AI POWERD TRANSPARENCY:

ADVANCING CSRD REPORTING IN THE FASHION INDUSTRY

- **Methodology**
- **Research Findings**
- **Opportunity Analysis**

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Work project carried out under the supervision of:
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AI POWERED TRANSPERENCY:
ADVANCING CSRD COMPLIANCE IN THE FASHION INDUSTRY REPORTING

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Abstract

This study explores the feasibility of implementing an AI-driven platform tailored for sustainability reporting within the fashion industry, with a particular emphasis on adhering to the Corporate Sustainability Reporting Directive (CSRD). Adopting a qualitative research methodology, the study delves into assessing the market potential, technological feasibility, and profit opportunity of the proposed solution. The findings indicate that the business solution is viable across these key domains. Furthermore, the study offers a detailed business plan related to the envisioned AI platform.

Keywords

AI-Driven Sustainability, AI in Sustainability Reporting, Fashion Industry Reporting, Corporate Sustainability Reporting Directive (CSRD), Greenwashing Prevention, Fashion Industry Compliance, Sustainability Data Analysis

Group Part

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List of Abbreviations

AI	Artificial intelligence
B2B	Business to business
BMC	Business Model Canvas
CSRD	Corporate Sustainability Reporting Directive
EFRAG	European Financial Reporting Advisory Group
ESRS	European Sustainability Reporting Standards
EU	European Union
GDP	Gross domestic product
LkSG	Lieferkettensorgfaltspflichtengesetz
MVP	Minimum Viable Product
NFRD	Non-Financial Reporting Directive
NLP	Natural Language Processing
Opex	Operational expenses
SDG	Sustainable Development Goals
SME	Small-and medium sized enterprises

Group part

1. Financial plan

The following section describes TrulyAI's cost structure, revenue streams and next steps. This part is based on a comprehensive financial plan that encompasses a range of detailed calculations. The financial plan can be found in the appendix (see appendix 6). This plan outlines the projected growth of our customer base, which is anticipated to stem from a combination of marketing efforts, organic growth, and strategic partnerships. Additionally, it provides an in-depth look at our revenue streams, alongside a thorough analysis of both the costs of goods sold and operational expenses. These elements collectively contribute to the calculation of our total revenues and total costs. The culmination of this financial analysis is the estimation of our earnings before income tax, offering a clear picture of the potential profitability of our venture.

1.1.1 Cost Structure

Our AI-based product, TrulyAI, is structured with a cost framework that reflects both initial investments and ongoing operational expenses. The primary investment is the development of our platform, which stands at €100,000. This significant initial outlay is complemented by an annual software license cost of €50,000. Operational costs primarily encompass employee salaries and marketing expenditures. Additionally, we account for expenses related to external services, office rent, supplies, and electronic equipment, however, these represent a smaller fraction of our total operational expenses (opex). A key advantage of TrulyAI, being an AI-based product, is its scalability. This attribute allows us to benefit from economies of scale, meaning that while our costs will incrementally increase over time, we anticipate a more substantial revenue growth. This growth is expected to be driven by an expanding customer base over the anticipated four years. Our financial projections indicate that TrulyAI is expected to reach its break-even point by January 2026. To achieve this crucial financial milestone, our

target is to secure approximately 151 customers. This customer base is seen as the pivotal point in transitioning from a phase of investment to realizing the potential for profitability and growth in our venture.

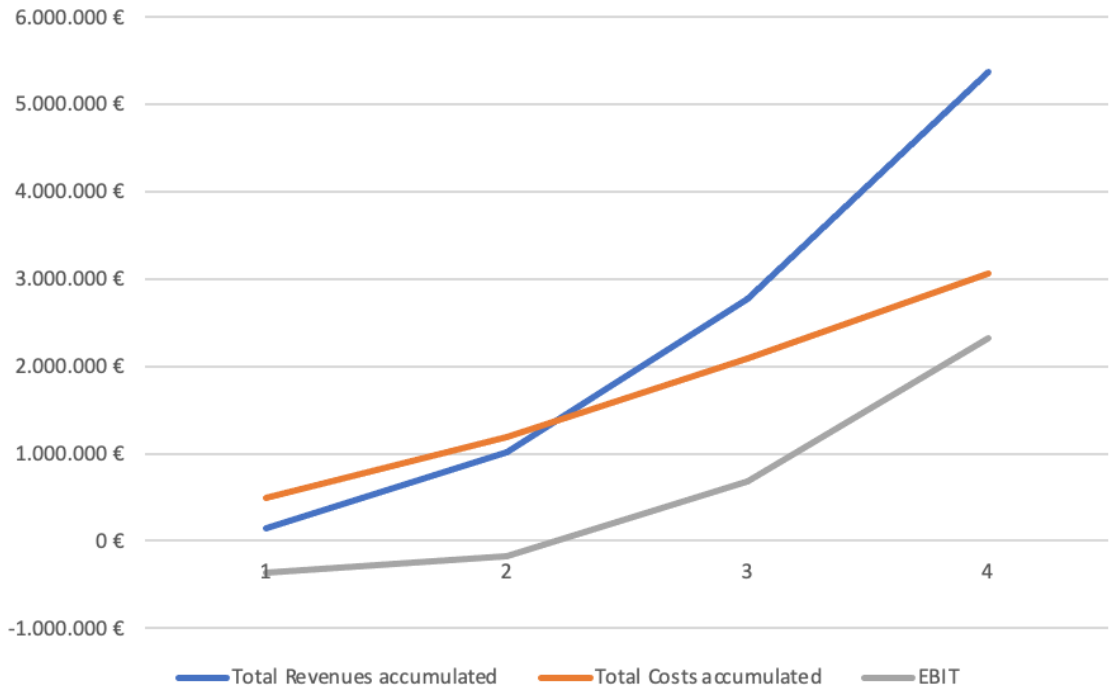

Figure 1: Break-even-point

1.1.2 Revenue Streams

As we outline the financial framework of our business plan, we introduce two pivotal revenue streams to meet diverse client needs in sustainability compliance and reporting: **the Core Package** and **the Premium Package** (figure 10). Each package is designed to align with our clients' varying levels of complexity and requirements in complying with the CSRD.

The Core Package, which will be available for €15,000, is tailored for companies that require essential CSRD compliance tools. This price is justified by the significant cost and time savings that result from automated reporting, streamlined data management and effective guidance compared to traditional manual consultancies. Moreover, when comparing similar AI tools in the market, it is evident that the pricing for these types of tools typically falls around this range.

For a more comprehensive solution, we present the Premium Package, available for €70,000. The package is tailored to customers with extensive requirements and offers unlimited access

and a wider range of functions compared to the core package. This pricing structure is consistent with established industry norms and agrees with the pricing recommendations proposed by our expert interviewee. From this revenue source, we keep €30.000 per pro package as a profit, which means that 57% of the revenue goes to our partner consultancies.

1.1.3 Funding & Next Steps

As we progress in the development of TrulyAI, our immediate next step is to build a prototype leveraging OpenAI's capabilities. This prototype is essential not only for testing the feasibility of our concept but also for gaining a deeper understanding of our user's needs. Following the development of a functional Minimum Viable Product (MVP), our strategy involves presenting this MVP to potential investors. In seeking funding, we aim to diversify our sources, focusing particularly on angel investors and early-stage venture capital firms with a specialization in AI and technology. These investors bring more than capital, their industry-specific expertise and strategic guidance are vital to navigating the early stages of a tech startup.

The financial plan for TrulyAI involves securing €650.000 by the end of 2025. This amount is needed to cover operational and development costs until profitability is reached. Our seed investment strategy is tailored to appeal primarily to business angels. Their funding is expected to bridge us through the completion of the development phase. In the first year, about €200,000 will be invested in software and platform development. This includes further develop, testing, and refining the first MVP. It will allow us to discern which features are most impactful, how to solve specific user problems and optimize user-platform interaction. This crucial phase is about more than demonstrating the viability of our idea, it is a showcase of its potential market impact.

Once the development is complete, TrulyAI's focus will shift to building strategic partnerships and expanding our customer base. Securing the ideal partners is vital as they should align seamlessly with our product's core values and substantially contribute to amplifying our presence in the market. Additionally, our strategy for fostering customer loyalty leverages

established channels to effectively engage and communicate with our target audiences. This strategy underscores the importance of not just acquiring clients but cultivating enduring relationships that support mutual growth and the long-term success of TrulyAI. The following investments will focus on team development. This strategy is crucial to increasing revenue and driving product development and includes the recruitment of skilled sales experts, an external sustainability consultant and an additional developer.

In summary, TrulyAI's funding approach is focused on developing our csrd solution, hiring key personnel and marketing to build a strong market presence. The financing strategy is geared towards meeting capital requirements with industry-specific expertise.

2. Conclusion

This thesis explores the feasibility of an AI-driven platform for CSRD compliant reporting in the fashion industry based on secondary literature and a qualitative primary research approach. The CSRD underscores a significant increase in the need for transparency and accountability in sustainability reporting practices. The fashion industry faces significant challenges in complying with CSRD regulations, particularly in terms of complex data collection and risk assessment. Producing accurate and comprehensive sustainability reports is a demanding task, exacerbated by complex supply chains and stringent requirements. This challenge is particularly acute for SMEs, which often struggle with the complexities of compliance due to their limited resources. These companies often find the high costs associated with manual methods of sustainability reporting a major financial burden. To overcome these industry-wide challenges, TrulyAI was developed as a forward-thinking AI platform tailored to the specific requirements of the fashion sector. Its main objective is to standardize and automate the CSRD compliance process. This AI tool will significantly increase the accuracy and efficiency of sustainability reporting and ensures to meet the strict standards of the CSRD.

The feasibility study for TrulyAI was designed to examine three critical aspects in detail: First, the market potential of an AI-powered sustainability reporting platform was investigated. Secondly, the technical feasibility of developing a platform that is compliant with CSRD standards was explored. Finally, the financial feasibility and potential profitability of integrating an AI-powered solution into sustainability reporting practice was assessed.

The market potential for TrulyAI is highly promising as demand for sustainability reporting is expected to rise significantly, especially in the context of the evolving CSRD. This trend is evident in the fashion sector, where the complex nature of supplier networks requires increased transparency and more thorough disclosure of business practices. Moreover, the sustainability reporting sector is increasingly acknowledging the inefficiency of manual methods due to their time-intensive nature. Traditional approaches not only struggle with managing the large volume and complexity of the required data but also exhibit a higher prone to errors. This realization has created a niche for advanced technological solutions such as TrulyAI and underlines their crucial role in the market. Similarly, our research shows that there is an urgent need among SMEs, which are experiencing growing challenges in meeting CSRD standards. Their obstacles are not limited solely to compliance but include the efficient and effective management of these processes. In this context, TrulyAI can establish itself as an essential tool. Due to the increasing integration of AI into business practices and the rise of AI-centric organizations, the market opportunities for tools such as TrulyAI are growing. The ability of AI to provide scalable and competent solutions is increasingly recognized as an essential factor in the business world. This development aligns well with the needs of companies looking to comply with CSRD regulations.

In terms of technical feasibility, experts confirm the potential of an AI-centric CSRD platform like TrulyAI. Modern AI technologies, in particular machine learning algorithms, GPT models and natural language processing, are ideally suited to meet the complex CSRD reporting requirements. Machine learning is particularly important as it enables TrulyAI to intelligently

recognize patterns, predict trends and make data-driven recommendations, greatly enhancing its ability to efficiently manage large-scale data. NLP helps to interpret regulatory documents and user guidelines, ensuring that the platform is both adaptable and user-friendly. As TrulyAI progresses towards handling larger data volumes, the development of custom AI models becomes essential. The development of AI solutions tailored to our specific needs enables better control and optimized processing of data. These customized AI services could focus on specific aspects of CSRD reporting and expand TrulyAI's ability to adapt and excel in this evolving field.

Our financial analysis reveals that TrulyAI will initially require external funding to offset its substantial initial investment costs. However, it is poised to greatly benefit from economies of scale in the long run. As it is an AI-powered software solution, costs will only increase slowly, while revenues have the potential to increase significantly. Consequently, TrulyAI proves to be a scalable and economically feasible business. Furthermore, the increasing trend of investing in AI-centric startups supports the assumption that TrulyAI will attract significant interest from investors. This trend reflects a growing confidence in the transformative potential and profitability of AI technology in various sectors. In addition, the platform's alignment with current environmental and regulatory requirements positions it at the forefront of an emerging market niche. This unique positioning, combined with the increasing demand for innovative AI solutions, increases TrulyAI's appeal to forward-thinking investors looking to capitalize on cutting-edge technology and sustainable business practices.

This feasibility study demonstrates AI's capability as a key asset for small and medium-sized fashion enterprises, facilitating their effective implementation of reporting practices in alignment with CSRD. It emphasizes the crucial influence of legal frameworks in guiding corporate actions and the adaptability of technology to evolving changing standards.

The changing landscape of CSRD regulations is creating new market opportunities. TrulyAI is ideally positioned to take advantage of this emerging niche. It meets current environmental and regulatory requirements and is leading the way in meeting the growing demand for advanced AI solutions. This marks not only the conclusion of our work, but also the beginning of a future where sustainable business practices is combined with cutting-edge technology, representing a great step towards a sustainable, technology-driven business world.

Individual part

3. Methodology

3.1 Research Design

A qualitative feasibility study was conducted to identify the market opportunity, technical feasibility, and profit potential in the European sustainability reporting market, with a specific focus on the fashion industry. In the initial phase, secondary data was systematically collected as part of a comprehensive desk research approach. This research facilitated the identification of three different expert groups that were considered essential for investigating the three research topics. Subsequently, a qualitative approach was implemented to collect primary data through interviews with expert groups to ensure a deep understanding of possible meanings, motivations, and contexts, of the research topics (Bhangu et al. 2023). Given the geographic reach and working domains of the researchers across Europe, a purposive sampling method was employed, leveraging personal contacts within the fashion industry, sustainability consultancy, and AI fields. This deliberate approach allowed us to strategically select participants with expertise and relevance to the study's objectives (Campbell et al. 2020). As a result, the interviews encompassed stakeholders from various European countries, ensuring comprehensive representation across the continent. The analysis was enhanced by incorporating frameworks such as PESTLE and SWOT, which provided robust support for both the secondary and primary data.

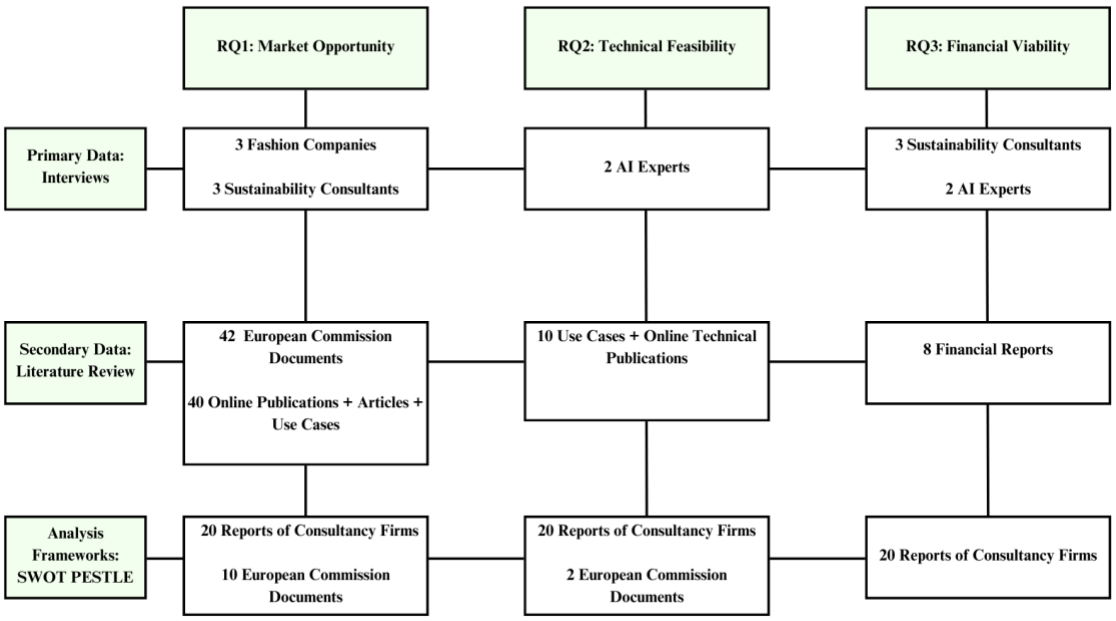

Figure 2: Methodological framework for the feasibility study

3.2 Data Collection

For this feasibility study, semi-structured interviews with experts were chosen as the main data collection technique. This method offers the flexibility to delve deeply into the topic of interest and allows for follow-up questions as the conversation progresses, adapting to the evolving discussion (Boeije, 2010). These participants were categorized into three distinct groups: First, employees from European fashion companies affected by the CSRD holding positions in general management, strategy, and sustainability. This group includes representatives from Takko Fashion, Primark, and a sportswear brand. Second, sustainability consultants who are knowledgeable about CSRD and traditional sustainability reporting, working for firms such as EY, Accenture, and Ramboll. Thirdly, AI experts specialized in AI technologies for tech companies represented by professionals from Fully Ventures and an independent AI consultant. Various modes of engagement, such as face-to-face interviews, phone calls, and virtual Google Meet, were adopted to conduct interviews. The duration of each interview was 30-60 minutes, aiming to gather substantial insights from diverse stakeholders. The open-ended questions were strategically formulated to encompass a balanced mix of exploratory, explanatory, and

descriptive inquiries. Three interview guides were divided into different sub-topics. The guides can be found in the appendix (see appendix 7). For fashion companies, 17 questions explored companies' sustainability focus and challenges, their awareness and preparation regarding the CSRD, and expectations for an AI reporting platform. For sustainability consultants, 14 questions investigated the current CSRD market, the experts' point of view on the AI role in sustainability, possible partnerships and synergies, and the demand of fashion industries in sustainability. The last interview guide, to AI experts, counts 12 questions exploring the technical challenges and feasibility of an AI-driven sustainability reporting platform, considerations and limitations, and specific features to enhance the effectiveness of the project and future technologies.

3.2.1 RQ1

To comprehensively explore the market potential of an AI-driven CSRD reporting platform, a diverse and methodical approach was adopted. This involved conducting interviews with representatives from three fashion companies and three sustainability consultants. These interviews were structured around three sub-research questions, aiming to gain a deeper insight into the relevant aspects of the market demand.

