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Chapter 1

INTRODUCTION

1.1 Background and Research Rationale

The Emergence of Social Sustainability Reporting (SSR)

- Under increasing stakeholder pressure, firms are progressively expected to disclose information related to their corporate social responsibilities (CSR), particularly in the social domain (Monteiro and Silva 2022).
- Such disclosures are increasingly viewed as important for reinforcing stakeholder confidence and supporting the firm's overall strategic positioning (Monteiro and Silva 2022).
- However, in practice, companies vary significantly in their readiness to implement CSR reporting.
- The social dimension has not received adequate attention (Heldal 2024).
- The social dimension is often viewed as vague, hard to quantify, and underemphasized, compared to environmental (Morais 2018) and governance aspects.

The Specific Role of the Software Industry

- Beyond sectors like retail, pharmaceuticals, and medical manufacturing, the social dimension of CSR reporting is gaining prominence in software services (Holder-Webb 2007).
- This is because software industry exerts substantial social impact through its indirect influence via digital platforms (Jimenez 2023).
- However, there is currently no clear or tailored SSR framework that reflects the industry's particularities, such as intangible assets, remote workforce, and agile organizational structures.

1.2 Research Gap

- There is limited research on corporate readiness for social sustainability reporting during the transition to mandatory regulations in the EU (Fiechter 2022).
- Most existing studies focus on ESG in general or primarily on environmental aspects (Mani 2018), with an emphasis on industries like manufacturing, finance, or energy—sectors with more tangible datasets.
- Many current reports remain superficial and lack specific social indicators (Christensen 2021; Leal Filho 2025).
- There is an absence of sector-specific SSR frameworks (Bochkay 2025).
- It is still unclear which factors drive or hinder the readiness for SSR among software companies in Europe.

1.3 Research Objectives

Aim

To develop a structured assessment framework for measuring the readiness of software service companies in Europe to engage in social sustainability reporting.

Objectives

- Identify key SSR criteria applicable to the software industry.
- Evaluate the SSR readiness of software companies using the developed criteria.
- Analyze the key drivers and barriers encountered in the implementation of social reporting.
- Provide practical recommendations to enhance SSR readiness for digital service enterprises.

1.4 Scope and Limitations of Research

Scope

- The study focuses solely on the “Social” dimension of ESG; environmental and governance aspects are not analyzed in detail.
- The sample includes 30 medium- and large-sized software companies headquartered in Europe during 2022–2023.

- Data sources include annual reports, ESG reports and the SRN database.

Limitations

- The analysis is restricted to the social pillar of ESG and does not address the environmental (E) or governance (G) components.
- The sample size is limited to 30 companies, which may not fully represent the entire software industry.
- No internal survey or interview data is used.
- Some evaluation criteria may involve a degree of subjectivity.

1.5 Significance of the Study

Academic Contribution

- Addresses a research gap by proposing a sector-specific SSR framework.
- Offers a practical quantitative tool to assess social reporting capabilities.

Practical Contribution

- Enables software companies to self-assess their readiness considering mandatory regulations such as the CSRD.
- Provides evidence-based insights for policymakers on the current state and support needs regarding SSR.

1.6 Structure of the Research

This thesis is organized as follows:

- Chapter 1 introduces the background, research gap, objectives, scope, limitations, significance, and structure of the study.
- Chapter 2 reviews relevant literature, including definitions, sector context, theoretical frameworks, and prior research.
- Chapter 3 outlines the research methodology, including approach, data collection, assessment framework, and limitations.
- Chapter 4 presents findings and analysis from empirical research.

- Chapter 5 discusses the empirical results and their implications.
- Chapter 6 summarizes the research, key conclusions, contributions, recommendations, limitations, and suggestions for future research.
- References are provided at the end.

Chapter 2

LITERATURE REVIEW

2.1 Definitions and Sector Context

2.1.1 Overview of Social Sustainability Reporting

Definition and Scope

- Social sustainability reporting in this research highlights the S-Pillar in CSR.
- In the literature, terms such as CSR, ‘extended external reporting’, ‘ESG reporting’, and ‘sustainability reporting’ are often used interchangeably (Edge 2022; Fiechter 2022).
- Sustainability reporting encompasses disclosures on social, environmental, and governance dimensions, with the social aspect focusing on issues such as labor practices, diversity, and community engagement.

Roles and Value of SSR

- SSR enhances transparency and builds trust with stakeholders (investors, employees, customers, governments).
- It serves as a key component within broader ESG strategies and CSR agendas.

Relevant Conceptual and Standards Frameworks

- Corporate Sustainability Reporting Directive (CSRD):
 - The EU’s CSRD, effective from January 2024, is a mandatory regulation requiring large and listed companies to disclose ESG-related information.
 - It establishes a legal basis for sustainability reporting and reinforces the importance of the social dimension across sectors.
- European Sustainability Reporting Standards (ESRS):

- Developed under the CSRD, the ESRS provide detailed reporting requirements.
- In particular, ESRS S1 focuses on social sustainability related to an organization's own workforce,
- GRI 401–405: Voluntary global standards covering employment, labor relations, diversity, and equal pay.
- ISO 26000: Voluntary international guideline promoting social responsibility across stakeholder groups.

