed AI tools could be useful in reporting, but human expertise and additional extended validations are still needed (Lehner et al., 2022, p. 127):

*“In any case, it could certainly make things a lot easier in some areas. Of course, major errors could probably be eliminated immediately, or it would certainly represent an additional control, not like at the moment when a human has it, of course, thinks about it, can think differently than an AI tool, such as the mathematical accuracy of a tool like that can of course perhaps not in all aspects, but also in one aspect, contribute to almost complete accuracy. Or*

*there is still a discussion about sufficient assurance in ESG audits at the moment, and so that could certainly be an issue that could potentially increase the security of the audit, as we practically, let's say, more on the human level, ESG and tools, that they could probably go hand in hand in the future and that we could also reduce the audit effort on our side from this and have an additional tool with which we can check data or reporting precisely.” (A9)*

*“Expert knowledge is still necessary, and it's not intended to replace experts by AI, but to use AI to assist experts. So, it's mainly time efficiency to so that the experts are able to have either a deeper look into the documents and to explore topics that the otherwise wouldn't have time to, or to have a broader understanding on the documents and where the topics have been mentioned in these documents.” (A16)*

Participant A4, who is a partner in an auditing and consulting company, believes that generally, people who are involved with AI and ESG are modern and open:

*“The people that get involved with AI and ESG are usually the ones that are open and prepared for modern tools and approaches. So we're not talking about some by heart financial accounting or inventory keepers.” (A4)*

Additionally, two participants from banking industry and one from consulting industry mentioned how the AI tools are already implemented in reporting and disclosure process:

*“So, we are using for our disclosure. We are currently in the process of collecting certain statistical data which needs to be collected as part of this so-called ICAP process and whereas part of the. There is one regulatory requirement where you need to collect their specific data fields, so there is it's manually not possible to collect this information, for thousands of companies, we built together with a company or big company built for us, a data extraction tool, which then, for example, collects taxonomy related data, in this case it's taxonomy. Pillar three is the correct word, so for this Pillar 3 information which needs to be disclosed, we will. We're trying to collect information automatically from the Internet using an AI or machine learning. For several machine learning technologies, plus generative AI. And we try to get for 1000 of companies this information automatically and hopefully then again, of course without too many errors. So, they also need to be check in.” (A6)*

*“What we have developed, is reflected in the financed emissions, which are also part of the disclosure. So indirectly, what has been positive for us, has already contributed to the disclosure.” (A8)*

*“There is something that is used externally by the NGO and so on, they already have AI tools. The WWF has an AI tool, where the report is uploaded by each company, and then it is analyzed in the field of AI, and you get a score afterwards.” (A13)*

The integration of AI tools can enhance ESG disclosure by enabling both standardization and customization of reporting processes. This dual capability allows organizations to provide a foundational level of disclosure that addresses the diverse informational needs of key stakeholders, including investors, customers, employees, and the general public (Asif et al., 2023, p. 9). Participant A9, an ESG expert, believes that, despite current legal uncertainties and outdated regulations, AI tools could very well become the standard for processing entire reports in the future.

*“Of course, I can imagine that if there is the appropriate, non-legal clarity or also no reference to independence sensitive data if all the risks could be cleared up, then I can very well imagine that this will probably become a kind of standard, that the entire report will be thrown through with AI tools. I can imagine that very well. I think there is simply a, let's say, legal uncertainty in the balance here, which is often still found in the contracts or in independence regulations, I don't think so yet AI tools, but those that have been incorporated, that we perhaps still have a somewhat outdated status quo here. But I can in principle, I can certainly imagine that this could become standard in a few years, yes.” (A9)*

Another ESG expert, A12, had the opposite opinion, pointing out that the availability of needed data is due to the Omnibus directive and change of legal regulations in the EU, which are still not present, and therefore, AI tools cannot be adequately implemented in the standardization of reports:

*“It doesn't make a lot of sense to leave it completely out of the AI to do the reporting. From a doing perspective, it's also more a question where does the AI get the data from? Because some companies simply don't have the database available for doing reporting right now, even manually. So, they need to pull together a lot of data. Here, of course AI can help but you still need manual interference to make sure it's it works fine.” (A11)*

Most of the participants expressed that they are still not familiar with the use of AI tools in the disclosure process. This conclusion was highlighted in the paper by Asif et al. (2023, p. 10) standardization of the ESG disclosure is still in its early stages.

*“From other companies that they have the reports written in the same way, so it's done step by step. It's not just generated once, but I have, let's say, some HR data or some back code stories to report, and the data is fed into the AI, I get a text out of it, and it's then adjusted slightly, exactly what I meant before. So yes, it is used, but now there is a separate AI tool that has been trained, I have not heard of it yet.” (A13)*

*“So we haven't heard from issuers that anyone has successfully implemented AI into reporting. We haven't seen any financial statements that say: "Everything's been leveled out, we humans don't need to do anything," or "I don't have anything to do." I haven't read or seen that.” (A3)*

*“The AI is summarizing, and the AI of monthly report writes already a first kind of summary, collecting data out of several systems, bringing this on one point, making a first draft summary and then re-evaluating this by humans and then pushing it further to the ESG department of Unica Group. Yeah. We would say it's early call maybe for that.” (A15)*

*“It is important to assess actual potential impacts, risks and opportunities and both experts from the company and stakeholders are now being questioned about this and I believe that this cannot yet be done in a standardized manner. It is difficult to have reliable data and the risk is that significant impacts may then be overlooked and that would be a shame for a report, because the report is there to publish ESG data transparently and it would be a real shame if impacts were then overlooked because the AI did not do it or was not able to assess it.” (A12)*