> *SRQ1 How do you perceive the current market demand for the CSRD?*
>
> *SRQ2 What opportunities do you see for a collaborative effort between an AI-driven sustainability reporting platform and your company?*

Additionally, secondary data was scrutinized via an extensive literature review, with a particular focus on 40 online publications, and 42 official documents published by the European Commission, which defined the customer target and market size. Furthermore, the analytical framework, PESTLE, focused on the political, economic, social, legal, and environmental external influences on the market potential of an AI-driven solution for sustainability reporting within the fashion industry, supported by 10 more EU documents and 20 reports of consultancy firms.

3.2.2 RQ2

To investigate the technical feasibility of an AI-driven reporting platform, the research methodology included conducting two interviews with AI experts. These interviews were specifically designed to address the following two sub-questions:

> *SRQ3 What are the primary technical challenges in developing an AI-powered platform for sustainability reporting?*
>
> *SRQ4 What AI techniques are most suitable for addressing the requirements of sustainability reporting?*

Moreover, secondary data was reviewed through 10 documents about use cases, and technical publications. The frameworks employed offered insights into the technical strengths, weaknesses, opportunities, and threats, linked to integrating AI into sustainability reporting practices, and the external technological factors, supported by 20 reports of consultancy firms and 2 EU documents.

3.2.3 RQ3

To assess the economic viability and potential returns on investment linked to the project, three interviews with sustainability consultants, and two with AI experts were conducted, focusing on two sub-research questions:

> *SRQ5 What are the prospective profit margins and expenses incurred associated with an automated sustainability reporting service?*
>
> *SRQ6 What are the estimated development costs involved in creating an AI-driven reporting platform?*

Furthermore, an analysis of secondary data, including 8 financial reports, market analyses, and pertinent use cases, was conducted.

3.3 Data Analysis

Content analysis involves systematically evaluating and interpreting qualitative data, such as interviews, to identify patterns, themes, and meanings within the content (Schreier 2012). Its

primary goal is to gain a deeper understanding of the material analyzed by categorizing and coding information into meaningful units. Content analysis enables the systematic examination of textual or visual information, allowing researchers to draw conclusions and identify relationships in various fields (Mayring 2004).

In a preliminary step, after building the research context with the literature review, all the transcripts and notes from the interviews were processed. The interview transcripts can be found in the appendix (see appendix 9). This analytical step was led by the research objectives and the three research questions (market opportunity, technical feasibility, and financial viability). Different statements across the different stakeholders were highlighted, regarding specific recurrent topics. After a second reading, a code system was developed. Each code was a short phrase, describing the content of the respective quotes. Then a list of sub-dimensions was developed. The following step was collecting all the sub-dimensions into aggregate dimensions, based on their characteristics. At this point the concept dimensions were compared, to see how they interact or influence each other for a broader understanding of the research questions.

4 Research Findings

4.1 Content Analysis

To categorize the quotes, a thematic approach was applied (Vaismorandi 2013). A table with the code system can be found in the appendix (see appendix 8). The code system was designed to individuate recurrent topics which are relevant to the research questions. Based on the transcript interviews, the following eight codes were analyzed for RQ1: *positive considerations and strong interest in the project*, *lack in the current sustainability reporting, companies' challenges faced in the CSRD compliance/ reporting, increasing CSRD market trends and demand, large fashion companies' high qualification in the CSRD*, *necessity of TrulyAI for medium size companies,* and *companies demanding expectations for an ai-driven sustainability reporting platform.* These codes form the following four sub-dimensions: *Advantages and opportunities*

of the project, CSRD demand, market limitations/opportunity, and *potential features and improvements*. Ultimately, the aggregated dimension of *market opportunity* summarizes these findings.

Furthermore, a second set of nine codes for RQ2 was individuated: *positive outlook on implementation, gpt models' efficiency to handle complexities, efficiency on handling large data set, necessary natural language processing, predictive agents allow development, improvements, difficulties in ensuring correct output, difficulties in processing different data,* and *data protection importance*. These codes form the following four sub-dimensions: technological possibilities, type of technology, future developments, AI limitations and AI risks. Overall, the aggregated dimension of *technical feasibility* encapsulates these findings.

Additionally, third set of six codes for RQ3 was analyzed a: *low initial technological investments, high maintenance and scaling costs, variable operational costs, necessity of high investment into partnerships, expensive traditional sustainability reporting services*, and *project's profitable financial evaluation.* These codes are then grouped into two sub-dimensions: cost estimates and pricing estimates. Ultimately, the aggregated dimension of *financial viability* summarizes these findings.

4.1.1 Market Opportunity

Figure 3: Content Analysis for Market Opportunity

Insights gained from industry experts unveiled several key determinants in assessing the market landscape. Notably, increasing demand for sustainability reporting related to the CSRD was recognized by 66% of participants on the topic. As stated by Lorenzo Antonini, one of the sustainability consultants:

> *"The market for consultancy services preparing companies for CSRD has significantly expanded, (…) we do between 2 and 5 CSRD-related projects monthly".*

This observation shed light on the promising demand for consultancy services dedicated to the CSRD reporting preparation, with an average of 4 clients per month. In detail, 2 representatives of fashion companies out of 3, revealed that large and medium-large companies (from 10.000 to >100.000 employees) have internal sustainability departments in charge of CSRD reporting (Takko, Primark 2023).

> *"Large companies (…) have enough money to manage it on their own."*
>
> – Wolfgang Krogmann

“In the parent company of Primark, there is a team of now over 120 employees who work on the whole topic of production monitoring and reporting”

– Wolfgang Krogmann

This is a crucial finding for TrulyAI’s market opportunity, identifying a specific target market in small-medium European fashion companies. Importantly, 50% of the stakeholders, from the fashion industry and sustainability consulting, expressed a keen interest in an AI-driven sustainability reporting platform, articulating substantial expectations for features like robust data analysis, real-time insights, and seamless integration.

“The idea of external help is very appealing and we have already discussed it internally.” – Anonymous

Moreover, ‘the early mover advantage’ emerged as a pivotal factor, emphasized by the AI expert Niklas von Weihe, who highlighted the competitive edge of pioneering a tailored AI-powered platform for CSRD compliance within the fashion industry.

"It's a competitive space but being a first mover would be advantageous. If you're quick to market with this idea, it could be a worthwhile investment." - Niklas von Weihe

Furthermore, 100% of the participants highlighted the immense potential of the platform, mentioning its advantage of improving the standardization and accuracy of the process.

"It would offer a scientific methodology to a process that is currently lacking in excessive subjectivity, offering more accurate data comparability within markets and speeding up the mapping process." – Lorenzo Antonini

To conclude, there is a significant demand for CSRD reporting in the market. Both fashion companies and sustainability consultancies recognize the potential of an AI platform as an ideal tool for crafting comprehensive sustainability reports.

4.1.2 Technical Feasibility

Figure 4: Content Analysis for Technical Feasibility

The interviews with Niklas von Weihe and Oleksii, two experts in Artificial Intelligence, affirm the technical feasibility of an AI-driven sustainability reporting platform in the fashion industry aligned with the CSRD.

> *"Absolutely feasible (...) I don't see any problem in turning your idea into reality."*
>
> - Oleskii

Niklas elucidates that while there may not be significant technical obstacles, adequate data provision from companies is vital for streamlined processing, citing the feasibility of API data extraction.

> *"I don't foresee any major technical obstacles. If the companies provide the basic data, processing it is straightforward."* – Niklas von Weihe

Both experts affirm modern AI capabilities, specifically mentioning GPT models and natural language processing (NLP), as proficient for Minimum Viable Product (MVP) in handling the project's complexities without the need for extensive coding experience.

> *"Modern AI, like the GPT models, can handle this. You can set up a system like this with little to no coding experience."* - Niklas von Weihe

Moreover, Niklas highlights the pivotal role of NLP in comprehending legal documentation and user instructions, ensuring an adaptable and user-friendly platform. Furthermore, discussions delve into managing extensive datasets, emphasizing the synergy between GPT models and auxiliary tools like Link Chain and vector databases for scalable data processing.

Both experts highlight emerging AI technologies, including AI agents for automated communication, improving the platform's capabilities in customer service.

> *"AI agents are an emerging technology with great potential. They're autonomous agents that can perform tasks like human workers. This could extend the platform's capabilities beyond just report creation to include automated communication with government bodies (...) even handling the submission of reports."* – Niklas von Weihe

Additionally, considerations of AI risks underscore the importance of ensuring data accuracy, mitigating biases, data protection and establishing transparent validation processes for AI decisions.

> *"Given the sensitive nature of the data, you also need to pay a lot of attention to data protection and data security."* – Oleskii

In conclusion, the insights gained from the interviews with AI experts emphasized the technological feasibility of an AI-powered CSRD reporting platform, identifying NLP as core technology, and predictive models to enhance its customization features.

4.1.3 Financial Viability

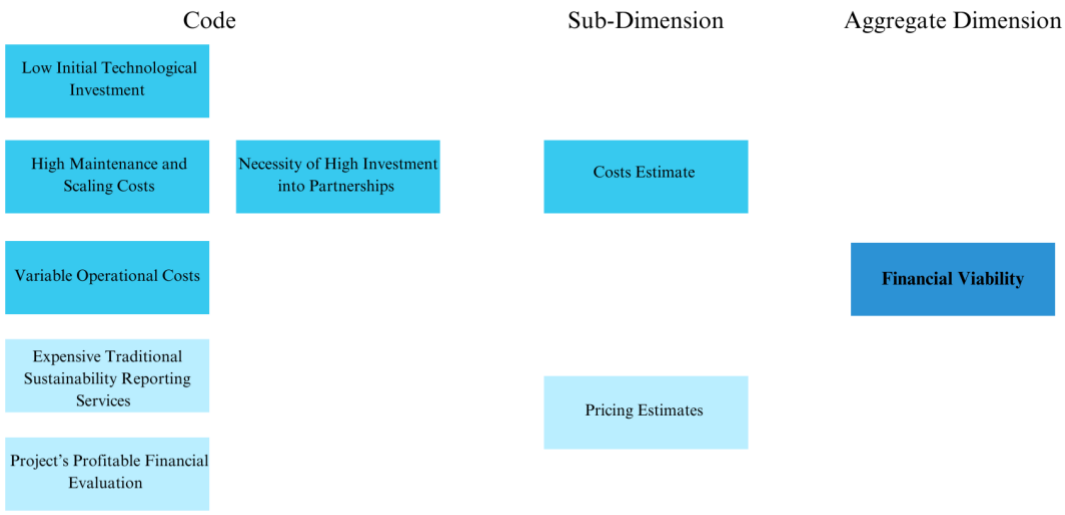

Figure 5: Content Analysis for Financial Viability

The assessment of financial feasibility and profitability regarding the integration of an AI-driven solution into CSRD sustainability reporting practices revealed multifaceted dimensions. Insights drawn from interviews with AI experts highlighted varying cost dynamics, emphasizing the potential low initial technological investment in setting up basic systems.

> *"Initially, you might not need extensive development resources. Setting up a basic system could be quite straightforward."* - Niklas von Weihe

However, a more sophisticated platform necessitates higher maintenance and scaling costs, estimated to range between €10,000 to €15,000 per month, primarily dependent on usage and cloud-based solutions.

> *"For ongoing maintenance, the use of cloud computing can offer scalable and cost-effective solutions (...) I think between 8 - 15 k monthly."* - Oleskii

Operational costs further fluctuate, contingent upon data processing volumes, based on the token-based pricing model of Open AI per token. Furthermore, interviews with sustainability consultants underscored a wide-ranging spectrum in traditional sustainability reporting, similar to TrulyAI's Core Package, spanning from €60,000 to €100,000. Additional services required

by companies for data preparation and final gap assessments are expected to further elevate the pricing.

"Prices for sustainability reporting rage from €60.000 to 100.000."

-Marcel Hadewigger

"From a common knowledge, I would say, in a range between €50.000 and €80.000."

– Patrick Engelbach

Additionally, consultants proposed an average pricing model encompassing Pro services integrated with AI technology, projecting prices within a range of €60,000 to €120,000.

"Considering the most expensive package you can offer to companies, I would say around €120.000 or even more" – Marcel Hadewigger

While there's recognition of the expense associated with traditional reporting services, consultants see a potentially profitable partnership between consultancy firms and AI-driven platforms, suggesting 50% on the product sale as a commission fee.

"50% sounds really fair, as the work would take short time and low effort for a consultant." - Lorenzo Antonini

Only 1 Fashion company provided valuable financial insights, referring to small-medium companies which have not the possibility to afford the high costs of conventional sustainability reporting services.

"The medium-sized companies can't afford to program something for €250,000."

– Wolfgang Krogmann.

In conclusion, insights from interviews with experts showcased varied cost dynamics in developing an AI-driven reporting platform. Initial setups suggest modest investment, while more advanced systems may incur higher monthly maintenance costs. Traditional sustainability reporting services are more expensive due to additional preparatory services, and optional gap assessments vital for CSRD compliance. Potential scalability in partnerships with sustainability

consultants was further individuated, and a relevant need for accessible reporting solutions among medium-sized companies.

5. Opportunity Analysis

5.1 Market Research and Segmentation

Market research is a fundamental step to gather information about the selected market and target customers, to test the feasibility of the project and its potential success (Dibb 1998). The following section of this document provides a comprehensive examination of the competitive landscape within the industry. In addition, this analysis includes a comprehensive assessment of the market's scope and outlook using the Total Addressable Market (TAM), Serviceable Available Market (SAM) and Serviceable Obtainable Market (SOM) frameworks. Lastly, a PESTEL and a SWOT analysis are carried out to gain important insights into the strategic direction and expected development of the fashion sector. The visualization of the analysis frameworks can be found in the appendix (see appendix. 2; appendix. 3).

5.1.1 Competitor Analysis

The competition is evaluated on two fundamental characteristics in the market of sustainability reporting: *Efficiency* and *Specialization.* In the first step, startups providing AI-driven CSRD reporting were researched. **Direct competitors** are Greenomy and Osapiens, two startups specializing in offering AI-driven online software for CSRD reporting. Through the AI focus of both companies, these two companies, compared to the industry standard, are relatively efficient. However, both companies have a general focus, covering multiple industries with their tools. The **indirect competitors** are divided into two categories, including companies offering sustainability reporting related to the CSRD with a manual approach and consultancy firms providing training and guidance for companies who want to write reports themselves. For the first group of indirect competitors, there is a long list of consultancies that write the new sustainability reports and help improve sustainability performances, such as Deloitte, PwC,

Ernst & Young, KPMG, AECOM, Ecovadis, SCRM Consulting. Since the sustainability reporting approach is based on a manual process the efficiency of the respective companies is relatively low. Like the direct competitors, the consultancies focus on various industry sectors and are not specialized in the fashion industry. In the second group of indirect competitors, there are consultancy firms that train companies to collect the right data for independent CSRD reporting. This group includes the three largest consulting companies and other relevant sustainability consultancy firms. Notably, EY, Ramboll, McKinsey, BCG, Bain & Company. This approach is more efficient as the process can be standardized; however, the respective companies do not cover a target niche. Moreover, the training does not give assurance to the clients.

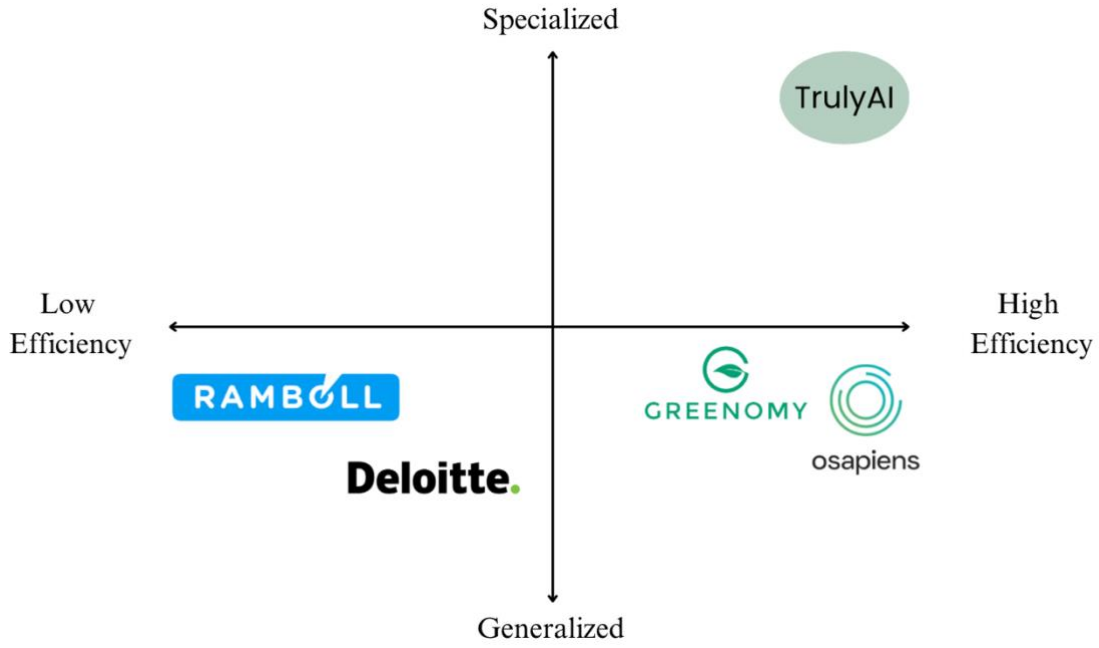

Figure 6: Competitor-Cross

5.1.2 Market Opportunity

The targeted market evolves in a time frame of five years, from 2024 to 2029 (European Commission 2023). It changes due to the level of restriction and inclusion of the CSRD. To analyze the market, a bottom-up approach was adopted, which involves analyzing individual-specific micro-factors to then form a broader conclusion (Brodsky 2022). This approach aims

to gather comprehensive market insights, starting from market particulars (Day 1981). A total of 145.000 fashion companies within the European Union are multiplied by an average of €22.500 annual contract per customer (Smith 2023). Therefore, the Total Addressable Market is €3.26 Bn. To calculate the Serviceable Available Market within the next 4 years, the number of European Fashion companies with a range of 50-250 or more employees, or with a specific yearly net turnover is considered, which represents 1% of the market (Euratex 2022). These 14.500 companies are multiplied again for the average price of TrulyAI's offer, revealing a Serviceable Available Market of €326.25M. Moreover, to understand the Serviceable Obtainable Market of Truly AI, the customer capabilities of direct competitors are considered. Considering the automation of AI and the company's competitive prices, the possibility of reaching 1% of the Serviceable Available Market within the 4th year is feasible. Based on 145 customers Truly AI's Serviceable Obtainable Market amounts to €3.26M yearly revenue.