2.1.2 Overview of Reporting Readiness

Definition

- Reporting readiness refers to the extent to which an organization possesses the capacity, systems, data, and commitment required to conduct high-quality, reliable SSR.
- It represents a transitional stage between awareness of SSR and successful implementation.

Key Characteristics

- **Disclosure Scope:** Coverage of key social topics such as working conditions, diversity, and employee well-being.
- **Stakeholder Engagement:** Involvement of internal actors like HR teams and management in the reporting process.
- **Data Availability:** Access to measurable and reliable social data that enables transparent reporting.
- **Maturity Levels:** Readiness can be assessed using multi-level scales reflecting progression from basic to advanced reporting practices.

Link to Organizational Capabilities

- Reporting readiness is viewed as an organizational capability that can evolve over time.
- It can be measured through structured frameworks proposed in the literature or developed in specific studies.

2.1.3 Overview of Software Services Sector

Sector Characteristics

- The software services sector is a service-based industry highly reliant on human capital and intangible assets.
- It is rapidly evolving with remote and hybrid work environments, facing high competition for talent and increasing expectations for attractive workplace conditions.

Role of Social Aspects

- Employees are core assets; thus, working conditions, benefits, and training are of strategic importance.
- ESG performance increasingly influences the ability to attract B2B clients and investors.

Challenges for SSR

- Lack of standardized quantitative data and measurement systems for social indicators (Gibbons 2024).
- Existing standards provide limited industry-specific SSR guidance for digital service firms.
- Many companies are SMEs with limited resources for non-financial reporting.

2.2 Theoretical Framework

2.2.1 Institutional Theory (DiMaggio & Powell, 1983)

Coercive Pressure

- Legal and regulatory requirements such as the CSRD, ESRS, and EU directives mandate ESG disclosure.
- Transparency laws, human rights policies, and DEI reporting obligations from public institutions and industry coalitions.

Normative Pressure

- Expectations from professional associations, major clients, and investors to comply with recognized reporting norms.

Mimetic Pressure

- Firms imitate industry leaders or competitors when SSR is seen to deliver reputational or HR-related advantages.
- This is particularly salient in the software sector, where best practices are quickly observed and replicated due to intense competition.

2.2.2 Resource-Based View (RBV) (Barney, 1991)

Readiness as an Outcome of Internal Resources

- Firms with ESG data systems, HR software, and dedicated sustainability personnel are better equipped to measure and report social outcomes.
- These internal elements are viewed as intangible assets that support the development of SSR capability.

SSR Readiness as a Strategic Capability

- Readiness is considered a difficult-to-imitate capability embedded in organizational culture and structure.
- It enhances brand reputation, attracts top talent, and improves access to ESG-oriented capital.

2.2.3 Stakeholder Theory (Freeman, 1984)

Key Stakeholders Influencing SSR Readiness

- Investors: Increasingly attentive to social risks and ESG transparency.
- Employees: Expect fair, diverse, and growth-oriented workplaces.
- Customers: Prefer socially responsible partners, particularly in tech supply chains.
- Communities and Local Authorities: Demand ethical behavior, equality, and positive social contributions.

Benefits of SSR from a Stakeholder Perspective

- SSR builds trust and credibility with key stakeholder groups.
- Supports a responsible corporate image—particularly important in sectors like software, where competition for talent is intense.

2.3 Literature Review

2.3.1 Overview of Prior Research

Sector-Specific SSR Studies

- Many studies on CSR and sustainable development have focused on industry-specific contexts such as manufacturing, construction, and mining (Ye 2020; Afshari 2022).
- CSR reporting is more prevalent in environmentally sensitive industries (Lock 2016).
- High-tech sectors, particularly software, have received comparatively limited attention.
- Earlier research acknowledges that the factors influencing sustainability reporting practices are often mixed and context-dependent (Fifka 2012),
- There remains no consistent framework to explain what drives or hinders SSR readiness.

ESG in the Technology Sector

- The “Social” component is often the weakest in ESG disclosures due to lack of standardized indicators, perceived immateriality, or symbolic reporting (Christensen 2021; Reitmaier 2025).

2.3.2 Existing Readiness Assessment Models

Prior Frameworks

- **Nava et al. (2023):** Emphasize the need for robust SDG measurement and reporting frameworks.
- **El Baz et al. (2022):** Propose a three-stage sustainability readiness framework (Approach – Deployment – Results) for Industry 4.0 adoption.
- **Afshari et al. (2022):** Present a multi-dimensional classification of Social Sustainability Indicators (SSIs), but not a formal readiness model.
- **Zopounidis et al. (2020):** Develop a multi-criteria ESG disclosure assessment framework, enabling benchmarking but not tailored to SSR readiness or the software sector.
- **Siew (2015):** Reviews corporate sustainability reporting tools, which mainly assess current reporting performance.
- **Okongwu et al. (2022):** Propose maturity models for sustainability reporting, focusing on governance, system integration, and leadership commitment.