*“I don't know if it's from the audited companies, but the way we do things, we don't do it. In the AI tools and then especially for us in the preparation, we get an overview in the first examination procedure, of course, if there is a need, later in the examination questions but the final report was like that, because at the moment we are not checking it using AI tools, no.” (A9)*

Additionally, two partners of audit and consulting companies, A4, A11, one financial regulatory officer, A16 and one risk manager, A5 agreed that there is no place for AI to support reporting within organizations, explaining that ESG reporting is in line with the existing standards and implementation of the tools cannot be helpful:

*“There's also some hesitation because you don't want to have responsibilities for ESG reporting and then apply artificial intelligence tools that may lead to an invalid or useless result. So, you're concerned about getting the proper responses, the analysis that has to do*

*with the quantity of data and the combination of what has been input into the programming.” (A4)*

*“We don't ever have a lot of production processes going on, so our ESG reporting is in line with all standards, of course, because we know how to do it, but we don't use AI. There's no need for that.” (A11)*

*“First, I think the idea was mainly to have an automated process to go through all these documents. But now we are having the experience that these AI tools are more powerful if they are used. In like a conversation so that you get questions and ask further questions and get deeper into a topic and not get an automated report out of the of the documents.” (A16)*

*“Pure three is the transparency, which requires the financial organizations to perform the reporting and can keep all the stakeholders informed about everything that happens in the bank, ESG is one part of that. All of them use standard reporting tools, which I wouldn't call AI. As I mentioned, reporting to some tool that is programmed to pick up data subjects from different places and put them in special form and that report it to the recipient.” (A5)*

The interviewee A15 highlights that while annual reports often present a positive, green image upfront, a true assessment of a company's ESG performance requires looking beyond profit and dividends to include metrics like customer and employee satisfaction and emissions data.

*“You just need to read through the annual report. The first pages are always very colorful and everybody's green. But if you look to the figures, you see it in customer satisfaction, you see it in employee satisfaction, you see it in how the emissions are changing and how you reduce emissions, and then you see the full picture if it's only the profit and the dividend you pay out or if there are more than just this one KPI, which is the only leading driver.” (A15)*

#### **4.3.2 Decision making in the companies**

Lehner et al. (2022, p. 126), discussed in their study that people do not trust decisions based on AI tools. This was confirmed by two partners from auditing and consulting firms, each highlighting different reasons. Participant A4 believes that internal stakeholders and decision-makers do not fully understand AI tools due to a lack of education. In contrast, participant A11 points out that the biggest obstacle is the technical nature of these tools, explaining that they are not yet sufficiently developed.



*“I don't recall any board meeting or meaningful investment discussion due diligence session or something like this that where artificial intelligence plays a significant role... So, I don't think that's very applicable over here. Corporate decision makers are typically around my age or slightly younger. We don't fully understand, we don't have any education or experience in AI tools. Therefore, the role is probably limited. My dear friends, colleagues and peers, we try to still use our own heads and thinking rather than relying on technology, quite honestly, at this point in time.” (A4)*

*“It might help you guide your decision-making process, but in principle you shouldn't rely on that because AI is not yet developed to such an extent that you can base especially investment decisions purely on AI.” (A11)*

In addition, two ESG specialists, A1, A9 and one manager, A2 emphasize that decision making still remains in the hands of humans:

*“...I really hope that it doesn't come to that, I hope it relies, it benefits us to make to gather the best information from our business and from our stakeholders for us to then make decisions. If the tool makes decisions for us, then it's kind of like redundant to have managers... There's this element of, humanity and there and our life experiences and our understanding of the world that I don't think AI can reach soon.” (A1)*

*“I almost doubt that AI can solve this for companies. I think it's still up to humans, but they can provide the database for it. Perhaps I'd be willing to accept that. I can then draw industry comparisons. I can say, okay, what effect did this or that have? Or maybe conduct certain analyses. But I think the decision must remain with the people.” (A2)*

*“I would find it very difficult to imagine that an AI can simply replace humans 1:1 in the foreseeable future. I imagine that an incorrectly used AI tool could certainly also potentially contradict, let's say, the purpose of transfer or maximum transport transparency in these ESG issues. That is certainly also a risk.” (A9)*

Automation frees employees from repetitive tasks while also streamlining daily operations and decision-making. The use of robots boosts workplace productivity, enabling employees to concentrate on more intricate and strategic responsibilities (Cheng, et al., 2024, p. 27). Participant A6 highlights that ESG reports are often too long and complex for decision-makers to fully read, leading to a demand for concise, accurate summaries. As a result, the use of AI tools for summarization is expected to improve the quality of decision-making:

*“If you look at it, what we need to collect is quite elaborate and what decision makers of course like to have is a summary. So currently they don't get these summaries. So, they get lots of ESG data in these applications. Sometimes you know 8/16/20 pages. Nobody has the time to read this because these applications could be 60-70 pages long, so they ask for a summary page. They get usually the summaries in the risk assessment, but also a risk measure needs to summarize it. So they also don't have the time, and so even the educational background to properly summarize everything in a very nice, let's say, paragraph, this is a super low hanging fruit. To summarize it, to show the score and to have a really truthful representation of the risks of the ESG risk. In a short second way and this is our target. So, this is already a request, and we will build this because it's super easy to do. Yep, so hopefully this will lead to a better understanding of these risks, because they will summarize. And of course, these we have to, of course everything has certain repercussions. If you present these G in a correct way, it also has a certain influence on the decision. And maybe today the decision is not taken in a super correct way because nobody has the time to read the details here.” (A6)*

One partner from an insurance company, A15, also agrees that the tools can be helpful for better preparation and analysis of the available data, thus enabling improved decision-making:

*“Especially in the large customer field where you have a lot of tailor-made product solutions and so on, here the AI can prepare a lot of stuff, can analyze all the data we have so far, connect it also with external data we provide and then prepare a kind summary, prepare decisions.” (A15)*

### **4.3.3 Future opportunities within companies**

This final subchapter presents the interviewees' perspectives on the potential advantages of AI tools for corporate performance and the ESG pillars within organizations, primarily from the viewpoint of the banking sector. It should be noted that no supporting literature is referenced in this section.