5.1.3 PESTEL Analysis

The PESTEL analysis examines various external factors that can influence the effectiveness and strategic direction of an AI-powered sustainability reporting solution. By assessing Political, Economic, Social, Technological, Environmental, and Legal dimensions, the analysis aims to craft a robust and adaptive business strategy that navigates the broader landscape impacting the project.

Political

From a political point of view, Europe is encouraging the fashion industry, with mandatory regulations, to approach transparency by the next year (European Commission 2023). This political factor is influencing and reshaping fashion companies, which adopt sustainability measures. The introduction of the CSRD has led to an increase in sustainability reporting within the European landscape, with approximately 60% of companies actively participating in sustainability reporting (KPMG, 2023). The fashion industry's rapid adaptation to the EU's

evolving regulatory framework set an advantageous landscape for TrulyAI for the next five years.

Economic

The economic factors of the fashion industry, such as market demand from a more conscious audience and funding availability for sustainability practices, are pivotal in the financial resources for sustainability reporting. Within the next five years, a relevant demand growth of 12% is expected in the European ESG software industry (PwC 2023). Financial forecasts predict a total ESG reporting software market of $2.25B in 2031 (Ace Analytic 2023). Additionally, in 2020 Europe counted €10.2 trillion of sustainability investments (Statista 2023). This number is expected to grow by 46% in 2024, with 80% of the 500 main European chief investment officers in fashion companies declaring ESG investments in their core strategy (McKinsey 2023).

Social

The social landscape is in continuous evolution, growing the number of people involved and interested in sustainable approaches when purchasing products. Every 10th European consumer purchases a product considering its carbon footprint (Deloitte 2023). Moreover, one out of four European customers decides to pay more for sustainable products or for brands that are involved in social projects (Deloitte 2023). The fashion industry is subject to this social pressure and awareness, aiming to meet consumer expectations by adopting sustainable practices and being transparent. Consequently, a focus on sustainable products results in customer loyalty and a better brand reputation (Islam et al. 2021). The fashion industry landscape has changed concerning their main stakeholders, who are seeking brands aligned with their values (McKinsey 2023).

Technological

Technological factors play another pivotal role in the project, providing us with the tools to build a technologically advanced solution and stand out from the competition. The current

growth of 60% of AI usage for sustainability reporting in the use of AI and its improvements have changed the game of sustainability reporting (Pwc 2023). European companies spent over $21B on artificial intelligence implementation in 2022 (Statista 2023). AI data analytics is the key factor impacting how companies can handle sustainability information and operations. AI has currently a high threshold of data collection and elaboration, capable of reaching 96% accuracy (Pwc 2023). Research forecasts that by 2030, a substantial 45% of the global economy will depend on product enhancements attributed to AI's influence, over the coming years. Moreover, the European economic landscape is expected to experience a significant boost, with AI contributing approximately 10% to the GDP by 2024 (Pwc 2023). The fashion industry seems ready to adopt such technology, as it has already been integrated into their systems for different scopes. Anyways, the positive approach of fashion companies to embrace AI-driven solutions is crucial to the research.

Environmental

The global environmental landscape has been shaped by the negative footprint of the fashion industry, which is responsible for 10% of global CO2 (European Commission 2023). Consequently, due to the environmental the social pressure, EU companies are trying to reduce carbon emissions, wastes, and pollution (Apostu et al. 2023). In 2019, with the introduction of the European Green Deal, Europe started a green transition that will revolutionize industries' production and emissions until 2050 (European Commission 2023). Transparency plays a pivotal role in the goal of European industries and becomes the key to introducing the product in the European fashion market.

Legal

Legal factors, such as the introduction of the CSRD in January 2023, play a fundamental role in the feasibility of the project (European Commission 2023). Almost 50.000 companies will be affected by the strict requirements of the new directive in the first years, increasing the demand for sustainability reporting (European Commission 2023). The legal landscape was

mainly shaped by the “Fit for 55” in 2021, a document presenting numerous policies to contrast greenwashing and improve sustainability performances of the European industries (European Council 2023). Moreover, many new directives will be implemented within the next ten years, such as the EU Digital Product Passport (DPP) which aims to track the sustainability and the value chain of a specific product by 2030 (European Health and Digital Executive Agency 2023). Additionally, privacy laws shape the legal framework, requiring strict compliance with the General Data Protection Regulation (GDPR EU 2020).

5.1.4 SWOT Framework

The SWOT analysis identifies different internal strengths and weaknesses of an AI-powered sustainability reporting solution, based also on external opportunities that surround the project. The aim is to develop a comprehensive and successful business strategy led by these factors (Benzaghta 2021).

Strengths

The envisioned project is based on the integration of modern AI technologies, to automate the whole sustainability reporting process, therefore increasing its efficiency, speed, and cost-effectiveness. This technological breakthrough not only reduces the possibility of mistakes but also assures the development of accurate and streamlined reports that adhere to regulatory criteria. Notably, the agility of AI updates outperforms traditional human work, allowing for rapid modifications in conformity with EU rules. Furthermore, this fast technology offers enough time for companies to refine sustainability strategies and implement new processes. Additionally, the technological platform, through rapid cross-checks and precise risk assessments, not only delivers comprehensive reports but also reveals vulnerabilities for the companies involved in the reporting process. Moreover, potential collaborations with consulting companies strengthen the company’s reputation and service efficiency, guaranteeing professional onboarding, gap assessment, and reasonable assurance. TrulyAI’s reporting division fosters transparency, accountability, and CSRD compliance, contributing not only to

boosting company credibility but also to the larger social goal of strengthening firms' reputations. A cornerstone is the user-centric interface design, which provides an easy platform that facilitates data entry and report production, making the proposed solution accessible to a varied user base regardless of technological skill. The fashion sector specialization and initial focus on supply chain data collecting not only strengthens TrulyAI's basic capabilities but also prepares us to tackle a range of industry requirements in the future.

Weaknesses

The company relies on technology, highlighting the importance of being up to speed on emerging AI and EU regulations to continuously improve the proposed solution. This reliance on AI, however, presents the danger of potential data analysis mistakes, which are vulnerable to system breakdowns (de Villiers et al., 2023). Moreover, the initial budget and team size cause complications in managing numerous operations such as marketing, sales, and support, where efficiency is critical for the company's credibility. Furthermore, the integration of new technology into old systems may attract opposition, particularly in an industry where established consulting firms rely heavily on manual methods. Therefore, convincing fashion firms to put their faith in an AI technology for CSRD reporting is another challenge, especially considering that large companies have specialized sustainability departments dedicated to it. Maintaining comprehensive cybersecurity, frequently updated, is critical to mitigating data theft threats, but at potentially growing costs. Additionally, there is a critical obstacle affecting the company's accessibility. A common difficulty in acquiring reliable data is caused by firms' lack of knowledge to identify and collect the right information.

Opportunities

The introduction of the CSRD plays a pivotal role in the opportunity scenario, offering new prospects and channels for global development. In its early stages, the business intends to expand particularly medium and small companies. Furthermore, fostering strategic partnerships with consultancy firms demonstrates TrulyAI's credibility and may facilitate mutual client

exchanges. On the other hand, partnering with important fashion companies can create a domino effect in the company's client portfolio. Simultaneously, the rapid growth of regulatory frameworks, as detailed in the European Council's "Fit for 55" document, portends imminent legislative changes requiring corporations to increase transparency and sustainability performance (European Council 2023). This transformational landscape gives an excellent opportunity to improve the services offered, which are especially geared to the fashion sector. Furthermore, as the company's name and reputation in the fashion industry grow, opportunities to explore new markets become feasible. The strategy objective includes expanding sustainability reporting services outside the fashion sector by using existing knowledge and reputation.

Threats

The competitive environment is rapidly changing, with the likelihood that a sizable number of competitors could soon integrate AI into their operational frameworks, thereby losing market share. Larger competitors have significant financial resources, allowing for expenditures in sophisticated technology and other operational aspects, creating a competitive challenge. Furthermore, the regulatory environment is rapidly changing, raising the possibility of new or changed rules impeding the company's creative reporting systems, resulting in delays and eventual credibility loss. Moreover, vulnerability to cybersecurity risks is heightened due to the handling of sensitive and previously hidden private data, intensifying challenges in protecting privacy and maintaining a strong reputation. Additionally, despite AI's outstanding accuracy, inherent data quality concerns and system biases might make adaptation to CSRD rules more difficult.

6. References

Adam, Martin, Wessel, and Alexander Benlian. 2020. "AI-based Chatbots in Customer Service and Their Effects on User Compliance." American Economic Review, [DOI:10.1007/s12525-020-00414-7].

Anandakumar, H., and Arulmurugan, R. 2019. "Artificial Intelligence and Machine Learning for Enterprise Management." In 2019 International Conference on Smart Systems and Inventive Technology (ICSSIT), 1265-1269. IEEE.

Apostu, S. A., Gigauri, I., Panait, M., & Martín-Cervantes, P. A. 2023. "Is Europe on the way to sustainable development? Compatibility of green environment, economic growth, and circular economy issues." International Journal of Environmental Research and Public Health 20(2): 1078.

Armstrong, C., and Lehew, M. 2011. "Sustainable Apparel Product Development: In Search of a New Dominant Social Paradigm for the Field Using Sustainable Approaches." Fashion Practice, 3, 29-62. [https://doi.org/10.2752/175693811X12925927157018].

Baier, D, T. M. Rausch, and T. F. Wagner. 2020. "The Drivers of Sustainable Apparel and Sportswear Consumption: A Segmented Kano Perspective."

Banchero, Mauro. 2020. "Recent Advances in Supercritical Fluid Dyeing." Coloration Technology, 136(4), 317-335. [https://doi.org/10.1111/cote.12469].

Baviskar, D., Ahirrao, S., Potdar, V., and Kotecha, K. 2021. "Efficient Automated Processing of the Unstructured Documents Using Artificial Intelligence: A Systematic Literature Review and Future Directions." IEEE Access, 9, 72894-72936. [https://doi.org/10.1109/ACCESS.2021.3072900].

Bergen, M., and Peteraf, M. A. 2002. "Competitor Identification and Competitor Analysis: A Broad-Based Managerial Approach." Managerial and Decision Economics, 23(4-5), 157-169.

Bevilacqua, M., Ciarapica, F., Mazzuto, G., and Paciarotti, C. 2014. "Environmental Analysis of a Cotton Yarn Supply Chain." Journal of Cleaner Production, 82, 154-165. [https://doi.org/10.1016/J.JCLEPRO.2014.06.082].

Bhangu, S., Provost, F., Caduff, C. 2023. "Introduction to Qualitative Research Methods – Part I." Perspectives in Clinical Research, 14(1), 39–42. [DOI 10.4103/picr.picr_253_22].

Bhangu, S., Provost, F., Caduff, C. 2023. "Introduction to qualitative research methods – Part I." Perspectives in Clinical Research.

Bick, R., Halsey, E., and Ekenga, C. 2018. "The Global Environmental Injustice of Fast Fashion." Environmental Health, 17. [https://doi.org/10.1186/s12940-018-0433-7].

Biswas, K., and B, D. 2023. "Role of Artificial Intelligence (AI) in Changing Consumer Buying Behaviour." International Journal of Research Publication and Reviews. [https://doi.org/10.55248/gengpi.2023.4227].

Black, Sandy. 2013. "The Sustainable Fashion Handbook." Choice Reviews Online, 50-6494. [https://doi.org/10.5860/choice.50-6494].

Braun, V., & Clarke, V. 2012. "Thematic analysis." American Psychological Association.

Braun, V., and Clarke, V. 2012. Thematic Analysis. American Psychological Association.

Brito, M., Carbone, V., and Blanquart, C. 2008. "Towards a Sustainable Fashion Retail Supply Chain in Europe: Organisation and Performance." International Journal of Production Economics, 114, 534-553. [https://doi.org/10.1016/J.IJPE.2007.06.012].

Brodsky, M. 2022. "Market Sizing Activity." In UT Faculty/Researcher Works. Association of College & Research Libraries.

Bundesministerium für Arbeit und Soziales. 2023. "Corporate Sustainability Reporting Directive (CSRD)." Oct 2. [https://www.csr-in-deutschland.de/DE/CSR-Allgemein/CSR-Politik/CSR-in-der-EU/Corporate-Sustainability-Reporting-Directive/corporate-sustainability-reporting-directive-art.html].

Bundesministerium für Wirtschaft und Klimaschutz. 2023. [https://www.bmwk.de/Redaktion/DE/Gesetze/Wirtschaft/lieferkettensorgfaltspflichtengesetz.html].

Caiado, R., Filho, W., Quelhas, O., Nascimento, D., and Ávila, L. 2018. "A Literature-Based Review on Potentials and Constraints in the Implementation of the Sustainable Development Goals." Journal of Cleaner Production. [https://doi.org/10.1016/J.JCLEPRO.2018.07.102].

Camilleri, M. A. 2015. "Environmental, social and governance disclosures in Europe." Sustainability Accounting, Management and Policy Journal 6(2): 224-242.

Castro-Lopez, A., Iglesias, V., and Puente, J. 2021. "Slow Fashion Trends: Are Consumers Willing to Change Their Shopping Behavior to Become More Sustainable?" Sustainability. [https://doi.org/10.3390/su132413858].

Cazier, Joseph A. 2011. “Sustainability Reporting: Will Consumers Pay More to Purchase from Technology Companies Who Issue Sustainability Reports?” Scispace, Dec 5. [https://typeset.io/papers/sustainability-reporting-will-consumers-pay-more-to-purchase-4chhvfmuy9].

Chand, P., Thakkar, J., and Ghosh, K. 2020. "Analysis of Supply Chain Sustainability with Supply Chain Complexity, Inter-relationship Study Using Delphi and Interpretive Structural Modeling for Indian Mining and Earthmoving Machinery Industry." Resources Policy, 68, 101726. [https://doi.org/10.1016/j.resourpol.2020.101726].

Concise Encyclopedia of Church and Religious Organization Marketing. Robert E Stevens, David L Loudon, Henry Cole, Routledge 2012.

Davenport, T., Guha, A., Grewal, D., et al. 2020. "How Artificial Intelligence Will Change the Future of Marketing." Journal of the Academy of Marketing Science, 48, 24–42. [https://doi.org/10.1007/s11747-019-00696-0].

Davis-Kean, P. E., Jager, J., and Maslowsky, J. 2015. "Answering Developmental Questions Using Secondary Data." Child Development Perspectives, 9(4), 256-261.

Day, G. S. 1981. "Strategic market analysis and definition: an integrated approach." Strategic Management Journal 2(3): 281-299.

de Villiers, C., Dimes, R., and Molinari, M. 2023. "How Will AI Text Generation and Processing Impact Sustainability Reporting? Critical Analysis, a Conceptual Framework and Avenues for Future Research." Sustainability Accounting, Management and Policy Journal.

Deloitte. "The sustainable consumer: what consumers care about." Retrieved from [https://www2.deloitte.com/uk/en/pages/consumer-business/articles/sustainable-consumer-what-consumers-care-about.html] (Deloitte.com).

Deloitte. 2022. "Corporate Sustainability Reporting Directive Brochure." Retrieved from [https://www2.deloitte.com/content/dam/Deloitte/mt/Documents/sustainability/Corporate-Sustainability-Reporting-Directive-brochure-2022.pdf] (Deloitte.com).

Deloitte. 2022. "Global Survey of Sustainability Reporting 2022." Retrieved from [https://assets.kpmg.com/content/dam/kpmg/se/pdf/komm/2022/Global-Survey-of-Sustainability-Reporting-2022.pdf] (Deloitte.com).

Deng, Li, and Yang Liu. 2018. "Deep Learning in Natural Language Processing." Springer. [https://link.springer.com/book/10.1007/978-981-10-5209-5].

Dibb, S. 1998. "Market Segmentation: Strategies for Success." Marketing Intelligence & Planning, 16(7), 394-406.

Dibb, S. 1998. "Market segmentation: strategies for success." Marketing Intelligence & Planning 16(7): 394-406.

Dissanayake, D. 2019. "Does Mass Customization Enable Sustainability in the Fashion Industry?" In Fashion Industry - An Itinerary Between Feelings and Technology. [https://doi.org/10.5772/intechopen.88281].

Dissanayake, D., Perera, S., and Wanniarachchi, T. 2017. "Sustainable and Ethical Manufacturing: A Case Study from Handloom Industry." Textiles and Clothing Sustainability, 3, 1-10. [https://doi.org/10.1186/S40689-016-0024-3].

Dobos, Emese and Andrea Éltető. 2022. "Regulation of the Fashion Supply Chains and the Sustainability–Growth Balance." Sustainability Accounting, Management and Policy Journal, 14(1), 101-129. [https://doi.org/10.1108/sampj-04-2022-0182].

Draschner, C., Jabeen, H., and Lehmann, J. 2022. "Ethical and Sustainability Considerations for Knowledge Graph based Machine Learning." In 2022 IEEE Fifth International Conference on Artificial Intelligence and Knowledge Engineering (AIKE), 53-60. [https://doi.org/10.1109/AIKE55402.2022.00015].

Drisko, J. W., & Maschi, T. 2016. "Content analysis." Pocket Guide to Social Work Re.

Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., … Williams, M. D. 2021. "Artificial Intelligence (AI): Multidisciplinary Perspectives on Emerging Challenges, Opportunities, and Agenda for Research, Practice and Policy." International Journal of Information Management, 57, 101994. [https://doi.org/10.1016/j.ijinfomgt.2019.08.002].

Enste. D. 2023. "Nachhaltigkeitsberichtspflicht: CSRD – Monster oder Motivator?" Institut der Deutschen Wirtschaft, Oct 12. [https://www.iwkoeln.de/studien/dominik-h-enste-karishma-herbert-julia-wildner-csrd-monster-oder-motivator.html].

ERM Group. 2023. "Why the CSRD Can Be a Good Thing for Your Business and Society." Sustainalize, Oct 2. [https://www.sustainalize.com/news/why-csrd-good-for-business-society/].

EURATEX. 2022. "EURATEX Facts and Key Figures." Retrieved from [https://euratex.eu/wp-content/uploads/EURATEX_FactsKey_Figures_2022rev-1.pdf] (Euratex.eu).

EURATEX. 2022. EURATEX Facts and Key Figures. Retrieved from [https://euratex.eu/wp-content/uploads/EURATEX_FactsKey_Figures_2022rev-1.pdf] (Euratex.eu).

European Commission - Single Market Economy. 2022. "Fashion and High-End Industries." Retrieved from [https://single-market-economy.ec.europa.eu/sectors/textiles-ecosystem/fashion-and-high-end-industries/fashion-and-high-end-industries-eu_en] (Single-market-economy.ec.europa.eu).