An AI expert, A14, explains that since the emergence of GPT, the use of AI in banking has shifted from driving additional revenue (top line) to improving efficiency and reducing errors in processes (bottom line), which is now seen as the principal value of AI despite its occasional mistakes. GPT is increasingly seen as a tool for improving process speed and reducing human error, which often arises from extensive manual involvement. Although AI systems like GPT can still produce mistakes (e.g., hallucinations), these are typically more traceable and

manageable, making efficiency gains the most significant value-generating aspect of AI in banking.

*“The focus of AI use in banking has somewhat shifted when GPT came out, from kind of top line impact to a bottom-line impact. So, on the top line in banking, it would mean additional gross income. And traditionally, machine learning has been always focused on that. So we have predictions of potential sales or things like that. With GPT, it's now more and more seen as an efficient tool. So we improve the speed of the processes, and we decrease the mistake or error rate that having too many human interactions usually brings into the processes. Because the more human interaction we have, the more error prone they become. And the use of AI, while still it can hallucinate and produce some errors, usually can be at least somehow systematically traced. So, these are probably, this is the biggest value generating aspect of AI.” (A14)*

The risk manager, A6 highlights that AI can significantly ease the assessment of both risks and opportunities by analyzing available information such as emission or decarbonization cost, without being burdened by the administrative effort of data collection and reporting.

*“You can also see there's a an opportunity because in the end if information is available you can also assess it and maybe you see a business opportunity in it so and of course for us in risk management you might see or there might a risk situation might pop up because you realize, oh, this is causing the information we see costs of emissions or abatement costs, if you need to decarbonize this is costing a lot of money. And then this might cost your balance sheet to deteriorate, so there are certain aspects which make definitely with AI. It will be much easier to assess these various risks opportunities, and not to focus on this administrative burden of collecting and reporting data.” (A6)*

The interviewer A5, also a risk manager, emphasizes that AI tools positively impact risk management by enabling the detection of trends and relationships within portfolios, ultimately improving credit quality, strengthening the bank's financial position, and enhancing overall performance.

*“AI tools help in analyzing trends, analyzing portfolios and building relations between the portfolios that, otherwise, would have been very hard to detect, so especially for risk management, it's important to have this type of analysis on a portfolio to understand what the trends are and where the risks lie so that they can be then managed and mitigated in a proper way. So having implemented something like this would improve the credit quality and it would improve the quality of the credit portfolio of the bank, ultimately leading to a better standing*

*and a better financial result of the organization. So again, I see a very positive impact and a very positive effect of implementing such tools.” (A5)*

Interview A2, the manager in the banking industry, explains that a company's responsibility surpasses its direct operations to include the entire supply chain and emphasizes that AI tools can help manage the overwhelming amount of data by screening media and press for issues like human rights violations and environmental harm, thereby supporting more effective research and data preparation.

*“So my responsibility as a company doesn’t stop at the company gates, to put it graphically, I also must ask myself where the raw materials come from? Are human rights being violated? Is the environment being violated? Is there deforestation? And I usually don’t know because I don’t source directly... I think a tool can really help or I can say I’ll come and screen all the newspaper articles. There’s also a company called Preview that’s already involved in this. They screen a lot of media and press articles and say, okay, where are human rights violations coming up? Where is here discrimination? Because I think that this amount of data is almost impossible for companies to handle anymore, so maybe I can input it into a central database, and that’s okay too, if I get something from you, it immediately shows whether you’ve done something or whatever, that there’s a lot of potential. Yes, simply in research, information, collecting data, preparing data in a targeted manner.” (A2)*

The only one ESG expert, A12 interviewer expresses anticipation that AI will help overcome future challenges in ESG reporting by making it easier to obtain supply chain data from third countries and non-reporting stakeholders.

*“I think that ESG data, regarding supply chains and when third countries are included, I would be happy in my consulting work if AI could also help in the future, so that it is easier to obtain data, even from abroad, even if you include stakeholders who do not report themselves. Things like that would certainly pose a problem for reporting in the future.” (A12)*

## 5. Discussion of findings

Stakeholder theory posits that corporations have a responsibility to consider the interests and well-being of all stakeholders, not just shareholders, but also employees, customers, regulators, and the broader society (Freeman, 1984). The adoption of AI in the Austrian companies presents the mix of significant advantages and potential challenges with impacts that differ depending on the stakeholder group. These findings are particularly valuable for organizations aiming to innovate while maintaining ethical standards and sustainability. In the subsequent chapters qualitative research results are examined and interpreted in the context of existing studies.