European Commission. 2023. "Corporate Sustainability Reporting." Retrieved from [https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en] (Finance.ec.europa.eu).

European Parliament. 2022. "Sustainable Economy: Parliament Adopts New Reporting Rules for Multinationals." Retrieved from [https://www.europarl.europa.eu/news/pt/press-room/20221107IPR49611/sustainable-economy-parliament-adopts-new-reporting-rules-for-multinationals] (Europarl.europa.eu).

European Union. "Digital Product Passport." Retrieved from [https://hadea.ec.europa.eu/calls-proposals/digital-product-passport_en] (hadea.ec.europa.eu).

European Union. 2016. "Regulation (EU) 2016/679." Retrieved from [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679] (Eur-lex.europa.eu).

European Union. 2021. "Publication Detail." Retrieved from [https://op.europa.eu/en/publication-detail/-/publication/1ef8fe0e-98e1-11eb-b85c-01aa75ed71a1/language-en] (Op.europa.eu).

European Union. 2022. “RICHTLINIE (EU) 2022/2464 DES EUROPÄISCHEN PARLAMENTS UND DES RATES vom 14. Dezember 2022 zur Änderung der Verordnung (EU) Nr. 537/2014 und der Richtlinien 2004/109/EG, 2006/43/EG und 2013/34/EU hinsichtlich der Nachhaltigkeitsberichterstattung von Unternehmen.” European Union, Nov 14. [https://eur-lex.europa.eu/legal-content/DE/TXT/PDF/?uri=CELEX:32022L2464].

Fraser, I., Müller, M., and Schwarzkopf, J. 2020. "Transparency for Multi-Tier Sustainable Supply Chain Management: A Case Study of a Multi-tier Transparency Approach for SSCM in the Automotive Industry." Sustainability. [https://doi.org/10.3390/su12051814].

Gabel, E. 2023. “The Future of ESG Legislation.” Industrial Decarbonization Network, Oct 12. [https://www.industrialdecarbonizationnetwork.com/standards-regulatory/articles/the-future-of-esg-legislation].

GDPR.eu. "Compliance Checklist for US Companies." Retrieved from [https://gdpr.eu/compliance-checklist-us-companies/] (gdpr.eu).

Ge, Yuying, Ruimao Zhang, Xiaogang Wang, Xiaoou Tang, and Ping Luo. 2019. "Deepfashion2: A Versatile Benchmark for Detection, Pose Estimation, Segmentation and Re-identification of Clothing Images." 2019 IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR). [https://doi.org/10.1109/cvpr.2019.00548].

Gencer, Y. 2019. "Developments Concerning Supply Chain Management in Global Retailing Business." In Advances in Logistics, Operations, and Management Science. [https://doi.org/10.4018/978-1-5225-8970-9.CH002].

Ghimire, A., Thapa, S., Jha, A., Adhikari, S., and Kumar, A. 2020. "Accelerating Business Growth with Big Data and Artificial Intelligence." 2020 Fourth International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), 441-448. [https://doi.org/10.1109/I-SMAC49090.2020.9243318].

GlobalData. 2022. "Europe Apparel Market Analysis." Retrieved from [https://www.globaldata.com/store/report/europe-apparel-market-analysis/] (Globaldata.com).

Goncalves, A., and Silva, C. 2021. "Looking for Sustainability Scoring in Apparel: A Review on Environmental Footprint, Social Impacts and Transparency." Energies, 14, 3032. [https://doi.org/10.3390/EN14113032].

GrantThornton. 2023. “CSRD Reporting: What You Need to Know.” GrantThornton, Oct 2. [https://www.grantthornton.com/insights/articles/esg/2023/csrd-reporting-what-you-need-to-know#:~:text=CSRD%20applicability%20determination%20is%20complex&text=EU%2Dbased%20large%20undertakings%2C%20regardless,assets)%20exceeding%20€20%20million].

Grimm, J., Hofstetter, J., and Sarkis, J. 2014. "Critical Factors for Sub-supplier Management: A Sustainable Food Supply Chains Perspective." International Journal of Production Economics, 152, 159-173. [https://doi.org/10.1016/J.IJPE.2013.12.011].

H&M Group. 2022. "H&M Group Annual and Sustainability Report 2022." Retrieved from [https://hmgroup.com/investors/annual-and-sustainability-report/].

Hadiati, Mulyana Chandra. 2023. “Examining the Effect of Sustainability Report Disclosure to Firm Value: A Study based on Listed Public Companies in Indonesia Stock Market.” Dinasti International Journal of Economics, Finance and Accounting, Dec 5. [https://typeset.io/papers/examining-the-effect-of-sustainability-report-disclosure-to-2chnwrtf].

Harmon, A. 2022. "SWOT Analysis." Salem Press Encyclopedia.

Henderson, P., Hu, J., Romoff, J., Brunskill, E., Jurafsky, D., and Pineau, J. 2020. "Towards the Systematic Reporting of the Energy and Carbon Footprints of Machine Learning." ArXiv, abs/2002.05651.

Hines, T., and Bruce, M. 2007. Fashion Marketing: Contemporary Issues. [https://doi.org/10.4324/9780080506241].

Hoffmann, A., Roberts, S., Wolf, C., and Wood, S. 2018. "Beyond Fairness, Accountability, and Transparency in the Ethics of Algorithms: Contributions and Perspectives from LIS." Proceedings of the Association for Information Science and Technology, 55, 694-696. [https://doi.org/10.1002/PRA2.2018.14505501084].

Holder-Webb, Lori, Jeffrey R. Cohen, Leda Nath, and David Wood. 2009. "The Supply of Corporate Social Responsibility Disclosures among U.S. Firms." Journal of Business Ethics, JSTOR Journals.

IBM. 2023. “What is the Corporate Sustainability Reporting Directive (CSRD)?” IBM, Nov 14. [https://www.ibm.com/topics/csrd#:~:text=The%20CSRD%20applies%20to%20many,impacts%20about%2011%2C700%20companies%20total].

Inditex Group. 2022. "Inditex Group Annual Report 2022." Retrieved from [https://static.inditex.com/annual_report_2022/pdf/Inditex-group-annual-report-2022.pdf].

Inditex. 2019. "Annual Report 2018." Retrieved from [https://static.inditex.com/annual_report_2018/pdfs/en/Inditex%20Annual%20Report%202018.pdf].

Inditex. 2022. "Inditex Annual Report 2022." Retrieved from [https://static.inditex.com/annual_report_2022/en/].

InsightAce Analytic. "ESG Reporting Software Market." Retrieved from [https://www.insightaceanalytic.com/report/esg-reporting-software-market/2136#:~:text=ESG%20Reporting%20Software%20Market%20Size%20is%20valued%20at%20USD%200.71,forecast%20period%20for%202023%2D2031] (InsightAceAnalytic.com).

Iqbal, Shahid. 2023. “Promoting Responsible Sustainable Consumer Behavior through Sustainability Marketing: The Boundary Effects of Corporate Social Responsibility and Brand Image.” Sustainability, Dec 4. [https://typeset.io/papers/promoting-responsible-sustainable-consumer-behavior-through-27k1js9b].

Islam, T., Islam, R., Pitafi, A. H., Xiaobei, L., Rehmani, M., Irfan, M., & Mubarak, M. S. 2021. "The impact of corporate social responsibility on customer loyalty: The mediating role

of corporate reputation, customer satisfaction, and trust." Sustainable Production and Consumption 25: 123-135.

Jacometti, Valentina. 2019. "Circular Economy and Waste in the Fashion Industry." Laws, 4(8):27. [https://doi.org/10.3390/laws8040027].

Jain, Karishma. 2022. “Challenges of Sustainability Reporting from Managerial Perspective: A Review and Future Agenda.” Sage Journals, 21(2).

Jans, Yvonne, Werner von Bloh, Sibyll Schaphoff, and Christoph Müller. 2020. "Global Cotton Production under Climate Change – Implications for Yield and Water Consumption." [https://doi.org/10.5194/hess-2019-595].

Jarrahi, Mohammad Hossein. 2018. "Artificial Intelligence and the Future of Work: Human-AI Symbiosis in Organizational Decision Making." American Economic Review. Available at: [https://www.sciencedirect.com/science/article/pii/S0007681318300387?via%3Dihub] .

Jastram, S., and Schneider, A. 2018. "New Business and Governance Approaches to Sustainable Fashion: Learning from the Experts." [https://doi.org/10.1007/978-3-319-74367-7_14].

Joffe, H., & Yardley, L. 2003. "Chapter four: content and thematic analysis." In Research Methods for Clinical and Health Psychology, edited by Marks D, Yardley L: Sage Publications, London, 56-68.

Johnny Saldaña. 2011. Fundamentals of Qualitative Research. Oxford University Press.

Jokhan, A., Chand, A., Singh, V., and Mamun, K. 2022. "Increased Digital Resource Consumption in Higher Educational Institutions and the Artificial Intelligence Role in Informing Decisions Related to Student Performance." Sustainability. [https://doi.org/10.3390/su14042377].

Jung, S., and Jin, B. 2014. "A Theoretical Investigation of Slow Fashion: Sustainable Future of the Apparel Industry." International Journal of Consumer Studies. [https://doi.org/10.1111/ijcs.12127].

Karmaker, C. L., Ahmed, T., Ahmed, S., Ali, S. M., Moktadir, M. A., and Kabir, G. 2021. "Improving Supply Chain Sustainability in the Context of COVID-19 Pandemic in an Emerging Economy: Exploring Drivers Using an Integrated Model." Sustainable Production and Consumption, 26, 411-427. [https://doi.org/10.1016/j.spc.2020.09.019].

Khakurel, J., Penzenstadler, B., Porras, J., Knutas, A., and Zhang, W. 2018. "The Rise of Artificial Intelligence under the Lens of Sustainability." Technologies. [https://doi.org/10.3390/TECHNOLOGIES6040100].

Khan, F., Pasha, M., and Masud, S. 2021. "Advancements in Microprocessor Architecture for Ubiquitous AI—An Overview on History, Evolution, and Upcoming Challenges in AI Implementation." Micromachines, 12. [https://doi.org/10.3390/mi12060665].

Konina, Natalia Yu. 2023. "Smart Digital Innovations in the Global Fashion Industry and a Climate Change Action Plan." In Smart Digital Innovations in the Global Fashion Industry and a Climate Change Action Plan. Retrieved from [https://link.springer.com/chapter/10.1007/978-3-031-28457-1_27].

Kordon, A. 2020. Data Science Based on Artificial Intelligence. [https://doi.org/10.1007/978-3-030-36375-8_1].

Kvale, S., and Brinkmann, S. 2009. Interviews: Learning the Craft of Qualitative Research Interviewing. Sage.

Labuschagne, C., Brent, A. C., and Erck, R. V. 2005. "Assessing the Sustainability Performances of Industries." Journal of Cleaner Production, 13(4), 373-385. [https://doi.org/10.1016/j.jclepro.2003.10.007].

Lapan, S. D., Quartaroli, M. T., and Riemer, F. J. (Eds.). 2011. Qualitative Research: An Introduction to Methods and Designs (Vol. 37). John Wiley & Sons.

Lepri, B., Oliver, N., and Pentland, A. 2021. Ethical Machines: The Human-Centric Use of Artificial Intelligence. iScience, 24. [https://doi.org/10.1016/j.isci.2021.102249].

Lin, D., Li, M., Zhan, Q., Song, X., Yang, Y., and Li, H. 2022. "Application of Intelligent Logistics Inventory Optimization Algorithm Based on Digital Supply Chain." International Journal of Emerging Electric Power Systems, 24, 61-72. [https://doi.org/10.1515/ijeeps-2022-0128].

Lombardi, A. R., Rifenbark, G. G., and Taconet, A. 2023. Quality Indicators of Secondary Data Analyses in Special Education Research: A Preregistration Guide. Exceptional Children, 89(4), 397–411. [DOI 10.1177/00144029221141029].

Lopez, B., and Alcaide, A. 2021. "Innovation Management, from Materiality Assessment to Sustainability Reporting, Opening the Social Impact Black Box." SocioEconomic Challenges. [https://doi.org/10.21272/SEC.5(1).13-27.2021].

López, T., Riedler, T., Köhnen, H., and Fütterer, M. 2022. "Digital Value Chain Restructuring and Labour Process Transformations in the Fast-Fashion Sector: Evidence from the Value Chains of Zara & H&M." Global Networks, 22(4), 684-700.

Lougee, Barbara, and James Wallace. 2008. "The Corporate Social Responsibility (CSR) Trend." American Economic Review, 98(2). [page numbers if available].

Lutfiyya, H., Birke, R., Casale, G., Dhamdhere, A., Hwang, J., Inoue, T., Kumar, N., Puthal, D., and Zincir-Heywood, N. 2021. "Guest Editorial: Special Section on Embracing Artificial Intelligence for Network and Service Management." IEEE Transactions on Network and Service Management, 18, 3936-3941. [https://doi.org/10.1109/tnsm.2021.3127543].

Maedche, Alexander, Christine Legner, Alexander Benlian, Benedikt Berger, Henner Gimpel, Thomas Hess, Oliver Hinz, Stefan Morana, and Matthias Söllner. 2019. "Opportunities, Threats, and Research Perspectives in AI-Based Digital Assistants." Published: June 11, 2019, Volume 61, Pages 535-544.

Maldini, I., P. Stappers, J. Gimeno-Martinez, and H. Daanen. 2019. “Assessing the Impact of Design Strategies on Clothing Lifetimes, Usage and Volumes: The Case of Product Personalisation.” Journal of Cleaner Production, 210, 1414–1424. [doi:10.1016/j.jclepro.2018.11.056].

Malgieri, G. 2021. “'Just' Algorithms: Justification (Beyond Explanation) of Automated Decisions Under the General Data Protection Regulation.” Law and Business, 1, 16-28. [https://doi.org/10.2478/law-2021-0003].

Mariampolski, H. 2001. Qualitative market research. Sage.

Mayring, P. 2004. "Qualitative content analysis." A companion to qualitative research 1(2): 159-176.

McKinsey & Company. "Investors want to hear from companies about the value of sustainability." Retrieved from [https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/investors-want-to-hear-from-companies-about-the-value-of-sustainability] (McKinsey.com).

McKinsey & Company. "State of Fashion." Retrieved from [https://www.mckinsey.com/industries/retail/our-insights/state-of-fashion] (McKinsey.com).

McNeill, Lisa S. and Rebecca Moore. 2015. "Sustainable Fashion Consumption and the Fast Fashion Conundrum: Fashionable Consumers and Attitudes to Sustainability in Clothing Choice." International Journal of Consumer Studies, 39(3), 212-222. [https://doi.org/10.1111/ijcs.12169].

Menichini, T., and Rosati, F. 2014. "The Strategic Impact of CSR Consumer-company Alignment." Procedia - Social and Behavioral Sciences, 109, 360-364. [https://doi.org/10.1016/J.SBSPRO.2013.12.472].

Miller, D. 2019. "The Medical AI Insurgency: What Physicians Must Know About Data to Practice with Intelligent Machines." NPJ Digital Medicine, 2. [https://doi.org/10.1038/s41746-019-0138-5].

Moore, L.L., I. De Silva, and S. Hartmann. 2012. "An Investigation into the Financial Return on Corporate Social Responsibility in the Apparel Industry." Journal of Corporate Citizenship, 45, 104-122.

Nadvi, K. 2008. "Global Standards, Global Governance and the Organization of Global Value Chains." Journal of Economic Geography, 8, 323-343. [https://doi.org/10.1093/JEG/LBN003].

Niinimäki, K., G. Peters, H. Dahlbo, P. Perry, T. Rissanen, and A. Gwilt. 2020. “The Environmental Price of Fast Fashion.” Nature Reviews Earth & Environment, 1 (4), 189–200. [doi:10.1038/s43017-020-0039-9].

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. 2017. "Thematic analysis: Striving to meet the trustworthiness criteria." International journal of qualitative methods 16(1): 1609406917733847.

Ntoutsi, E., Fafalios, P., Gadiraju, U., Iosifidis, V., Nejdl, W., Vidal, M., Ruggieri, S., Turini, F., Papadopoulos, S., Krasanakis, E., Kompatsiaris, I., Kinder-Kurlanda, K., Wagner, C., Karimi, F., Fernández, M., Alani, H., Berendt, B., Kruegel, T., Heinze, C., Broelemann, K., Kasneci, G., Tiropanis, T., and Staab, S. 2020. "Bias in Data-Driven Artificial Intelligence Systems—An Introductory Survey." Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery, 10. [https://doi.org/10.1002/widm.1356].

Olsson, F., and Sahlgren, M. 2020. "Data Readiness for Natural Language Processing." ArXiv, abs/2009.02043.

Papamicheal, I., G. Chatziparaskeva, I. Voukkali, J. N. Pedreno, M. Jeguirim, and A. A. Zorpas. 2023. “The Perception of Circular Economy in the Framework of Fashion Industry.”

Waste Management & Research: The Journal for a Sustainable Circular Economy, 41(2), 251-263.

Peças, P., John, L., Ribeiro, I., Baptista, A., Pinto, S., Dias, R., Henriques, J., Estrela, M., Pilastri, A., and Cunha, F. 2023. "Holistic Framework to Data-Driven Sustainability Assessment." Sustainability. [https://doi.org/10.3390/su15043562].

Perera, R. 2017. The PESTLE Analysis. Nerdynaut.

Pérez, F., and Sánchez, L. 2009. "Assessing the Evolution of Sustainability Reporting in the Mining Sector." Environmental Management, 43, 949-961. [https://doi.org/10.1007/s00267-008-9269-1].

Perry, P., Towers, N., and Choi, T. 2012. "Fashioning a Socially Responsible Garment Supply Chain: A Qualitative Exploration of Corporate Social Responsibility in Sri Lankan Export Garment Manufacturers." [https://doi.org/10.4018/978-1-60960-756-2.CH018].

Pournader, Mehrdokht, Ghaderi, Hadi, Hassanzadegan, Amir, and Fahimnia, Behnam. 2021. "Artificial Intelligence Applications in Supply Chain Management." International Journal of Production Economics, Available online 5 August 2021.

Pradeep, A. K., Appel, A., Sthanunathan, S. (Author). 2018. "AI for Marketing and Product Innovation: Powerful New Tools for Predicting Trends, Connecting with Customers, and Closing Sales."

PwC. "ESG Software Market." Retrieved from [https://www.strategyand.pwc.com/de/en/functions/sustainability-strategy/esg-software-market.html] (PwC.com).

PwC. 2022. "PwC Global Investor Survey 2022." Retrieved from [https://www.pwc.com/gx/en/issues/esg/global-investor-survey-2022.html] (PwC.com).

PwC. 2023. "Artificial intelligence study." Retrieved from [https://www.pwc.com/gx/en/issues/data-and-analytics/publications/artificial-intelligence-study.html] (PwC.com).

PwC. 2023. "PwC 2023 Global Investor Survey." Retrieved from [https://www.pwc.com/gx/en/news-room/press-releases/2023/pwc-2023-global-investor-survey.html] (PwC.com).

Qiu, Ethan. 2023. “Corporate Sustainability in the Fashion Industry.” Journal of Student Research, Dec 4. [https://typeset.io/papers/corporate-sustainability-in-the-fashion-industry-1h1oyade].

Ranoliya, B., Raghuwanshi, N., and Singh, S. 2017. "Chatbot for University Related FAQs." 2017 International Conference on Advances in Computing, Communications and Informatics (ICACCI), 1525-1530. [https://doi.org/10.1109/ICACCI.2017.8126057].

Reichart, E., Drew, D., and Merrity, P. 2019. "By the Numbers: The Economic, Social and Environmental Impacts of 'Fast Fashion'." World Resources Institute. Retrieved from [https://www.wri.org/insights/numbers-economic-social-and-environmental-impacts-fast-fashion?_ga=2.67275857.1].

Renaningtyas, L., Dwitasari, P., and Ramadhani, N. 2023. "Implementing The Use of AI for Analysis and Prediction in the Fashion Industry." The Academic Research Community publication. [https://doi.org/10.21625/archive.v7i1.928].

Ritch, E. L. 2020. "Socially Responsible Fashion Practice: Looking Good and Feeling Good." In Transitioning to Responsible Consumption and Production, edited by Lisa McNeill, Transitioning to Sustainability Series 12. Basel: MDPI. Retrieved from [https://library.oapen.org/bitstream/handle/20.500.12657/49695/9783038978725.pdf?sequence=1#page=78].

Roig-Tierno, N., Gonzalez-Cruz, T. F., and Llopis-Martinez, J. 2017. "An Overview of Qualitative Comparative Analysis: A Bibliometric Analysis." Journal of Innovation & Knowledge, 2(1), 15-23.

Roth, E. G., Kim, J., Slejko, J. F., et al. Constructing Health State Descriptions for Low-Risk Thyroid Cancer: Stakeholder Engagement and Formative Qualitative Research. Patient 16, 67–76 (2023). [https://doi.org/10.1007/s40271-022-00597-5].

Ryan W. Buell and Basak Kalkanci. "How Transparency into Internal and External Responsibility Initiatives Influences Consumer Choice." Harvard Business School Working Papers (2019). [https://doi.org/10.2139/ssrn.3385443].

Salvioni, D., and Bosetti, L. 2014. "Sustainable Development and Corporate Communication in Global Markets." [https://doi.org/10.4468/2014.1.03SALVIONI.BOSETTI].

Sánchez-Cambronero, A., González-Cancelas, N., and Serrano, B. M. 2020. "Analysis of Port Sustainability Using the PPSC Methodology (PESTEL, Porter, SWOT, CAME)." World Scientific News, (146), 121-138.

Sarkar, B., Sarkar, M., Ganguly, B., and Cárdenas-Barrón, L. 2021. "Combined Effects of Carbon Emission and Production Quality Improvement for Fixed Lifetime Products in a Sustainable Supply Chain Management." International Journal of Production Economics, 231, 107867. [https://doi.org/10.1016/j.ijpe.2020.107867].

Schreier, M. 2012. Qualitative content analysis in practice. Qualitative content analysis in practice: 1-280.

Shahi, A., Issac, B., and Modapothala, J. 2014. "Reliability Assessment of an Intelligent Approach to Corporate Sustainability Report Analysis." [https://doi.org/10.1007/978-3-319-06773-5_31].

Sherringham, K., and Unhelkar, B. 2020. "Adaptiveness and Responsiveness Within Knowledge Worker Services." [https://doi.org/10.1007/978-981-15-1224-7_3].

Si, Dingwen. 2022. "A Framework to Analyze the Impacts of AI with the Sustainable Development Goals." Highlights in Science, Engineering and Technology, 17:313-323. [https://doi.org/10.54097/hset.v17i.2621].

Soni, N., Sharma, E., Singh, N., and Kapoor, A. 2019. "Impact of Artificial Intelligence on Businesses: from Research, Innovation, Market Deployment to Future Shifts in Business Models." ArXiv, abs/1905.02092.

Statista. 2022. "Apparel Market in Europe." Retrieved from [https://www.statista.com/outlook/cmo/apparel/europe#key-players] (Statista.com).

Statista. 2023. "Fast Fashion Market Value Forecast Worldwide." P. Smith, Sep 5, 2023. Retrieved from [https://www.statista.com/statistics/1008241/fast-fashion-market-value-forecast-worldwide/].

Steyer, Anna. 2023. “Sustainable Finance in Global Capital Markets.” Scispace, Dec 4. [https://typeset.io/papers/sustainable-finance-in-global-capital-markets-c52b2gje].

Suboyin, A., Eldred, M., Thatcher, J., Rehman, A., Gee, I., and Anjum, H. 2023. "Environomics Framework for Sustainable Business Practices: Industrial Case Studies on True Impact Reduction and Process Optimization Through AI." Day 1 Tue, January 17, 2023. [https://doi.org/10.2118/214459-ms].

Székely, N., and Brocke, J. 2017. "What Can We Learn from Corporate Sustainability Reporting? Deriving Propositions for Research and Practice from Over 9,500 Corporate Sustainability Reports Published between 1999 and 2015 Using Topic Modelling Technique." PLoS ONE, 12. [https://doi.org/10.1371/journal.pone.0174807].

Tam, Fung Yi and Jane Lung. 2022. "Impact of COVID-19 and Innovative Ideas for a Sustainable Fashion Supply Chain in the Future." Foresight, 25(2), 225-248. [https://doi.org/10.1108/fs-12-2021-0257].

Tamimi, N., and Sebastianelli, R. 2017. "Transparency among S&P 500 Companies: An Analysis of ESG Disclosure Scores." Management Decision, 55(8), 1660-1680.

Tanaka, M. 2010. "Sustainable Fashion in the US." [https://doi.org/10.3985/MCWMR.21.169].

Tao, R., and Guo, Q. 2022. "Artificial Intelligence Technology Driven Environmental Factors Extraction and Analysis Method in Traditional Clothing Handicraft." Journal of Environmental and Public Health, 2022. [https://doi.org/10.1155/2022/1883641].

Terry, G., Hayfield, N., Clarke, V., & Braun, V. 2017. "Thematic analysis." The SAGE handbook of qualitative research in psychology 2: 17-37.

Tesch, R. 1990. Qualitative Research Analysis Types and Software Tools. The Falmer Press.

The European Council. "European Green Deal." Retrieved from [https://www.consilium.europa.eu/en/policies/green-deal/#:~:text=The%20European%20Green%20Deal%20is%20a%20package%20of%20policy%20initiatives,a%20modern%20and%20competitive%20economy] (consilium.europa.eu).

The European Council. "Fit for 55: the EU plan for a green transition." Retrieved from [https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55-the-eu-plan-for-a-green-transition/] (consilium.europa.eu).

Thorisdottir, Thorey S. and Lára Jóhannsdóttir. 2019. "Sustainability within Fashion Business Models: A Systematic Literature Review." Sustainability, 11(8), 2233. [https://doi.org/10.3390/su11082233].

Thorne, S. 2000. "Data Analysis in Qualitative Research." Evidence-based Nursing, 3(3), 68-70.

UN Environment Programme. 2019. “Environmental Rule of Law: First Global Report.” UN Environment Programme, Nov 14.

UN. 2011. “Guiding Principles on Business and Human Rights.” United Nations, Nov 14. [https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf].

UN. 2015. “Transforming our World: the 2030 Agenda for Sustainable Development.” United Nations, Nov 14. [https://sdgs.un.org/2030agenda].

Vaismoradi, M., Turunen, H., & Bondas, T. 2013. "Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study." Nursing & health sciences 15(3): 398-405.

Vakeel, Sana. 2020. “Sustainability in the Fashion Industry.” Scispace, Dec 4.[https://typeset.io/papers/sustainability-in-the-fashion-industry-mbij3ra2q5].

Vartanian, T. P. 2010. Secondary Data Analysis. Oxford University Press.

Vijayakumar, Harsha. 2021. “The Impact of AI-Innovations and Private AI-Investment on U.S. Economic Growth: An Empirical Analysis.” Reviews of Contemporary Business Analytics, 4(1), 14-32. [https://researchberg.com/index.php/rcba/article/view/167].

Vinuesa, R., Azizpour, H., Leite, I., Balaam, M., Dignum, V., Domisch, S., … Nerini, F. F. 2020. "The Role of Artificial Intelligence in Achieving the Sustainable Development Goals." Nature Communications, 11(1). [https://doi.org/10.1038/s41467-019-14108-y].

Wang, Chenxing, Lihua Wang, Xinlei Liu, Chong Du, Ding Ding, Jia Jia, and Yan Yan. 2015. "Carbon Footprint of Textile Throughout its Life Cycle: A Case Study of Chinese Cotton Shirts." [https://www.sciencedirect.com/science/article/pii/S0959652615007064?casa_token=JTMb-3TVD7EAAAAA:yKGImmJk8p9JgOCco1hopSRRnXGgCKps0oisBzl-T9dmfZbRzKH312oVGSNdOpSML-z_34hTu1M].

Widodo, A. K., Mahachandra, M., Widhiyaningrum, M., and Tahqiqi, R. 2019. "Formulating a Strategic Management of Social E-Commerce through a Combination of SWOT and PESTLE Analysis: Case Study."

Xu, Vicky Xiuzhong, Danielle Cave, Dr. James Leibold, Kelsey Munro, and Nathan Ruser. 2020. "Uyghurs for Sale: 'Re-education,' Forced Labor, and Surveillance Beyond

Xinjiang." Australian Strategic Policy Institute (ASPI). Retrieved from [https://www.aspi.org.au/report/uyghurs-sale].

7. Appendix

Features	TrulyAI	GREENOMY	osapiens	Deloitte.	RAMBØLL
Time Saving	✓	✓	✓		
Accessible Price	✓	✓			
Expert Onboarding	✓			✓	✓
Gap Assessment	✓	✓	✓	✓	✓
Reasonable Assurance	✓			✓	✓

Appendix 1: Competitor Feature Analysis

Appendix 2: PESTEL Analysis

Appendix 3: SWOT Analysis

Financial Plan 2024 - 2027		2024 Full year	2025 Full year	2026 Full year	2027 Full year
Customers	*Driver*				
# Total customers		**8**	**51**	**102**	**151**
# Core package customers	*85%*	**7**	**43**	**87**	**128**
# Premium package customers	*15%*	**1**	**8**	**15**	**23**
# New customers					
# B2B Mkt spend (Linkedin, Webinars)		4	18	40	64
# Organic growth		1	13	26	30
# Key partnerships		3	19	32	45
#Churned customers					
# B2B Mkt spend (Linkedin, Webinars)	*avg. monthly churn 10%*	0	4	16	36
# Organic growth	*avg. monthly churn 7%*	0	1	12	24
# Key partnerships	*avg. monthly churn 5%*	0	3	18	30
Revenue streams					
Subscription fee					
Core package	*yearly fee: 15,000 euros per customer*	102.000 €	645.405 €	1.304.070 €	1.921.425 €
	yearly fee: 70,000 euros per customer - 40,000 euros commission for the consultancy partners				
Premium package	*yearly revenue: 30,000 euros per customer 1 product per customer/ year*	36.000 €	227.790 €	460.260 €	678.150 €
Total revenue		**138.000 €**	**873.195 €**	**1.764.330 €**	**2.599.575 €**
Revenue growth			633%	202%	147%
Costs					
COGS		**150.000 €**	**50.000 €**	**50.000 €**	**50.000 €**
Software development		100.000 €	0 €	0 €	0 €
Software services (Licenses)		50.000 €	50.000 €	50.000 €	50.000 €
Opex: Personnel		**260.000 €**	**500.800 €**	**700.864 €**	**756.933 €**
Chief Executive Officer		50.000 €	54.000 €	58.320 €	62.986 €
Chief Technological Officer		50.000 €	54.000 €	58.320 €	62.986 €
Chief Marketing Officer		50.000 €	54.000 €	58.320 €	62.986 €
Developer		60.000 €	64.800 €	69.984 €	75.583 €
Developer		0 €	60.000 €	64.800 €	69.984 €
(UX) Designer		50.000 €	54.000 €	58.320 €	62.986 €
Sales		0 €	50.000 €	54.000 €	58.320 €
Sales		0 €	0 €	50.000 €	54.000 €
Key Account Manager		0 €	55.000 €	59.400 €	64.152 €
Key Account Manager		0 €	0 €	55.000 €	59.400 €
Partnership Manager		0 €	55.000 €	59.400 €	64.152 €
Partnership Manager		0 €	0 €	55.000 €	59.400 €
Opex		**89.000 €**	**138.400 €**	**149.800 €**	**159.700 €**
External sustainability consultant		25.000 €	25.000 €	25.000 €	25.000 €
Office rent		0 €	30.000 €	30.000 €	30.000 €
Office supplies		0 €	2.000 €	2.000 €	2.000 €
Phones		0 €	0 €	2.000 €	3.000 €
Laptops		1.000 €	2.000 €	2.000 €	3.000 €
Team events		0 €	1.000 €	2.000 €	2.500 €
Tax advisory		6.000 €	6.200 €	6.400 €	6.600 €
Legal advisory		7.000 €	7.200 €	7.400 €	7.600 €
Marketing spend (Googel Ads, etc)		50.000 €	65.000 €	73.000 €	80.000 €
Total costs		**499.000 €**	**689.200 €**	**900.664 €**	**966.633 €**
	Total Revenues accumulated	***138.000 €***	***1.011.195 €***	***2.775.525 €***	***5.375.100 €***
	Total Costs accumulated	***499.000 €***	***1.188.200 €***	***2.088.864 €***	***3.055.497 €***
	EBIT	**-361.000 €**	**-177.005 €**	**686.661 €**	**2.319.603 €**

Appendix 6: Financial Forecast 2024-2027

Interview Guide for Fashion Companies

Company Background and Sustainability Focus:

- *Could you please introduce your company and describe your role within the organization?*
- *How does your company currently approach sustainability, and which areas—social or environmental—are prioritized?*

Measuring Sustainability Initiatives:

- *How does your company measure the impact of its sustainability initiatives?*
- *Can you discuss any challenges or obstacles your company has faced in implementing and managing sustainability practices?*

Awareness and Preparation for CSRD:

- *Are you familiar with the Corporate Sustainability Reporting Directive (CSRD), and what is your understanding of its requirements?*
- *Has your company appointed someone responsible for CSRD compliance, and if so, what has been their approach?*
- *If your company has not yet prepared for the CSRD, what are your plans to address this directive?*

Third-Party Assistance and CSRD Compliance:

- *Would your company consider employing a third-party service to assist with CSRD compliance? What would be the key factors in making this decision?*
- *What are your primary concerns when it comes to collecting and reporting sustainability data as required by the CSRD?*

***Expectations from an AI-Powered Platform**:*

- *What would your expectations be from an AI-powered anti-greenwashing platform in terms of features and capabilities?*
- *How do you perceive the potential benefits of such a platform in improving the efficiency and accuracy of your sustainability reporting?*
- *What concerns might you have about integrated an AI-powered platform into your existing sustainability processes?*

***Perceived Value and Decision-Making**:*

- *In what ways do you believe an AI-powered platform could add value to your company's risk management and sustainability performance?*
- *How would your company assess the potential return on investment when considering the adoption of such a platform?*

Closing and Additional Insights:

- *How does your company envision the future of sustainability reporting, and what role do you think technology will play in this evolution?*
- *Are there any other thoughts or feedback you would like to share regarding the use of technology in sustainability practices within the fashion industry?*

Final Thoughts:

- *Is there anything we have not covered that you believe is essential for us to understand about your company's approach to sustainability and reporting?*

Interview Guide for Sustainability Consultants

Understanding the Current Market and Practices:

- *How would you describe the current demand for sustainable consulting services as it prepares for the CSRD?*
- *What are the most common challenges your clients face when trying to comply with the CSRD and sustainability reporting?*
- *How has the demand for sustainability consulting changed in the past year, and what trends do you anticipate as the CSRD implementation date approaches?*

Exploring the Role of AI in Sustainability:

- *What is your initial reaction to the concept of an AI-powered CSRD platform tailored for the fashion industry?*

- *How do you believe AI could complement the traditional methods of sustainability reporting?*

Potential for Collaboration and Integration:

- *What opportunities do you see for a collaborative effort between your consultancy and an AI-driven platform?*
- *What would be the ideal features of an AI platform that would encourage your consultancy to consider a partnership?*

Synergies and Mutual Benefits:

- *In what ways could a partnership with an AI platform potentially expand the services and impact of your consultancy?*

Exploring the Role of the Fashion Industry in Sustainability:

- *Are you working with companies in the fashion industry regarding the topics of sustainability reporting and CSRD?*
- *Are there any specific obstacles or opportunities in the fashion industry concerning CSRD and sustainability reporting?*

Assessing the Value Proposition:

- *How would you evaluate the value proposition of an AI-powered sustainability reporting tool for your client?*
- *What feedback or advice would you offer to a startup developing such a tool, to ensure it meets the needs of both consultants and fashion companies?*

Closing and Additional Insights:

- *Are there any aspects of sustainability reporting under the CSRD that we haven't covered but you feel are important for my research and startup concept?*
- *Do you have any final thoughts or suggestions that could help refine the AI platform concept to better serve the fashion industry's sustainability efforts?*

Interview Guide for AI Experts

Understanding Technical Challenges and Feasibility:

- *What are the primary technical challenges you foresee in developing an AI-powered platform for sustainability data collection, analysis, data integration, processing and reporting in the fashion industry?*
- *How do you assess the current state of AI in terms of its capability to handle the complexities of CSRD compliance?*

AI Technology Considerations and Limitations:

- *What are the critical considerations when employing AI to ensure the accuracy and reliability of sustainability reports?*
- *What kind of data is suitable for an ai tool/software to access?*

Enhancing Platform Feasibility and Effectiveness:

- *In what ways can AI experts contribute to enhancing the feasibility and effectiveness of an AI-driven sustainability reporting platform?*
- *What AI techniques and methodologies do you believe are most suitable for addressing the unique requirements of sustainability reporting within the fashion industry?*

Data Management and AI Integration:

- *What strategies would you recommend for the effective management and analysis of large datasets typically involved in sustainability reporting?*
- *What is the comprehensive cost involved in the entire lifecycle of creating the platform, implementing AI, and ensuring its ongoing maintenance and upgrades?*

Future Developments and Innovation:

- *What emerging AI technologies or innovations do you think could be leveraged in the future to further enhance sustainability reporting for fashion companies?*
- *How do you envision the evolution of AI platforms in response to changing regulations such as the CSRD?*

Risks and consequences:

- *Closing and Additional Insights: Are there any potential risks or unintended consequences of using AI in sustainability reporting that we should be aware of?*

Final Thoughts:

- *Is there anything we haven't discussed that you think is crucial for the development of an AI platform for sustainability reporting in the fashion industry?*

Appendix 7: Interview Guides

Quote	Data Source: Primary data	Code	Sub-Dimension	Aggregate Dimension
"I don't foresee any major technical obstacles. If the companies provide the basic data, processing it is straightforward." – Niklas	AI Experts Interviews	Positive Outlook on Implementation	Technological Possibilities	Technical Feasibility
"Absolutely feasible (...) I don't see any problem in turning your idea into reality." - Oleskii				
"Modern AI, like the GPT models, can handle this. You can set up a system like this with little to no coding experience." - Niklas		GPT Models Efficiency to Handle Complexities		
"For handling large data volumes, you'd use a combination of GPT and tools" – Niklas		Efficiency on Handling Large Data Set		
"The use of cloud-based solutions and distributed computing frameworks can enable the efficient handling of large amounts of data." - Oleskii				
"The core technology here is natural language processing." – Niklas		Necessary Natural Language Processing	Type of Technology	
"The most important methods here would be natural language processing (NLP) and machine learning (ML)." - Oleskii				
"AI agents are an emerging technology with great potential. They're autonomous agents that can perform tasks like human workers. This could extend the platform's capabilities beyond just report creation to include automated communication with government bodies (...) even handling the submission of reports." – Niklas		Predictive Agents Allow Development and Improvements	Future Developments	
"Emerging technologies such as AI-driven predictive analytics could significantly improve the predictive capabilities of your platform." – Oleskii				
"The main concern is ensuring the accuracy of the AI's outputs. LLMs can sometimes generate incorrect information." -Niklas		Difficulties in Ensuring Correct Output	AI Limitations	
"The main technical challenge will probably be to ensure that the AI is able to effectively process and analyze very different data sets" - Oleskii		Difficulties in Processing Different Data		
"Given the sensitive nature of the data, you also need to pay a lot of attention to data protection and data security." – Oleskii		Data Protection Importance	AI Risks	
"The main risks are certainly around ensuring the accuracy of the data used by AI and mitigating any bias in the AI decision-making processes" - Oleskii		Accuracy AI Input		
"Initially, you might not need extensive development resources. Setting up a basic system could be quite straightforward." - Niklas		Low Initial Technological Investment	Costs Estimate	
"For a more developed platform, expect higher costs, possibly in the range of $10,000 per month for maintenance and scaling." – Niklas				
"For ongoing maintenance, the use of cloud computing can offer scalable and cost-effective solutions (...)I think between 8 - 15 k monthly." - Oleskii		High Maintenance and Scaling Costs		
"The operational costs depend on the usage – OpenAI charges per token, so you'd need to calculate the costs based on the amount of data processed" – Niklas		Variable Operational Costs		
"50% sounds really fair, as the work would take short time and low effort for a consultant." - Lorenzo	Sustainability Consultants Interviews	Necessity of High Investment into Partnerships		
"Prices for sustainability reporting rage from €60,000 to 100,000." – Marcel				
"We provide sustainability guidance to companies but do not undertake the full reporting for more than €80,000." – Lorenzo		Expensive Traditional Sustainability Reporting Services	Pricing Estimates	Financial Viability
"From a common knowledge, I would say, in a range between €50,000 and €80,000." – Patrick				
"Considering the most expensive package you can offer to companies, I would say around €120,000 or even more" - Marcel				
"I'd suggest a range between €70,000 to €120,000 for a comprehensive AI-powered sustainability reporting service." – Lorenzo		Project's Profitable Financial Evaluation		
"A range between €60,000 to €130,000 for an advanced AI-powered sustainability reporting service" – Patrick				
"The medium-sized companies can't afford to program something for €250,000." - Wolfgang	Fashion Companies Interviews			
"It's a competitive space but being a first mover would be advantageous. If you're quick to market with this idea, it could be a worthwhile investment." – Niklas	AI Experts Interviews			
"An AI-powered platform tailored for the CSRD in the fashion industry is really promising" – Marcel				
"AI has the potential to automate daily tasks, allowing professionals to focus on strategic sustainability initiatives" – Marcel	Sustainability Consultants Interviews	Immense Potential of the Platform	Advantages and Opportunities of the Project	Market Opportunity
"It would offer a scientific methodology to a process that is currently lacking in excessive subjectivity, offering more accurate data comparability within markets and speeding up the mapping process." – Lorenzo				
"There's immense potential for innovation in sustainable practices and leveraging technology to drive compliance." – Marcel				
"Absolutely positively, the fusion of sustainability and AI is necessary to improve the performance offered by consulting firms." – Lorenzo				
"It would facilitate the work of consulting companies, allowing them to offer faster and more accurate services, increasing the number of projects on which to work, thus increasing the profit and competitive advantage in the market." – Lorenzo				
"The idea of external help is very appealing and we have already discussed it internally." – Anonymous	Fashion Companies Interviews	Strong Interest in the Project		
"Feel free to get in contact with me. I think such tools can be valuable for CSRD future reporting, so we can keep in touch to see if this project might be actually feasible in the future." – Patrick				
"You would offer a scientific methodology to a process that is currently lacking in excessive subjectivity." – Lorenzo	Sustainability Consultants Interviews	Lacks in Current Sustainability Reporting System		
"Companies are seeking guidance (...) Short-term challenges often revolve around obtaining the right data for input" - Marcel				
"With Tier 3 Takko still has some difficulties – Wolfgang	Fashion Companies Interviews	Companies' Challenges Faced in the CSRD Compliance/ Reporting		
"The greatest challenge is to achieve the transparency and gather the data to create reliable and accurate sustainability reporting" - Wolfgang				
"The demand for sustainability consulting services has been rapidly increasing." – Marcel	Sustainability Consultants Interviews	Increasing CSRD Market trends and Demand	CSRD Demand	
"The market for consultancy services preparing companies for CSRD has significantly expanded, (...) we do between 2 and 5 CSRD-related projects initiated monthly." - Lorenzo				
"Takko published its first Sustainability Report, made internally, this year (...)We have our own AI, Taco GPT" – Moritz	Fashion Companies Interviews	Large Fashion Companies High Qualification in the CSRD	Market Limitations/Opportunity	
"Primark has primarily been focusing on having transparent supply chain processes (...) And the parent company writes the report for Primark" – Wolfgang				
"In the parent company of Primark, there is a team of now over 120 employees who work on the whole topic of production monitoring and reporting" – Wolfgang				
"Large companies (...) have enough money to manage it on their own." - Wolfgang		Necessity of our product for Medium Size companies		
"We don't have to produce a report yet, but we will have to in two years, so we are already actively learning about it. (Medium size company)" – Anonymous				
"We expect an AI platform to provide solid data analysis, advanced predictions and real-time insights." – Anonymous	Fashion Companies Interviews	Companies Demanding Expectations for an AI-driven Sustainability Reporting Platform	Potential Features and Improvements	
"The main concern is the smooth integration of the platform into our existing systems without disruption. Data security is also crucial as we need to protect sensitive information." – Anonymous				
"We would expect comprehensive technical support, ease of use when using the platform, regular updates for sustainability standards to customize the platform to our specific needs." - Anonymous				

Appendix 8: Content Analysis Table

Professional interviews with AI experts:

Niklas von Weihe - Chief Technology Officer & Co at Fully Ventures

Interviewer
“Hey Niklas, thank you for joining us today. Our project involves creating an AI-powered platform to automate and optimize sustainability reporting in the fashion industry, in line with the CSRD. We'd love to hear your insights on the technical feasibility of this idea."

Interviewee
"Sure!"

Interviewer 1
"Okay, so let's begin. Niklas, we briefly discussed the idea earlier, but I think Caroline will provide a more detailed introduction so you can fully grasp what we're aiming to do."

Interviewer 2
"Sure, I'll start with an overview. Are you familiar with the CSRD, the Cooperative Sustainability Reporting Directive? It's an EU-wide law."

Interviewee
"Ah yes, I've heard of it."

Interviewer 2
"Right, the law mandates companies exceeding certain thresholds in employee numbers and revenue to report on their supply chain in terms of human rights and environmental sustainability. Our master's thesis project aims to optimize this risk analysis process for companies using an AI-powered platform. This platform will be user-friendly, allowing companies to upload their supplier data. Our AI will then analyze this data to conduct the risk assessment, which is a critical first step under the law. Ultimately, companies will receive a comprehensive risk analysis report for their sustainability documentation."

Interviewee
"So, essentially, it's a reporting tool? Let me rephrase to ensure I understand – a company like Zara needs to document their entire supply chain, including supplier information such as working conditions and material safety, right?"

Interviewer 2
"Actually, the required data isn't overly specific. The suppliers are analyzed based on their industry and country of operation. We just need basic information like where the suppliers are based and their industry sector, be it coloring, chemicals, textiles, etc. The in-depth analysis of human rights issues and such will be conducted by our AI."

Interviewee
"Understood."

Interviewer 3

"If you don't mind, I'll start with some questions. Our goal is to understand the technical feasibility of implementing this AI tool for sustainability data collection, analysis, integration, and reporting in the fashion industry."

Interviewee
"Based on what I've heard, I don't foresee any major technical obstacles. If the companies provide the basic data, processing it is straightforward. Even pulling data from various sources through APIs is feasible. So, in general, there shouldn't be a problem."

Interviewer 3
"Would you say that current AI technology is capable of handling the complexities of this project, specifically for developing a reporting tool?"

Interviewee
"Absolutely. Modern AI, like the GPT models, can handle this. You can set up a system like this with little to no coding experience. You just specify your requirements, upload the necessary files, and the AI takes care of the rest, including data analysis and report generation."

Interviewer 3
"Great. Could you elaborate on the specific AI techniques and methodologies suitable for this project?"

Interviewee
"Certainly. The core technology here is natural language processing, as used in large language models like GPT. You feed the AI the text of the law and other relevant documents, and it understands the requirements. You then instruct the AI on how to process the data, perhaps through a chatbot interface. Integrating APIs for data upload or creating a user-friendly website for data submission would be part of the process. The AI applies the law to the data provided by the companies, analyzes the reports, and identifies any gaps or issues."

Interviewer 3
"What about managing and analyzing large data sets, especially as we scale up and onboard more clients with extensive data?"

Interviewee
"For handling large data volumes, you'd use a combination of GPT and tools like Link Chain and vector databases. Link Chain acts as a hub, connecting GPT's intelligence with various data sources and databases. If you have, say, 200 gigabytes of company reports, Link Chain processes and chunks this data into a vector database. This database is then linked back to GPT, allowing you to access and scale the data as needed."

Interviewer 3
"Interesting. And what about the costs involved in creating, implementing, and maintaining this AI platform?"
Interviewee

"Initially, you might not need extensive development resources. Setting up a basic system could be quite straightforward. However, for a more sophisticated, customer-facing platform, you'd likely need a full-stack developer and other resources, which would increase costs. The operational costs depend on the usage – OpenAI charges per token, so you'd need to calculate the costs based on the amount of data processed. For a more developed platform, expect higher costs, possibly in the range of $10,000 per month for maintenance and scaling."

Interviewer 3
"Looking to the future, what emerging AI technologies or innovations do you think could further enhance sustainability reporting?"

Interviewee
"AI agents are an emerging technology with great potential. They're autonomous agents that can perform tasks like human workers. This could extend the platform's capabilities beyond just report creation to include automated communication with government bodies or other entities, and even handling the submission of reports."

Interviewer 3
"And what about the potential risks or consequences of using AI in this field, particularly for sustainability reporting?"

Interviewee
"The main concern is ensuring the accuracy of the AI's outputs. LLMs can sometimes generate incorrect information. To mitigate this, you could either have the customer verify the data or use multiple LLMs to cross-check the results. This approach is used in the industry to ensure higher accuracy."

Interviewer 3
"Thank you, Niklas. That covers the main questions we had for our research and business plan development. Is there anything else crucial for the development of this kind of platform that we haven't discussed?"

Interviewee
"I recommend focusing on the legal aspects and the user flow of the platform. It's common for AI systems to handle the bulk of the work, but having a 'human in the loop' for the final checks and approvals is crucial. Visualizing this user flow will give you a better understanding of the entire process and how your platform will function."

Interviewer 1
"Niklas, do you think our questions were adequate for understanding our project? We're not AI experts, so we wanted to ensure they were relevant."

Interviewee

"Yes, your questions were on point. You now understand the cost, resources needed, and the technology involved. This should be sufficient for developing your business plan."

Interviewer 2

"We aim to create a business plan that touches on AI technology but doesn't delve into deep technical details. We want to present a clear overview of our idea."

Interviewee

"What you've done is a good start! That's a great approach."

Interviewer 3

"We have other interviews lined up with experts in sustainability and fashion to better understand the market. Do you see this project as viable?"

Interviewee

"It's a competitive space but being a first mover would be advantageous. If you're quick to market with this idea, it could be a worthwhile investment."

Interviewer 1

"Thank you for your insights, Niklas. They've been incredibly helpful."

Interviewee

"You're welcome."

Oleksii: Head of Technology Officer & CO at Anonymous

Interviewer

"Hey, thank you for joining us today. We are happy to tell you about our project. It's an AI-driven platform that aims to simplify sustainability reporting in the fashion industry in line with CSRD guidelines. We are very curious to hear your opinion on whether this idea is technically feasible. What do you think?"

Interviewee

"I am very happy to be here and thank you for the invitation. Your project sounds fascinating and absolutely timely. Can you tell us a little more about what you have in mind?"

Interviewer

"Of course! Imagine a user-friendly platform where fashion companies can simply upload their supplier data. Then our AI takes over the task of analyzing this data for sustainability risks and creating comprehensive reports. So why are we doing this? Because some start-ups are already offering this report creation, but only manually. Which of course costs a lot of time and money. We thought about automating the whole process to make it faster and more efficient. So our question is, what technical challenges do you think such a system would involve and how could we best solve them?"

Interviewee
"I like what you're getting to. The main technical challenge will probably be to ensure that the AI is able to effectively process and analyze very different data sets from different companies. This can be achieved by training the AI with a variety of data samples and continuously refining its algorithms. Given the sensitive nature of the data, you also need to pay a lot of attention to data protection and data security.

Interviewer
"That's really interesting, thank you. When it comes to the AI technology itself, are there any methods or tools that you think are particularly useful for tackling the complexity of sustainability reporting?"

Interviewee
"Certainly. The most important methods here would be natural language processing (NLP) and machine learning (ML). NLP would allow your platform to interpret and analyze the text data in the reports, while ML algorithms could be used to identify patterns and insights related to sustainability practices. Tools such as TensorFlow and PyTorch are the first choice for developing these models."

Interviewer
"Given the potentially huge amounts of data from different companies, what strategies would you recommend to effectively manage and analyze these large data sets?"

Interviewee
“The use of cloud-based solutions and distributed computing frameworks can enable the efficient handling of large amounts of data. The creation of data lakes, where all data is stored in its raw form, could also be very beneficial as it would allow AI systems easier access and analysis."

Interviewer
"Ok nice! And on the financial side, what costs should we expect for the development and maintenance of such a platform?"

Interviewee
"Initial development costs can vary widely depending on the complexity of your platform and choice of technologies. For ongoing maintenance, the use of cloud computing can offer scalable and cost-effective solutions. But remember that regular updates, security measures and possible scaling must be planned in."

Interviewer
“Can you give us maybe an estimate of what it would cost per month?

Interviewee
“Hm difficult to say, but I think between 8 - 15 thousand.”

Interviewer
" Okay thank you! And looking to the future, are there any new AI technologies or innovations that could further enhance the capabilities of our platform?"

Interviewee
"Definitely. Emerging technologies such as AI-driven predictive analytics could significantly improve the predictive capabilities of your platform. Advanced data visualization tools will also play an important role in presenting complex insights in an understandable way. Additionally, the integration of AI ethics and governance frameworks will become increasingly important as AI continues to evolve. So, it's important that you keep up to date and regularly find out what's happening in the AI market as it's constantly changing."

Interviewer
“Yes, absolutely! And are there any potential risks or unintended consequences associated with the use of AI in sustainability reporting that we should be aware of?"

Interviewee
"The main risks are certainly around ensuring the accuracy of the data used by AI and mitigating any bias in the AI decision-making processes. It is crucial to have a robust validation process for AI results. Transparency in the AI decision making process is also key as it promotes user trust and understanding."

Interviewer
Just one more time about our final validation. So, the creation of an AI tool is easy to implement on the technical side?

Interviewee
Absolutely feasible. Obviously, you must find some good data scientists, but apart from that I don't see any problem in turning your idea into reality.

Interviewer
"Thank you very much for your valuable insights. This discussion was incredibly helpful in confirming the feasibility of our project!"

Interviewee
"You're welcome! It's a powerful project and I'm excited to see how it will impact reporting practices in the fashion industry! Good luck!"

Professional interviews with Sustainability Expert:

Marcel Hadewigger - Strategic Sustainability Consultant at Accenture Vienna

Interviewer
“Good afternoon and thank you for taking the time to participate in this interview. My name is Chiara, and I'm currently pursuing my Master's thesis at Nova Business School, focusing on the intersection of artificial intelligence and sustainability within the fashion industry, particularly considering the forthcoming Corporate Sustainability Reporting Directive (CSRD). We would like to offer our clients initial onboarding to find the right data, and a final consulting service to fill the assessment’s gaps.”

Interviewee
“Nice to meet you Chiara. My name is Marcel and I’m glad to be here and help with your Mater’s Thesis. Your project sounds really interesting. Please ask me as many questions as you want.”

Interviewer
“To begin, I would like to explain the goal of this interview and the objective of the research. With this interview, I aim to gain insights about the market opportunity for our project and the financial feasibility of it, to then build a comprehensive business plan. Please describe us your role at Accenture Vienna.”

Interviewee
“Sounds great! I have worked at Accenture Vienna for 4 years now, in the department of strategic sustainability. So, I also work with the Corporate Sustainability Reporting Directive.”