### 5.1. Use of the AI tools in the corporate field in Austria (RQ1)

#### Positive impacts on stakeholders

A key benefit highlighted in the study was the enhancement of efficiency and role redistribution of employees. Most interview participants indicated that AI tools have the capacity to streamline workflow efficiency by automating routine tasks. This shift offers considerable advantages for internal stakeholders. Interviewees such as consultant A13, ESG experts A1 and A7, and risk manager A6 highlighted how AI tools are supporting in summarizing large documents, processing unstructured information, and optimizing communication workflows (Chen et al., 2024, p. 1093). With these tools, employees can shift their focus to more complex and impactful work. This redistribution of tasks can increase job satisfaction and professional development opportunities, aligning with the stakeholder theory principle of enhancing employee well-being (Norzelan et al., 2023, p. 8)

The second-notable advantage of AI adoption lies in its contribution in enhanced Reporting and ESG integration. This was confirmed by interviewees A14, A6, and A9, who agreed that the analysis of extensive documentation from the sustainability reports and non-financial disclosures significantly reduced. For internal stakeholders (e.g., ESG experts, compliance managers), this provides enhanced accuracy and structure in reporting processes. From the perspective of external stakeholders, these improvements signal a commitment to transparency and accountability. According to Villiers et al. (2023, p. 97), artificial intelligence has the capacity to improve both the efficiency and detail of ESG reporting, helping to ensure that such disclosures are more closely aligned with stakeholder expectations. Despite initial resistance,

many interviewees, including an AI expert, A14, and a risk manager, A6, acknowledged that AI investment is becoming a necessity for corporate competitiveness. From a stakeholder theory view, companies, which fail to innovate, risk harming their long-term relationships with key stakeholders such as clients and employees. Investing in AI is seen as a strategic move to meet stakeholder expectations for innovation, efficiency, and digital transformation. Furthermore, long-term cost reductions achieved through AI-driven process optimization can indirectly benefit customers via lower prices and shareholders via increased profitability.

### Negative impacts and risks for stakeholders

Across different industries, such as banking, auditing, reporting, and the insurance industry, a shared concern was about the accuracy and reliability of AI data outputs. Skepticism about the use of AI in complex decision-making, particularly in ESG reporting, credit risk assessment, and regulatory compliance was expressed by internal stakeholders. Study from Seok et al. (2024, p. 2) suggests how AI can improve ESG transparency by automating data collection, enhancing data quality, and enabling real-time monitoring and reporting. In this research, some interviewees, A15, A10, A11, A9, A3, A1, and A16, pointed out potential challenges related to accuracy and trust. Moreover, the incomplete or biased training data highlights a danger that can cause misleading results. Interviewees A4, A10, A16 underscored the importance that processing technologies are only as effective as the data used to train them. When the training data lacks diversity or completeness, different systems can become biased or inaccurate, potentially resulting in the dissemination of misleading information (Villiers et al., 2024, p. 111). Another risk was raised, especially by one risk manager, A6, and an AI expert, A14, which implicated the issue of AI hallucinations where the AI fabricates information or provides unverifiable outputs (Magesh et al., 2025, p. 233). When such outputs are mistakenly accepted as fact, they can mislead decision-makers, regulators, and external auditors. Stakeholders, depending on the accuracy of such outputs, are thereby placed at risk. Two participants, one consultant A13 and regulatory financial officer, A16 warned against blind reliance on AI tools, arguing that all outputs must be verified by human experts (Zhang & Hußmann, 2021, p. 6).

Another significant conclusion of the study is that the personal points of view of the participants regarding ethical and privacy risks are entirely dissimilar. Although the study of Lehner et al. (2022, p. 127) confirmed that human oversight is crucial in AI deployment to ensure ethical alignment, requiring ongoing monitoring to maintain moral standards and address emerging

concerns, this was solely confirmed by two interviewees A2 and A9. On the contrary, most other interviewees A5, A13, A1, A11 and A4 emphasized that there are no ethical concerns in any stakeholder group regarding the application of AI tools within companies. Concerning privacy risks, AI and data-driven systems must be designed to uphold privacy, transparency, and accountability (Asif & Castka, 2023, p. 9) two ESG experts, A9, A1 and partner from tax advisory firm, A4 confirmed that in their companies, privacy is given the highest priority. Conversely, one risk manager, A5 expressed no concerns regarding privacy issues, instead highlighting the importance of regularly informing different stakeholders parties.

While larger enterprises are generally better equipped to leverage the benefits of advanced technological tools, smaller firms often face limitations in resources and technical expertise, which can hinder their ability to implement AI tools within their entities (Asif & Castka, 2023, p. 9). This challenge was also highlighted by several interviewees, who noted the high costs of AI implementation and an uneven access to such technologies on the Austrian market. The concern was expressed by interviewees A1, A15, and A13, who indicated that their companies must seek budget approval and that smaller companies cannot afford the implementation of the tools. Solely larger corporations, which are better positioned and have extended budgets, invest actively in customized AI solutions, potentially exacerbating disparities and placing smaller businesses and their stakeholders at a disadvantage, a development that runs counter to stakeholder theory's emphasis on fairness and inclusive value creation. Therefore, small companies risk falling behind in ESG compliance or operational competitiveness, indirectly affecting their stakeholders, including employees, customers, and local communities.

## **5.2. AI integration in ESG: Stakeholder views (RQ2)**

Despite the study from Zhang & Yang (2024, p. 14) indicating that the application of AI tools can lead to higher ESG ratings within companies and advance sustainable development goals, evidence that AI has influenced the development of ESG ratings in the Austrian market is not found. However, one interviewer, consultant A13, emphasized that ESG-driven innovation is often used more as a competitive differentiation tactic rather than a genuine sustainability commitment. The consultant put it that ESG strategies are frequently motivated by profit and market positioning, rather than environmental ethics, highlighting a tension between economic and ethical stakeholder expectations.

## Environmental trade-offs of AI Use

Stakeholders have expressed significant concerns over energy consumption. While studies like Zhang and Yang (2024, p. 3) argue that AI can optimize energy use and reduce emissions, interviewees highlighted the high environmental cost of running AI models, citing enormous energy and water consumption, data center emissions, and a growing CO<sub>2</sub> footprint. Two ESG experts, A2 and A13, alongside two AI experts, A7 and A14, emphasized the contradiction in promoting AI as environmentally sustainable when its infrastructure can be resource-intensive and contributes to substantial increases in energy usage. Therefore, the study indicates a gap between academic optimism and concerns voiced by actual stakeholders, particularly those in ESG roles within the organization and those responsible for implementing AI tools within the companies.