Interviewer
“That’s amazing. So let me start with some questions. And please, feel free to ask me questions and to share additional thoughts. How would you describe the current demand for sustainable consulting services as it prepares for the CSRD?”

Interviewee
“The demand for sustainability consulting services has been rapidly increasing, especially with the imminent implementation of the CSRD. Companies are seeking guidance to ensure compliance and navigate the complexities of sustainability reporting.”

Interviewer
“Sounds interesting, and what are the most common challenges your clients face when trying to comply with the CSRD and sustainability reporting?”

Interviewee
“Short-term challenges often revolve around obtaining the right data for input. Long-term challenges primarily consist in maintaining compliance with evolving regulations, which requires ongoing adjustments and comprehensive strategies.”

Interviewee

“And how has the demand for sustainability consulting changed in the past year, and what trends do you anticipate as the CSRD implementation date approaches?”

Interviewee

Interviewee

“Over the past year, there's been a noticeable surge in demand, indicating a bigger awareness of sustainability. Anticipated trends include a growing reliance on technology, particularly AI, to streamline reporting processes and improve accuracy.”

Interviewer

“This sounds really promising for us. And regarding AI's role in sustainability, what's your initial reaction to the concept of an AI-powered CSRD platform tailored for the fashion industry?”

Interviewee

“An AI-powered platform tailored for the CSRD in the fashion industry is really promising. It could significantly improve standardization in reporting and facilitate the process of data collection and processing.”

Interviewer

“Thank you for this positive feedback, it is really important to us. How do you believe AI could complement traditional methods of sustainability reporting?”

Interviewee

“AI has the potential to automate daily tasks, allowing professionals to focus on strategic sustainability initiatives. It can enhance data accuracy and speed up the reporting process. Let’s say that this service helps sustainability consultants focusing on bigger projects.”

Interviewer

“Based on this, what opportunities do you see for a collaborative effort between your consultancy and an AI-driven platform?”

Interviewee

“Collaborating with an AI-driven platform could offer valuable support in data analysis and processing, enabling us to concentrate on high-level strategic projects for clients, rather than small reporting tasks.”

Interviewer

“You are providing valuable suggestions for our partnerships! Let’s continue this path. What would be the ideal features of an AI platform that would encourage your consultancy to consider a partnership?”

Interviewee

“An ideal AI platform would possess robust data analytics capabilities, enabling integration with our consultancy's strategies. It should also facilitate personalized client interactions and support in-depth data insights.”

Interviewer
“In what ways could a partnership with an AI platform potentially expand the services and impact of your consultancy?”

Interviewee
Such a partnership could elevate our consultancy's offerings by enhancing data accuracy and providing rapid insights. As I said before, it would definitely allow us to focus on strategic sustainability initiatives while ensuring clients receive reliable reporting.

Interviewer
“Let’s go back talking about the CSRD. Are you currently engaged with fashion industry companies regarding sustainability reporting and CSRD?”

Interviewee
“Yes, we're actively working with some fashion industry companies on sustainability initiatives, aiding them in navigating compliance challenges and strategizing for long-term sustainability goals.”

Interviewer
“So, you don’t offer sustainability reporting services?”

Interviewee
“We did it in the past, but we don’t want to do it anymore, it is too small for our company, and we want to work on big projects.”

Interviewer
“Ok I see. And are there any specific obstacles or opportunities in the fashion industry concerning CSRD and sustainability reporting?”

Interviewee
“The fashion industry, like every other one, faces challenges in data collection and ensuring adherence to evolving regulations. However, there's immense potential for innovation in sustainable practices and leveraging technology to drive compliance.”

Interviewer
“Marcel may I ask some questions about the financial aspects of sustainability reporting?”

Interviewee
“Sure, please ask me whatever you need for the project. I’m not really aware of precise prices, cause I’m more on the side of strategy. But I’m happy to help you.”

Interviewer

“Ok, so how much does your consultancy charge for sustainability guidance and report preparation? And, how much we should ask for our project in your opinion? You have to consider that with a premium package, clients will have access to a special onboarding with a consultant to find the right data. And, in addition they will be guided at the end to fill the sustainability gaps of their assessments.”

Interviewee
Well, from what I heard from the other departments and companies, prices for sustainability reporting rage from €60.000 to 100.000, but it depends on the size of the company and the time consumed. On the other end, considering the most expensive package you can offer to companies, I would say around €120.000 or even more. You will manage data of big companies, compared to the normal scenario. So it is the right price to ask for. And with the usual percentages of consultants, around 20/50% depending on the time spent for it, it is the right price for you.

Interviewer
“Yes, this insight is really helpful and gives us an initial financial perspective of the project. We are now close to the end, and I know your time is precious. Few more questions. How would you evaluate the value proposition of an AI-powered sustainability reporting tool for your clients?”

Interviewee
“Such a tool could significantly reduce manual efforts, improve accuracy, and facilitate fast reporting. Especially time concerns are affecting companies.”

Interviewer
“Lastly, any aspects of sustainability reporting under the CSRD that we haven't covered but you feel are essential for my research and startup concept?”

Interviewee
“Ensuring the tool's adaptability to changing regulatory landscapes and its capability to offer actionable insights would be critical factors to consider.”

Interviewer
“Thank you for your valuable insights. Do you have any final thoughts or suggestions that could refine the AI platform concept to better serve the fashion industry's sustainability efforts?”

Interviewee
“Focus on flexibility and user-centric design. The tool should be intuitive, customizable, and aligned with the diverse needs of fashion companies to maximize its impact.”

Interviewer
“Ok, I think we covered every possible doubt and me and my team thank you for your time and kindness.**”**

Interviewee
"It is always a pleasure to help young people with their projects involving sustainability and innovation. I wish you a wonderful day. Bye!"
Interviewer
"Have a nice day too! Bye bye."

Lorenzo Antonini - Sustainability Consultant at Ramboll Consulting (Copenhagen)

Interviewer
"Good morning Lorenzo. Thank you for taking the time to meet with us today. We are Chiara, Maya, and Caroline and the purpose of this interview is to gain insights into the market opportunity and financial feasibility of an AI-driven sustainability reporting platform in relation to the CSRD. We appreciate your expertise in the field of sustainability consulting and your valuable inputs will greatly contribute to our research and startup concept."

Interviewee
"Nice to meet you girls, my name is Lorenzo and I work in sustainability consulting for Ramboll Consulting, in Copenhagen. I'm happy to be involved in this research. Tell me more about the project please."

Interviewer
"Sure! With the recent Corporate Sustainability Reporting Directive, we are developing a comprehensive business plan for an AI-powered platform for sustainability reporting. We want to sell this tool to fashion companies, in order to speed up and standardize the process of reporting. In addition, with our premium package, we planned an initial onboarding and in the end a small consultancy service with one of our partners."

Interviewee
"It sounds amazing! I heard about a similar project only few weeks ago, but it is still in a planning phase."

Interviewer
"Please let us know the name of the business if you will remember it. To begin, could you describe the current demand for sustainable consulting services as the Corporate Sustainability Reporting Directive (CSRD) approaches implementation?"

Interviewee
"The market for consultancy services preparing companies for CSRD has significantly expanded, with over 50,000 companies expected to comply by 2026. With my company, we do between 2 and 5 CSRD-related projects initiated monthly."

Interviewer

“What are the most common challenges your clients encounter in complying with CSRD and sustainability reporting?”

Interviewee
“Many struggle to adopt a scientific approach and understand the new guidelines imposed by CSRD. Quantifying financial risks from sustainability issues and understanding 'double materiality' is really difficult. Moreover, understanding the necessity of considering the entire value chain in CSRD preparation is challenging for several clients.”

Interviewer
“Ok and how has the demand for sustainability consulting changed recently, and what trends do you foresee approaching the CSRD implementation date?”

Interviewee
“The demand appeared in 2023, and this trend is expected to escalate further, extending to SMEs and other businesses as the EU broadens CSRD's scope.”

Interviewer
“Interesting! And, What is your initial reaction to the concept of an AI-powered anti-greenwashing platform tailored for the fashion industry?”

Interviewee
“Absolutely positively, the fusion of sustainability and AI is necessary to improve the performance offered by consulting firms, as well as to facilitate the process of compliance with ESG frameworks for the companies concerned.”

Interviewer
“How do you believe AI could complement the traditional methods of sustainability reporting?

Interviewee
“An effective AI tool, able to map the existing gaps of a company regarding certain sustainability regulations, would offer a scientific methodology to a process that is currently lacking in excessive subjectivity, offering more accurate data comparability within markets and speeding up the mapping process.”

Interviewer
“Amazing, that would be our goal with this project. You basically just mentioned some of the advantages of our service. What opportunities do you see for a collaborative effort between your consultancy and an AI-driven platform?”

Interviewee
“The implementation of AI tools would facilitate the work of consulting companies, allowing them to offer faster and more accurate services, increasing the number of projects on which to work, thus increasing the profit and competitive advantage in the market.”

Interviewer
“What would be the ideal features of an AI platform that would encourage your consultancy to consider a partnership?”

Interviewee
“Analysis of ESG reports, extrapolation of salient data, possibility of offering a ranking or scoring of environmental and social impacts comparable to the scales and thresholds imposed by the European Union.”

Interviewer
“How could an AI platform enhance or disrupt the current services offered by sustainability consultancies?”

Interviewee
“As already mentioned, it would have the time required for the analysis of company documents, increasing the efficiency of the process and allowing better comparability between projects, companies and different markets.”

Interviewer
“In what ways could a partnership with an AI platform potentially expand the services and impact of your consultancy?”

Interviewee
“It could increase the scope of services offered, reaching out to new markets and industries. It would also offer a more scientific approach in preparing clients for ESG reporting practices, offering accurate benchmarks on which to base future business strategies. AI would help to offer faster and more timely services, but without a tailored and structured analysis by a sustainability consultant in my opinion would be difficult to add real value to the specific customer needs and situation.”

Interviewer
“Interesting! This could be a limitation for us. Let’s go deeper into our industry. Are you involved with companies in the fashion industry concerning sustainability reporting and CSRD?

Interviewee
“Actually just one of 1500 employees and another of 3000 more or less. All our current and past CSRD-related customers aren't part of the fashion industry.”

Interviewer
“What specific obstacles or opportunities do you perceive in the fashion industry regarding CSRD and sustainability reporting?”

Interviewee

“Well, from the perspective of obstacles, I would say that the very often global supply chain of fashion brands would make it difficult to map the social and environmental impacts that take place within the upstream value chain. With respect to opportunities, there are many, like compliance, reputation and risk management, improved assessment of sustainability. Ah, and inform strategic decision-making and provide material information to investors.”

Interviewer
“Ok, it sounds like an opportunity for future features of our project. Now let’s investigate a bit more into the financial part. How much does your consultancy charge for sustainability guidance and report preparation? If I can ask.”

Interviewee
“Of course, it is not a secret. We provide sustainability guidance to companies but do not undertake the full reporting for more than €80,000. We want to work on big projects, avoiding the small reporting services.”

Interviewer
“Based on your expertise, what price range would you recommend for a service like ours?

Interviewee
“Considering the market standards, I'd suggest a range between €70,000 to €120,000 for a comprehensive AI-powered sustainability reporting service. With a superficial calculation, it seems that your expenses won’t be that many, except the percentage to the consultancy firm.”

Interviewer
“Yes, you are right. And what would be a fair consulting percentage for an initial onboarding and final consulting service to fill the sustainability gaps?”

Interviewee
“It is really complicated to say the exact amount, but 50% sounds really fair, as the work would take short time and low effort for a consultant.”

Interviewer
“Ok, thanks for giving us very precise cost information. Let’s now talk about our value proposition. How would you evaluate the value proposition of an AI-powered sustainability reporting tool for your clients in the fashion industry?”

Interviewee
“In a very positive way, if presented in the right way, it could be an added value to the services offered.”

Interviewer
“Ok, and what feedback or advice would you offer to a startup developing such a tool, to ensure it meets the needs of both consultants and fashion companies?”

Interviewee
“Ensure that the software developed can offer a scientific and replicable service to different realities, build on existing EU guidelines and thresholds, and focus on offering tailored services to specific companies or industries.”

Interviewer
“Sounds great. And Are there any aspects of sustainability reporting under the CSRD that we haven't covered but you feel are important for my research and startup concept?

Interviewee
“We haven’t talked about double materiality and ESRS gap fit assessment, but I don’t think it is relevant to your research now.”

Interviewer
“Yes, we didn’t want to go too much into technical details of the report because they are not relevant to the research. Do you have any final thoughts or suggestions that could help refine the AI platform concept to better serve the fashion industry's sustainability efforts?”

Interviewee
“Girls, just remember that the key to make money in this field is mathematic analysis and replicability. So, develop at the best of your capacity and invest a lot into the AI application to your platform. Now I really need to go, but for any other question just text me by Whatsapp.”

Interviewer
“Thank you for sharing your insights and expertise today. Your perspectives have been precious for understanding the market dynamics and challenges related to sustainability reporting. We appreciate your time and contribution and wish you a good day.”

Interviewee
“You're welcome. And please keep me posted on your project. I wish you good luck! Bye girls! Interviewers: Bye bye!”

Patrick Engelbach - Sustainability Consultant at EY Berlin

Interviewer
“Hello, thank you for joining this interview. My name is Chiara, it is a pleasure to hear you.”

Interviewee
“Hello Chiara, how are you?”

Interviewer
“I’m goo and you? Nico gave me your phone number.”

Interviewee

“Yes, he anticipated something about your project. Is it about an AI-powered sustainability reporting platform right?”

Interviewer
“Ah great! Yes, it is. The aim of this interview is to gather insights on market opportunity and financial feasibility for that project. Especially beacause we want to collaborate with few consultancy firms for this project.”

Interviewee
“Ah, nice. Tell me more about it.”

Interviewer
“We would like to support our client at the beginning and at the end of the journey with us. Initially with an onboarding service to find the right data, and in the end to fill the gaps in their assessment.”

Interviewee
“Ok, I understand. So you want to give them initial supoort just to garther the right data no? And in the end, for a small startegic planning based on the gaps in their assessment.”

Interviewer
“Yes, that’s correct. So, If you don’t have further questions i would start.”

Interviewee
“Please go ahead.”

Interviewer
“Considering the Corporate Sustainability Reporting Directive (CSRD), what's the current demand for sustainable consulting services?”

Interviewee
“CSRD’s announcement has led to increased CSRD-focused projects, especially in renewable energy sectors. There's a slight shift in priorities within sustainability consulting, with a focus on Due Diligence and Decarbonization-related projects.”

Interviewer
“Ok, I don’t know a lot about it, but the demand seems increased a lot. What are the common challenges clients face in CSRD compliance and sustainability reporting?”

Interviewee
“Clients struggle with understanding materiality assessment and ESRS standards. The sheer volume of data (around 1,200 data points), internal alignment, and strategic integration are significant obstacles.”

Interviewer

“Yeah, we had similar answers from some colleagues of different companies. Now, focusing more on AI, what's your take on an AI-powered CSRD platform for the fashion industry?”

Interviewee
“An AI-powered platform could streamline reporting processes, especially for the complex supply chains in the fashion industry, ensuring accuracy and comprehensive value chain coverage.”

Interviewer
“How could AI complement traditional sustainability reporting methods?”

Interviewee
“Well, AI can handle vast datasets, identify material issues, and enable real-time sustainability metric monitoring, supplementing traditional methods.”

Interviewer
“Now, I would liek to ask you few questions related to the financial aspects. What are the costs associated with companies accessing sustainability reporting services?”

Interviewee
“I'm not entirely sure about the specific costs. Because we don’t offer sustainability reporting. So, from a common knowledge I would say in a range between €50.000 and €80.000. It depends on the company size and the data related to it. We want to tackle bigger problems related to revolutionizing the company’s sustainability. And those big projects cost from €100.000 to 1 million.”

Interviewer
“Ok interesting. And, in your opinion, what could be a suitable price for a service like ours in the market?”

Interviewee
“I'd suggest a range between €60,000 to €130,000 for an advanced AI-powered sustainability reporting service.”

Interviewer
“Now, going back to the partnership topic. What percentage of a partnership fee would be reasonable for consultants' initial onboarding and filling gaps in assessments?”

Interviewee
“A 40% or 50% partnership fee for these purposes might be fair. You know, the job you want consultants to do is really not time-consuming. I think that percentage should make both parts happy.”

Interviewer

“Ok, this is really helpful for our business plan and financial development. We are close to the end, so is there any crucial aspect related to CSRD and sustainability reporting that we haven't discussed but is vital for research or startup concept?”

Interviewee
“Not that I'm aware of at the moment.”

Interviewer
“Any final thoughts or suggestions to refine the AI platform concept for the fashion industry's sustainability efforts?”

Interviewee
“Nope. Thanks for letting me take part in this questionnaire. Let me know how things are going forward. If this becomes an actual project outside of uni, feel free to get in contact with me. I think such tools can be really valuable for CSRD future reporting, so we can keep in touch to see if this project might be actually feasible in the future.”

Interviewer
“Would you be interested in joining such a business?”

Interviewee
“Yeah, for sure! Please keep me updated. And have a great weekend. Greetings for Nico too.”

Interviewee
“Bye Patrick, this interview was amazing. I will keep you posted. Bye, bye.”

Professional Interviews with Fashion Companies:

Moritz - General Management and Strategy at Takko Fashion

Interviewer
“Hello Moritz, how are you? Thank you for taking your time to answer us some questions regarding our master's thesis.”

Interviewee
“Hello Maya, I am good, currently in China. Of course, I will answer yo some questions.”

Interviewer
“I first want to clarify the background and the goal of this interview. My two colleagues, Chiara, Caro and I are currently working on a feasibility study regarding a project in sustainability reporting this interview aims is to get insights into the sustainability practices and challenges faced by fashion companies, particularly in light of the upcoming Corporate Sustainability Reporting Directive. More specifically, we want to understand if our solution has potential in the fashion market and is feasible. Do you have any questions so far?”

Interviewee
“No, it is clear so far. And I also already know the regulation quite well.”

Interviewer
“Okay so first of all, please introduce yourself and the role you have taken in the fashion industry so far.”

Interviewee
“Yes, so I work for the fashion company Takko Fashion, and at management level. So, regarding the execution of the CSRD I have a pretty good overview about what is happening in Takko Fashion.”

Interviewer
“Okay and what would you say are the greatest challenges regarding sustainability reporting at Takko Fashion?”