The research study confirmed that AI tools can be helpful by monitoring emissions in real time, and predict environmental risks, while helping firms meet environmental targets more effectively, whereby AI-driven analytics can identify inefficiencies and automate corrective actions, directly supporting ecological objectives (Naveed et al., 2023, p. 6). Despite the concerns, several stakeholders, two ESG experts, A12, A1 and one risk manager, A6 acknowledged the practical benefits of supporting environmental management. The interviewees confirmed that AI tools streamline the collection and analysis of CO<sub>2</sub> emissions data, aiding compliance and performance tracking. AI is also employed in scenario modeling and real-time risk prediction, allowing companies to forecast climate-related threats and take preemptive action. Additionally, interviewees A5, A6, A8 working in banking and finance industry accentuated that AI-driven predictive analytics enhance physical risk assessment across portfolios, aiding firms evaluate location-based vulnerabilities such as floods or heatwaves, resource allocation and operational efficiency while minimizing environmental footprints (Ameh, 2024, p. 2742). These tools also integrate with insurance databases and support the aggregation of ESG risk data, reinforcing firms' strategic and operational resilience, key demands of institutional investors and risk managers. Furthermore, a few stakeholders pointed out that AI is instrumental in promoting green R&D and investment (Zhang & Yang, 2024, p. 14). In the banking sector, tools like "Green Asset Screening" help assess eligibility for green finance, while internal initiatives (e.g., "Green Zones") are emerging to guide sustainable business practices (A2, A3, A5). Two interviewers, A7 and A8, also brought to light, that AI tools are assisting in tracing carbon footprint, facilitating green lending decisions, and screening for ESG controversies. These efforts support stakeholders seeking



both environmental impact and competitive edge, including green-focused investors, sustainability consultants, and corporate boards.

### Social integration of AI Tools

Organizations are expected to support AI literacy and training by stakeholders, particularly employees and leadership teams, so as to ensure responsible implementation. Studies (e.g., Xie et al., 2018; Norzelan et al., 2023) and three interviewees A9, A13, A6 agreed that training policies are crucial in core regarding boosting AI acceptance and maintaining data ethics. These training sessions highlight data protection, responsible tool use, and upskilling, ensuring employees are aware of both technical capabilities and limitations. A strong education-based approach, also supported by a partner in an advisory and consulting tax firm A4, mirrors stakeholder expectations that firms will invest in the long-term reskilling of the workforce, including younger employees, highlighting a need for early integration of AI education in both corporate and academic settings (Imjai et al., 2024, p. 11). This aligns with stakeholder concerns over digital inclusion, transparency, and responsible AI usage.

While existing literature acknowledges the potential of AI to support diversity, inclusion, and HR functions (e.g., bias reduction in hiring, labor monitoring), such as paper from Stone et al., (2024, p. 1), which concluded that application of AI tools can also be supportive in HR, during the analysis of job descriptions, recruitment and hiring processes within the organizations, two participants expressed skepticism about its current application in practice. One risk manager, A5 and one ESG expert, A1 pointed out that the data currently used for social reporting is mainly qualitative and fragmented, limiting the effectiveness of AI in automating or enhancing social responsibility and that is hard to imagine in the connection with AI tools. On the contrary, Interviewer A7, an AI expert, confirmed the theoretical potential of AI to improve organizational culture and employee satisfaction but noted that AI's use in social domains is still in its infancy. Moreover, the study by Zhang and Yang (2024, p. 9) has shown, that AI can play a positive role in improving social performance by fostering stronger stakeholder engagement and optimizing workforce management strategies. Interviewees A10 and A2 further indicated that the absence of baseline social data infrastructure in many companies, stemming from a historical lack of mandatory non-financial disclosure requirements, represents a significant obstacle to the effective integration of AI.

The impact of the development of AI tools on current employment is said to be one of the most debated social topics among stakeholders and therefore the fear of job displacement remains central. Although partners at audit firms gain from improved product quality, increased efficiency, and reduced personnel costs, junior employees may face the consequences of displacement from their current positions (Fedyk et al., 2022, p. 944). Interviewees A7 and A6 anticipate long-term job losses, pointing out that some professions will rapidly change due to automation of daily tasks. On the other hand, other participants, A4, A15, A1, A13 offered a more optimistic view, positioning AI as a complement to human efforts rather than a replacement. These participants argued that AI cannot yet fully replace human judgement, especially in areas such as consulting, decision-making, and ESG reporting, where human oversight is essential. Even among stakeholders who are relatively unconcerned about job losses, there is broad acknowledgement of the likelihood role restructuring. Stakeholders anticipate that companies will implement change management strategies that harmonize technological innovation with job security, in alignment with wider societal and workforce expectations.

### Governance dimension

Within ESG strategies, there are complex stakeholder expectations and significant challenges in adopting AI tools in the Austrian market. A key finding is the generally low reluctance among governance-focused committees to invest time and resources into upgrading non-sustainability reporting, which negatively affects disclosure quality and the effective integration of AI tools (Naveed et al., 2025, p. 18). This reluctance is primarily attributed to regulatory complexity and limited resources, as noted by ESG and AI experts A1 and A14, who underscore the substantial time investment required to comply with the evolving EU regulations on ESG data compiling and reporting.

Natural language processing (NLP) tools can automate the review of legal documents and flag compliance risks, enhancing transparency and accountability (Zhang & Yang, 2024, p. 14). However, two ESG experts, A9, A2 and one partner of an insurance company, A15, emphasize the importance of human oversight, supported by stringent guidelines and controls to ensure that AI-generated outputs meet established standards. Some companies are in the early stages of implementing AI for processing legal texts and regulatory documents, indicating a cautious yet increasing interest in AI-supported governance. Furthermore, regulatory clarity and

stability are consistently highlighted as essential for building trust and enabling broader AI adoption in governance practices. Interviewers A12, A1, and A11 point to inconsistencies in ESG data reporting obligations, and the challenges companies face in reconciling regulatory requirements with operational realities, particularly in the banking and financial sectors, which are subject to numerous overlapping EU directives (e.g., GDPR, DORA, and taxonomy regulations). This fragmented regulatory environment presents a substantial barrier, requiring organizations to navigate the tension between compliance and innovation carefully.

Moreover, as AI technology progresses, it is crucial to develop new governance frameworks and oversight structures to ensure that its benefits are maximized while maintaining effective control over its use (Lehner et al. 2022, p. 127). An AI expert, A7, reflects on the broader EU approach to AI governance, expressing concern that the EU stands alone, facing criticism from both the U.S., which favors big tech and China, which empowers state control. While proud of the ethical stance, interviewer A7 warns that this strict regulation may hinder innovation, leaving Europe technologically dependent on foreign AI and at risk of being left behind. Additionally, some participants, a financial regulatory officer A3, two ESG experts A1, A10, and one risk manager, A6, highlighted the importance of regulatory stability within Austria and the EU generally.

### **5.3 Future and potential ESG corporate performance with AI tools (RQ3)**

The findings of the study indicate that the interviewers anticipate a considerable future impact of AI tools on ESG performance in the Austrian market. The author highlights two sectors where AI is expected to have a particularly strong influence, and one sector where its effect is currently more limited. Those are: transformation of sustainability non-financial reporting, progressing transparency in banking industry and possible development of future decision-making. However, concerns exist about the pace of change, data accuracy, and overreliance on automated tools without human oversight.

AI shows the prospective to improve the collection, analysis, and interpretation of non-financial ESG data, leading to more accurate, reliable, and timely disclosures Villiers et al. (2024, p. 111). With efficiency being increased, it reduces manual effort and errors, streamline reporting processes including compliance with EU regulations such as the CSRD. It helps

auditors by adding an extra layer of data validation. Most of the interviewers, five ESG experts A12, A10, A2, A1, A13 and one AI expert, A14, claimed that the use of AI tools in reporting and disclosure processes can lead to standardization and therefore reduce workforce time. Moreover, two participants from the banking industry, A8, A6 and one from the consulting industry, A13, confirmed how the AI tools are already implemented in the reporting and disclosure process within their companies. On the contrary, another interviewer, including two partners from audit and consulting firms, A4, A11 and one risk manager, A5, had opposite opinion. The participants expressed reservation about incorporating AI tools into sustainability reporting, arguing that current ESG reporting practices already comply with established standards and that AI offers limited added value at this stage. The author of the paper firmly believes that these opinions are grounded in the extensive professional experience of all three interviewees, each with over 25 years in the field. Additionally, the integration of AI in ESG disclosure offers the potential to balance standardization with customization, helping organizations meet diverse stakeholder needs (Naveed et al., 2025, p. 1). While one ESG, A9 anticipates that AI tools will become standard for processing entire reports, once legal uncertainties and outdated regulations are resolved, another expert, A12 is more skeptical. A12 takes a more cautious view, in which many companies are still without the data infrastructure needed to fully support AI, which means human oversight remains crucial to ensure accurate and dependable reporting.

The consensus across expert interviews in the Austrian market offers an insight into that AI tools playing a growing but supportive role in corporate decision-making. Despite optimism about their future utility, stakeholders are still apprehensive. Key decision-makers—often older or less technologically versed—demonstrate limited trust in AI-generated outputs, particularly in high-stakes areas such as investment or strategic ESG planning. People distrust decisions based on AI tools (Lehner et al., 2022, p. 127), which was confirmed by two partners from auditing and consulting firms, A4 and A11 expressed that they are not able to rely on decisions based on the trained tools. Moreover, two ESG specialists, A1, A9 and one manager, A2 firmly emphasized that final decision making should remain in the hands of humans, given the complexity, context, and ethical nuances that AI cannot yet address. Even automation frees employees from repetitive tasks while also streamlining daily operations and decision-making (Cheng et al., 2024, p. 27), the interviewees in this study expressed a less modern and more cautious approach. Only two risk managers, A6 and A5, highlighted that decision-making

could be enhanced by using AI to summarize extensive reports, allowing key decisions to be based on the most important points.

According to one AI expert, A14, the advent of tools such as GPT has shifted emphasis toward process optimization. AI tools minimize the reliance on manual input, which is often susceptible to errors. While generative AI systems may occasionally produce inaccuracies, commonly referred to as "hallucinations," these errors are generally identifiable and manageable. As a result, the most outstanding value is now seen in improved efficiency rather than revenue growth. One risk manager, A6, highlights the ability of AI to facilitate the analysis of risks and opportunities by drawing on complex data sets, such as emission levels and decarbonization costs. In this way, AI helps organizations minimize the time and effort spent on daily manual data collection, enabling a greater focus on strategic analysis and forward-looking planning. Furthermore, another risk manager, A5 highlighted that the tools have ability to uncover hidden patterns and connections with financial portfolios insights, which would be difficult to detect using solely traditional methods. This capability supports more effective monitoring and management of credit risk, ultimately contributing to better portfolio quality and a stronger financial position for the institution. Participants A5 and A6 emphasized that AI enables the detection of patterns and trends across portfolios—supporting early identification of ESG-related risks and opportunities. In addition to its operational and financial applications, AI is increasingly being considered about ESG responsibilities. One banking manager, A2, points to the growing pressure on companies to extend accountability beyond their operations to include their full supply chains, particularly in areas such as human rights, environmental degradation, and ethical sourcing. Given the overwhelming amount of information involved, AI is viewed as a practical solution for scanning news sources and public data to flag potential concerns such as deforestation or labor abuses—issues that might otherwise escape notice. Furthermore, an ESG advisor, A12, adds that AI could also play a helpful role in overcoming persistent data gaps in sustainability reporting. This is particularly relevant when dealing with suppliers from abroad based in third countries or with stakeholders who are not obligated or equipped to provide formal non-financial disclosures.