Interviewee
"Exactly. And as far as I know, this whole creation of this Sustainability Report, I don't know how hard Takko finds it. Takko does a lot in this direction, and they are actually very pioneering in terms of the topics. So, they started very early with including Tier 1, Tier 2, which is relatively unusual. With Tier 3 they still have some difficulties because, of course, Tier 2 doesn't necessarily want to disclose that, as it would also damage their business somewhere. Clearly, that is currently a challenge for Takko. In addition, a challenge lies in the fact that with all these certifications you always have these transaction certificates, so TCS. Basically, if you want to put the Global Recycling Standard, GLS, on your products, then everyone in the entire value chain must have this certificate for the respective quantity and weight. And if the certificate, so if for example Tier 3 has it, but Tier 2 is about to expire, then the whole process is invalid, and you can't label it as GLS. That is currently the biggest challenge, as I understand it."

Interviewer
Now I have understood a lot too. My company's clients don't even know how to approach this whole topic, what the methodology behind it is, so which risk factors they need to specialize in and how to conduct such an analysis. Is that the case with Takko too?"

Interviewee
"I think Takko is quite advanced there. The Head of, he is really good with the whole topic. He also worked for Cali's little sister, Franky. I was in a call with the two of them recently when I was still in Germany, for their bachelor thesis they are doing about marketing, about labeling of recycled products. So more from a marketing perspective. But he is competent at Takko regarding the whole supply chain law. So, he would be very helpful. Otherwise, I can also bring you together with the Senior Director for the whole thing, basically the boss of Dirk Stolz, the

Head of. I can also bring you together with my father, yes, but I think you would say that's the topic."

Interviewer
“Yes please, feel free to share any other useful contact. About this topic, did you publish any report?”

Interviewee
"Exactly. Takko published its first Sustainability Report, made internally, this year. They also created reports in the last years, but did not publish those. It was a preparation for us knowing what was coming. That's good to know."

Interviewer
"And can you remember what these reports were about? Was it about SDG goals and what you want to achieve? Was it more than just telling stories, but actual, solid goals?"

Interviewee
"I believe Takko sets quite clear, also numerical goals, because they try to always be one step ahead of the law. They are now reaching their limits, which one must understand if one knows Takko's sourcing. Takko benefits from an extremely large and deep supplier network, which is unusual. We have been working with many players for a long time, but there are incredibly many, and they constantly change their orders. For example, if they want to order 1 million tons of shirts, they pass the order to their offices and then get different prices to negotiate the lowest. So one of the biggest assets of Takko is actually their extensive supplier network. Probably from 2026 onwards, sourcing will become even more complex when the so-called 'Garment Passport' comes. Then every garment sold must have a QR code or something similar on it, showing how many nautical miles the part has traveled, which supplier it was with, and from which cotton field it comes from. That will be a huge bureaucratic challenge."

Interviewer
“It sounds like another big opportunity for a project like ours!”

Interviewee
"Yes, and that's why you should definitely look at it. Otherwise, I have dealt more with the supply chain than with the whole report."

Interviewer
"And in general, are you open to innovations, like AI tools?"

Interviewee
"We have our own AI, Takko GPT. Many companies now have similar systems that do not make the data entered usable by everyone. When my father told me about it, I was surprised at first, but then I understood what it is."

(… the conversation continues with personal topics)

Wolfang Krogmann - Retail Expert Ex- Director General Germany & Austria Primark

Interviewer

“Hello Wolfgang, I am Maya it is nice to meet you. Thank you for taking your time to answer us some questions regarding our master's thesis.”

Interviewee
“Hello Maya, I am Wolfgang. Nice to meet you too. Of course, I am happy to help.”

Interviewer
“I first want to clarify the background and the goal of this interview. My two colleagues, Chiara, Caro and I are currently working on a feasibility study regarding a project in sustainability reporting this interview aims is to get insights into the sustainability practices and challenges faced by fashion companies, particularly in light of the upcoming Corporate Sustainability Reporting Directive. More specifically, we want to understand if our solution has potential in the fashion market and is feasible. Do you have any questions so far?”

Interviewee
“Sounds good. No, I am happy to start.”

Interviewer
“Okay so first of all, please introduce yourself and the role you have taken in the fashion industry so far.”

Interviewee
“So, I am Wolfgang Krogmann and I spent the majority of my professional journey in the fast fashion industry. There were a few exceptions, but I was with H&M for over ten years and Primark for over ten years and Jean Pascal for another five. You don't remember that was a Hamburg company like New Yorker back then. So I gained quite a lot of experience in that area and at Primark I was head of Germany and Austria. And strictly speaking, it wasn't up to me to decide where and how to buy, it was up to the head office. But because of the many critical comments that were made about Primark in the press, I had the opportunity to work with the sustainability team both in England and then in Bangladesh, India and China, so to speak, and to look at a few things on site. And I used to do that at H&M and at another company. So in this respect, I have a few insights and of course I know what measures these fashion companies basically implement. And I was here, so to speak, as a representative of Primark at the Federal Ministry that initiated the legislation we're talking about now. I was there. So of course I'm familiar with a lot of things.”

Interviewer
“Thank you. And how does Primark currently approach sustainability? And which areas – social or environmental - are currently prioritized?”

Interviewee
“To answer this, I have to tell you a little bit of background history about Primark. Primark purchases its products directly from its suppliers. There is no agency between the two entities. This only happens in really specific cases, when a product is missing from the portfolio. So, for years, the procurement team traveled to mostly Asia and purchased products in the factories. 18 or 19 years ago a big scandal regarding Primark happened. A BBC journalist uncovered that parts of Primark products were produced in a small garage by children in India. He even received a prize for his journalism work. Primark investigated this case afterward and revealed that the story of this journalist was staged. Primark was also able to verify this. After 2 years the BBC journalist was fired, and the prize was annulled. BBC had to report about the fact that this story was fake. Another scandal was about a multi-story building with all kinds of things

in it, downstairs. What was there? There were stores, offices, and on the upper floors below, so to speak, there were suppliers who manufactured there. And a few floors were illegally added on top of the existing building. The textile machines are relatively heavy and at some point the statics didn't hold up and the whole building was practically crushed from above. So Primark was the first company to come out and say yes, we had a supplier in this factory who made the parts for us and was on site to provide help and support the people and families affected by the disaster. I also had the opportunity to travel to Bangladesh at that time. I spoke to many people. I looked at the whole program and it was something special that Primark put together. And it turned out that there are a lot of fashion companies that aren't able to create this transparency because they have middlemen. And they didn't know that the middlemen had placed an order there, for example. Both of these incidents were major impulses in society that sparked a lot of discussion and awareness about the topic of sustainable procurement. Primark did a lot of research locally and realized there is a huge issue in Asia with big factories having subcontracts with other non-certified factories that fashion companies do not know about. Therefore, supply chains can be super untransparent and companies often do not know where their products are really coming from. Many companies always say that it is impossible that they produce goods in such factories. That must somehow be a mistake. But it turns out that this is a lack of transparency from the supplier side. Since all of these things happened, Primark has primarily been focusing on having transparent supply chain processes."

Interviewer
"That is super interesting to learn more about the history of Primark. And what specific actions and initiatives does Primark focus on in terms of sustainability?"

Interviewee
"They are doing this by executing much more strict quality control protocols. These protocols heavily focus on human rights and environmental sustainability. Also, all huge fashion retailers including for example C&A, the Inditex Group, and Primark usually use the same suppliers, and therefore put pressure on them, to really stick to their code of conduct. The codes of conduct of these companies are really similar, of course, some put more emphasis on one topic than others, but in general, the message is the same. And compared to 40-50 years ago fashion retailers carefully control the adherence to these quality protocols. 40-50 years ago the suppliers signed these contracts and there were no more controls from the retailer's side. Today, Primark has about 700 suppliers and they do about 3000 quality controls per year. So, this means that every factory, every supplier, is thoroughly examined 3 to 5 times. Some inspections are conducted by Primark itself, while others are carried out by service providers and NGOs who take a look. I have undergone such an inspection myself, to see exactly what happens. It's really about checking everything that is done in the company. This starts with the largest area. Initially, the biggest criticism was about the work of the people. So, they looked at, okay, how many people work in the factory? Are they even able to produce the required number of items with this number of people and equipment? Sometimes you talk about it. Yes, there's a small garage company, and they're supposed to produce 10,000 tons of shirts. No, they can't do that. And if you notice they can't, but the order is still accepted, then there is a suspicion that this order has been passed on to subcontractors. The first attempt was to stop this. I would say that this works quite well and extensively. When you look at it, then you now look at the factory, how are the people there. So how many work there, how are they paid, how are they technically employed? Like, how many hours do they work, how do they get their salary? And um, do they have human rights, so can they, say, express themselves, Can they organize themselves in unions or anything else? Yes, and these inspections take place in such a way that the inspection team asks for employee lists from the personnel office, calculates everything with individual employees without the involvement of local management, speaks to verify the information. And tries to

find out. Is management telling us a nice story or is it really true? So, in this way, it was at least ensured that people are paid. Just a little time note. So, then the legislation had to be dealt with, for example, certain dyes are no longer allowed to be used in Europe. That had to be ensured on-site so that they are not sent anywhere and so on, and then the companies dealt with where the raw materials come from? How is cotton dyed? The worst is leather dyeing. Now leather is hardly produced anymore. But that. There, people stand knee-deep in water and tread on the leather with their feet and tan it that way, and so on. So, this has terrible chemical effects and and demands disease patterns. So, that's the next step. And now? So first, they looked at how it is done in the factory that was commissioned. So are the people protected now, this is the so-called Tier 1 Tier T1, T2, T3 it was seen. Okay, we have to go further, namely already in the manufacturing process, where the goods, where the raw materials are produced. Yes, and there too, it applies that the companies all have a common interest in ensuring that this is ensured."

Interviewer
"And are there any challenges or obstacles your company has faced in implementing and managing those sustainability practices?"

Interviewee
"As already mentioned before the greatest challenge is to achieve the transparency and gather the data to create reliable and accurate sustainability reporting. Sourcing adequate and correct data means having immense resource expenditures of time and money."

Interviewer
"Okay, and has Primark appointed someone responsible for CSRD compliance, and if so, what has been their approach?"

Interviewee
"Yes, so with Primark it was like this, there is a parent company of Primark, Associate British Foods, you should check out their website. ABF. Um, so when you enter ABF, you don't get there immediately. I think the website is something like abf.co.uk. The parent company is also the company that writes the report for Primark, because the parent company is listed on the stock exchange. Under its umbrella, you'll find Primark, but also sugar. ABF is one of the largest sugar producers in the world. Yes, we have nothing to do with each other, so to speak. Bakery products, etc., they also have their own brands and for the whole group, which operates as a public limited company, they have set standards and report there in their own Sustainability Report, what has happened overall and what measures the company has taken. And Primark itself, after this BBC report, joined an English organization. This English organization is a union of retailers, suppliers are represented, logistics companies, government representatives and they have created rankings and measures that are evaluated, so that the companies have the opportunity to put everything they do in there and make it transparent and thereby also measurable. Yes, and Primark has come under the top three after five or seven years, I don't remember exactly, and since then has always been among the best three in the UK. Yes, and you can always say that what applies to the UK also naturally applies to all other countries where they sell. And they have actually already put in place the preparatory measures and reports. These reports were manually created, with the corresponding effort, but they were necessary."

Interviewer
"Would your company consider employing a third-party service to assist with CSRD compliance? What would be the key factors in making this decision?"

Interviewee
“If I may say so, the idea of doing this AI-supported and basically developing a tool with which one can measure this uniformly, I think is super good. I am sure that especially the fast fashion companies will participate in this. Basically, you have to imagine it like a TÜV report. Yes, so in Germany we are used to the fact that the car has to go to the TÜV every two years and then is examined once to see if it is still roadworthy and everything works. It should actually be with the companies, manufacturers and suppliers, that they are also examined in the same way and that the data gets published. In the parent company of Primark, there is a team of now over 120 employees who work on the whole topic of production monitoring and reporting. From Primark’s side it is a super strong incentive that regulations like the CSRD are implanted and applied, since they want to showcase all the measures they are doing. But they also want everyone else to be held at the same standard. To whether you could equip Primark with such a tool, I would put a question mark on that, because I think they have probably already developed something themselves. But I wouldn't exclude anything.”

Interviewer
So, you're saying it's perhaps even smarter to target medium-sized companies because they don't yet have the resources to properly execute sustainability reporting?”

Interviewee
“Yes, definitely, because such large companies, if they have to program something themselves or if they have to change or compile something. In any case, they have enough money to manage it on their own. The medium-sized companies, they say, man, we actually can't afford to program something for €250,000. We would actually be quite happy if we could join a system where we pay, I don't know, a monthly amount, and which then helps us with regulation-compliant sustainability reporting. The difficulty is always that the state says, you have to deliver this and that information and then you sit there as a company and say, my goodness, so CO2 emissions of our company, how do you do that now? Yes, how do I convert something etc.”

Interviewer
“Our time is also almost up. The call is about to end. Do you have any other thoughts on the topic of CSRD in the fashion industry or our idea?”

Interviewee
“Yes, I wanted to tell you. So, if you want to know something specific about Primark, they have Primark Cares. Yes, that is, so to speak, the collective term under which Primark has compiled everything. On the German site, you can also find all the names and information about the programs that are being made there and in which one wants to participate. Just as a background information, it's quite good to get it compiled there.”

Representative of a sport brand working in the sustainability department (ANONYM)

Interviewer
“Hello! It's a pleasure to meet you. I really appreciate you taking the time to help us with some questions for our master's thesis.”

Interviewee

“Hey, nice to meet you. I am excited to hear about your project.”

Interviewer
“To begin, I'd like to set the context and purpose of this interview. My colleagues, and I are undertaking a feasibility study about a project focused on sustainability reporting. The main objective of this interview is to gain insights into the sustainability practices and challenges that fashion companies encounter, especially considering the upcoming Corporate Sustainability Reporting Directive. Our primary goal is to determine whether our proposed solution has viability and applicability in the fashion industry. Do you have any questions or need any clarifications up to this point?”

Interviewee
“I think for now it’s clear, if I have question, I will tell you.”

Interviewer
“Sure, please feel free to ask questions. So then let’s start. Could you please introduce your company and describe your role?”

Interviewee
“Of course! I'm part of a well-known sports brand that specializes in fitness apparel and accessories. Our focus is on innovation and quality. In my role, I focus on sustainability efforts, strategies and ensuring that our practices reflect our commitment to the environment and social responsibility.”

Interviewer
“Sounds interesting, how is your company currently addressing sustainability and which areas are a priority?”

Interviewee
“Our approach is a mix of environmental and social sustainability. We are working hard to reduce our carbon footprint through sustainable materials and minimizing waste in our supply chain. We are also committed to fair working conditions and safe working conditions in our production facilities.”

Interviewer
“What specific sustainability measures and initiatives does your company focus on?”

Interviewee
“We have been actively involved in several initiatives. These include switching to sustainable materials, optimizing packaging to reduce waste and forming partnerships to promote sustainability in the fashion industry. We are also constantly looking for ways to improve efficiency in our operations.”

Interviewer
“Going forward to next topic, how does your company measure the impact of its sustainability initiatives?”

Interviewee
“We use a number of metrics to measure our impact. These include the reduction of carbon emissions and the proportion of sustainable materials in our products. Another important indicator is the reduction of waste in our operations.”

Interviewer
“Interesting! Can you tell us what challenges you face in implementing and managing sustainability practices?”

Interviewee
“Certainly. A major challenge has been integrating sustainability into all aspects of our business without compromising product quality. Ensuring consistent sustainability practices in our global supply chain was also complex and required constant collaboration with our suppliers.

Interviewer
“And now to the next important topic. Are you familiar with the Corporate Sustainability Reporting Directive (CSRD)?”

Interviewee
“Yes, we are aware of the CSRD. It is very important to us, but we are still working out how best to comply with it. We don't have to produce a report yet, but we will have to in two years, so we are already actively learning about it. However, I know that the directive requires more detailed sustainability reporting, which is crucial for corporate accountability.”

Interviewer
“Has your company appointed someone to be responsible for CSRD compliance?”

Interviewee
“They are aware of the importance of CSRD compliance, but we are still developing our approach. We are looking at how we can integrate these requirements into our existing sustainability framework.”

Interviewer
“You just said that you don't yet know exactly how to approach the issue of CRSD. Would your company consider third party help with CSRD compliance?”

Interviewee
“Absolutely. The idea of external help is very appealing and we have already discussed it internally. The decision depends on the competence of the provider, their understanding of the CSRD requirements and the added value they offer in terms of efficient and accurate reporting.”

Interviewer
“What would be your main concerns in collecting and reporting sustainability data for CSRD?”

Interviewee
“Our main concern is the accuracy and completeness of the data. CSRD requires detailed reporting, and we want our reports to both comply with regulations and truly reflect our efforts.

Interviewer
“What do you expect from an AI-powered reporting platform?”

Interviewee
“We expect an AI platform to provide solid data analysis, advanced predictions and real-time insights. It would also be great if the platform could identify unsustainable suppliers in our supply chain to help us proactively address these issues.”

Interviewer
“How do you see the benefits in the future of such a platform in improving sustainability reporting?”

Interviewee
“An AI platform could automate data collection and analysis, reducing manual work and errors. This could increase the efficiency of reporting and also the accuracy and reliability of our data, which is crucial for internal decision making and external transparency.”

Interviewer
“Are there any concerns you might if you would integrate an AI-powered platform into your existing processes?”

Interviewee
“The main concern is the smooth integration of the platform into our existing systems without disruption. Data security is also crucial as we need to protect sensitive information.”

Interviewer
“What additional benefits could an AI platform bring to your risk management and sustainability performance?”

Interviewee
“It could significantly improve risk management through predictive analytics and help us anticipate and address sustainability risks. I hope it would also provide deeper insights into our sustainability performance and lead us to improvements.”

Interviewer
“What key services or support would you expect from a third-party provider?”

Interviewee
“We would expect comprehensive technical support, ease of use when using the platform, regular updates for sustainability standards to customize the platform to our specific needs.”

Interviewer
“Thank you very much for all your answers! Finally, how does your company envision the future of sustainability reporting and the role of technology?”

Interviewee
“We see a future where AI plays a key role. We are already seeing AI tools being integrated into our normal working day. And we are starting to work with different AI tools to become more efficient. So, I can well imagine that a tool like the one you are currently working on could be very exciting for us and other companies.”

Interviewer
“That's great to hear! Is there anything else we should know about your approach to sustainability and your reporting?”

Interviewee

“Just that we are committed to continuous improvement in sustainability. This is an ongoing process for us, characterized by regular assessment, adaptation to new trends and technologies and active stakeholder engagement. We try our best to become as sustainable as possible.”

Interviewer
“Thank you very much for your time!”
Appendix 9: Interview Transcripts