Across all insights, a recurring theme is that AI enables companies to engage more effectively with stakeholder demands by processing complex ESG information quickly and presenting it in actionable formats. Whether summarizing ESG risks for board-level decisions, scanning for supply chain violations, or improving credit evaluations, AI supports the goal of stakeholder theory, balancing corporate success with societal responsibility.

## **6. Conclusion**

In the year 2025, Artificial intelligence is remarkably reshaping the structure of the financial industry not only on the European continent, but on the whole world. There are several papers by researchers such as Seok et al. (2024), Chen et al. (2024), Zhang & Yang (2024), Xie et al. (2018), etc., and most of them are being conducted in the Asian market, mainly in China. Owing to the fact that conducted research studies lack in Austria, the author chose to concentrate solely on one country. Therefore, this research study sought to examine the influence and impact of AI adoption in Austria's corporate sector on stakeholders across ESG (Environmental, Social, Governance) dimensions. Although the model research paper from Zhang & Yang (2024) accentuates that AI enables firms to achieve higher ESG ratings and advance their sustainable development goals, currently, no evidence was found in the Austrian market.

To fill the research gap, a qualitative research study was conducted, which is discussed in detail in the methodology chapter. The results of the paper reflect semi-interviews conducted in April and June of 2025 with 16 participants. The interviewers were selected from a wide range of fields, including several ESG experts, risk managers, two AI specialists, three partners, one manager, and two financial regulatory officers.

### **6.1 Research implications**

Findings reveal both outstanding benefits and notable risks, varying across stakeholder groups. Positive impacts of AI on stakeholders are mirrored mainly in efficiency and role reallocation, whereby AI automates routine tasks, making job satisfaction higher and allowing focus on complex working processes. Furthermore, the study inferred that ESG Reporting is enhancing, in which AI supports more structured, accurate ESG disclosures, which reflects benefits internal (e.g., compliance) and external stakeholders (e.g., investors). Additionally, there are competitive advantages that companies see in AI as essential for innovation and competitiveness, which can benefit both shareholders and customers. Lastly, there is significant potential for future cost reduction, whereby long-term AI use optimizes costs, indirectly supporting affordability and profitability.

In regard to the obstructive impacts and risks, this study firstly spotlights the presence of data accuracy concerns such as bias, incomplete data, and “AI hallucinations” which are generating risks in decision-making and regulatory reporting. Furthermore, even ethical concerns vary among the interviewers. Some participants expressed privacy concerns, with some stakeholders downplaying risks and others stressing the need for human oversight and data protection. Moreover, there are existing barriers for small and medium enterprises that may be hindered by limited access to the use of the tools due to high AI implementation costs, creating inequality across the market. Lastly, job displacement fears are notable, as evidenced by the divergent views in this study. Some participants expect job losses, while others see AI as complementary to existing human work.

Overall, the research study concludes that AI has an impact across environmental performance and social dimensions, but less so on governance, due to limited influence. The positive aspects of integrating AI tools into ESG strategies in the Austrian market, as reflected in environmental impacts, are that AI enables real-time emissions tracking, risk prediction, and promotes green finance. On the negative side, the study concluded that the high energy and water use, as well as the environmental footprint of AI infrastructure, conflict with sustainability goals. Respecting social impacts, the study concludes that AI literacy is supported, such as upskilling in the corporate field in Austria, and that AI can improve diversity and inclusion if data quality improves. On the contrary, limited application in social reporting due to poor data infrastructure is indicated. Also, concerns over job security persist. Lastly, regarding the governance impacts, the tools can enhance compliance, automate legal reviews, and support risk management. On the other hand, there are concerns about reluctance from governance bodies, regulatory complexity, and fears that EU regulation will stifle innovation.

The study concluded that in near future, AI tools can be helpful by improving non-financial reporting, which could lead to more standardized, accurate, and efficient ESG disclosures. AI helps summarize ESG reports, scan supply chains for violations, and assess portfolio-level risks. Seen as aiding, not replacing human judgment in complex ethical and strategic areas. There is also cautious adoption in decision-making processes in the corporate field. Human oversight remains critical, and there is limited trust in AI tools' strategic decisions. AI adoption must balance innovation with inclusion, fairness, and transparency. Companies should ensure that all stakeholders benefit equitably from AI integration. Human oversight, ethical

governance, and stakeholder engagement remain critical to ensure sustainable and responsible AI use.

## **6.2 Limitations and future research**

This research is limited to the Austrian market and focuses exclusively on Austrian public companies, which are legally required to produce annual sustainability reports. Future research should expand to include small and medium-sized enterprises (SMEs), as well as companies not yet mandated to report on sustainability. Additionally, the current study examined only tertiary sector services such as financial and professional services. Subsequent investigations should also encompass a broader range of industries, such as the oil and gas extraction industry, the manufacturing industry, especially automotive, chemicals, and machinery, as well as the food and beverage production industry. Moreover, increasing the number of participants – particularly AI experts responsible for developing ESG-related tools – would strengthen the reliability of future findings. Finally, the subsequent studies should explore how these dynamics manifest in different cultural and regulatory contexts beyond the European Union, providing a more comprehensive understanding of the global effects of AI adoption on corporate ESG performance.



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## **Appendix: Interview Guide**

### **Before the interview: General information and permission to record the interview**

1. Thank the interviewee for the willingness to contribute to the research, for the time invested, and for clarifying in which language the interview should be held.
2. Provide a brief introduction of the author, along with an explanation of the thesis and the research focus of the study.
3. Explain that all interviews are anonymous and that the interview will be recorded to validate the conversation and ensure proper transcription. Ask for permission to record.
4. Request the interviewee to introduce themselves, including their current workplace, position in the company, and the number of years of work experience.
5. Politely ask the interviewee if they have any questions regarding the interview.

### **Interview Questions on English:**

#### **RQ 1: What are the current challenges and barriers to implementing AI tools in ESG reporting?**

1. Could you share some details about your experience with ESG-related topics?
2. Have you been using AI tools in your company? If so, why have you been using AI tools, and for what purpose?
3. From your experience, what are the main threats associated with relying on AI for ESG reporting?
4. How would you evaluate your organization's willingness and ability to allocate resources toward AI-driven automation?
5. Are any stakeholder groups (e.g., investors, employees, suppliers) resisting or using AI in ESG reporting? If so, why? (additional question for participants from Big4)

#### **RQ 2: What are the key expectations of stakeholders (e.g., employees, customers, investors) regarding integrating AI tools in corporate ESG strategies in the Austrian market?**

6. How does your company navigate potential conflicts between stakeholder demands for ESG transparency and concerns about AI's limitations (e.g., data biases and ethical risks)?
7. What ethical issues arise when using AI for ESG assessments, and how can they be mitigated?

8. How do investors and shareholders perceive the long-term value of AI tools in improving corporate ESG performance in Austrian companies?
9. How do corporate decision-makers perceive the role of AI tools in improving Environmental, Social, and Governance (ESG) performance within their organizations?

**RQ 3 What new opportunities and benefits can AI tools introduce to the future ESG performance of companies?**

10. Can you share examples of your company successfully using AI to enhance ESG disclosures? Additional if not using AI: Do you know any of your friends/ colleagues that have been successfully used AI tools to enhance ESG disclosure?
11. What impact can the adoption of AI technology have in your business field?
12. How can AI tools help companies balance the often-conflicting ESG priorities of different stakeholder groups (e.g., profit-driven investors vs. socially responsible consumers)?
13. Is there anything you want to add that I haven't asked you in this interview?

**Interview Questions on German language:**

**Frage 1: Was sind die aktuellen Herausforderungen und Hindernisse bei der Implementierung von KI-Tools in der ESG-Berichterstattung?**

1. Können Sie mir etwas über Ihre Erfahrungen mit ESG-bezogenen Themen erzählen?
2. Warum haben Sie KI-Tools in Ihrem Unternehmen verwendet/nicht verwendet? Wenn ja, nennen Sie bitte, welche Tools Sie zu welchem Anlass verwendet haben.
3. Was sind Ihrer Erfahrung nach den größten Bedrohungen, die mit dem Einsatz von KI für die ESG-Berichterstattung verbunden sind?
4. Wie würden Sie die Bereitschaft und Fähigkeit Ihres Unternehmens bewerten, Ressourcen für KI-gesteuerte Automatisierung bereitzustellen?
5. Gibt es Stakeholder-Gruppen (z. B. Investoren, Mitarbeiter, Lieferanten), die sich gegen KI in der ESG-Berichterstattung wehren? Wenn ja, warum? (Zusatzfrage für Teilnehmer von Big4)

**Frage 2: Was sind die wichtigsten Erwartungen von Stakeholdern (z.B. Mitarbeiter, Kunden, Investoren) an die Integration von KI-Tools in ESG-Unternehmensstrategien am österreichischen Markt?**

6. Wie geht Ihr Unternehmen mit potenziellen Konflikten zwischen den Forderungen der Stakeholder nach ESG-Transparenz und Bedenken hinsichtlich der Grenzen der KI (z. B. Datenverzerrungen und ethische Risiken) um?
7. Welche ethischen Fragen ergeben sich beim Einsatz von KI für ESG-Bewertungen und wie können diese gemildert werden?
8. Wie schätzen Investoren und Aktionäre den langfristigen Wert von KI-Tools für die Verbesserung der ESG-Performance von Unternehmen in österreichischen Unternehmen ein?
9. Wie sehen Entscheidungsträger in Unternehmen die Rolle von KI-Tools bei der Verbesserung der Umwelt-, Sozial- und Governance-Leistung (ESG) in ihren Organisationen?

**Frage 3: Welche neuen Möglichkeiten und Vorteile können KI-Tools für die zukünftige ESG-Performance von Unternehmen einführen?**

10. Können Sie Beispiele nennen, wie Ihr Unternehmen KI erfolgreich einsetzt, um die ESG-Offenlegung zu verbessern? Zusätzlich, wenn keine KI verwendet wird: Kennen Sie einen Ihrer Freunde/Kollegen, der KI-Tools erfolgreich eingesetzt hat, um die ESG-Offenlegung zu verbessern?
11. Welche Auswirkungen kann die Einführung von KI-Technologie auf Ihr Geschäftsfeld haben?
12. Wie können KI-Tools Unternehmen dabei helfen, die oft widersprüchlichen ESG-Prioritäten verschiedener Stakeholder-Gruppen (z. B. gewinnorientierte Investoren vs. sozial verantwortliche Verbraucher) in Einklang zu bringen?
13. Gibt es etwas, das Sie hinzufügen möchten, dass ich Sie in diesem Interview noch nicht gefragt habe?