- **Barletta et al. (2021):** Organisational Sustainability Readiness (OSR) Model assesses internal capability to implement sustainability strategies, adaptable to software services.

Identified Gap

- Absence of SSR readiness models that reflect the specific characteristics of the software industry.
- Need for an integrated framework drawing from ESRS, ISO, GRI standards, and the context of the digital economy.

2.3.3 Drivers and Challenges in Prior Research

Drivers

- Regulatory compliance pressures—such as GRI, CSRD, or SASB standards—encourage ESG disclosure in the software sector (Reitmaier 2025; Bochkay 2025).
- Investors and corporate clients increasingly expect transparency and alignment with ESG principles (Bonnefon 2022; Dai 2019).
- Enhancing corporate reputation is a key driver for improved social sustainability reporting (Reitmaier 2025).
- Firms recognize strategic and operational benefits from participating in collaborative CSR initiatives (Dai 2019).
- Strong societal and ethical practices are positively linked to higher market valuation (Chouaibi 2021).

Challenges

- Social reporting standards remain insufficiently defined in many industry-specific contexts, including software and IT services (Bochkay 2025).
- Many firms face limitations in data infrastructure and ESG reporting systems, hindering consistent and reliable disclosure (Troshani 2024; El Baz 2022; Jona 2023; Belal 2016).
- Stakeholder relationships, particularly in B2B contexts, are often characterized by power asymmetries that reduce external reporting pressure (Dai 2019).
- Reputational concerns can lead to superficial or symbolic social reporting practices, increasing the risk of greenwashing (Reitmaier 2025; Belal 2016).
- High short-term costs and expensive assurance processes discourage investment in comprehensive social reporting, despite long-term benefits (Dai 2019; Najjar 2023).

2.3.4 Analytical Orientation Informed by Prior Research

- Previous studies have highlighted several factors influencing SSR readiness, including
 - regulatory pressure (e.g., CSRD, ESRS)
 - stakeholder expectations (e.g., from investors and clients)
 - internal systems and organizational capabilities (Christensen 2021)
 - resource constraints
- Foundational theories such as Institutional Theory, Resource-Based View (RBV), and Stakeholder Theory provide a basis for understanding the key drivers and barriers to social reporting.
- Studies on sustainability reporting structure and indicator design provided the conceptual basis for organizing related indicators into thematically coherent mid-groups.
 - Based on this structure, the study aims to construct an assessment framework for evaluating SSR readiness in the software services industry.
 - The scoring results are then analyzed to uncover prevailing patterns, key drivers, and common challenges in current reporting practices.

Chapter 3

RESEARCH METHODOLOGY

3.1 Research Approach and Design

Type of Research

- This study adopts an exploratory approach, aimed at developing and applying an assessment framework for SSR readiness.

Methodology

- A mixed-methods design was employed, combining:
 - Qualitative content analysis of company reports;
 - Quantitative descriptive statistics;
 - Framework design aligned with Design Science Research (DSR) principles.
- Three main phases of the research:
 1. Developing the framework, consisting of 7 main groups and 246 sub-criteria;
 2. Collecting data from 30 European software companies (2022–2023);
 3. Descriptive analysis to assess levels of readiness and identify key patterns.

Methodological Objectives

- Assess the social reporting capabilities of software companies;
- Identify major drivers and barriers in practice;
- Propose directions for improving the framework and aligning SSR capabilities with emerging EU regulations (CSRD/ESRS).

3.2 Research Subjects and Data Collection

Sampling Criteria

- Sample Size: 30 software companies listed or disclosing ESG information publicly in Europe (during 2022-2023).
- Selection Criteria: Companies must have publicly available data on their social sustainability reporting practices.

Data Collection

- Primary Sources: Financial reports and ESG/sustainability reports for 2022 and 2023 through SRN.
- Data Set:
 - Compiled SSR-related information corresponding to 246 framework criteria for each of the 30 software companies in 2022 and 2023.
 - Data recorded using a structured scoring sheet (Excel).

3.3 Assessment Framework and Data Analysis

3.3.1 Developing the SSR Readiness Framework

Reference Standards

- ESRS S1 – Own Workforce;
- GRI 2 – General Disclosures, GRI 401–406;

Framework Structure

- A total of 246 sub-criteria (reporting items), partially derived from ESRS/GRI standards, and partially adapted to the software sector context.
- 7 main indicator groups based on SRN Framework, each containing 2–3 mid-groups, reflecting specific social dimensions including:
 1. Workforce Characteristics
 2. Collective bargaining and social dialogue
 3. Compensation
 4. Training

5. Health and Safety
6. Work Life Balance
7. Human Rights

- A brief description is given on how the full list of 246 sub-criteria was organized into mid-level thematic groups (mid-groups) for analysis.

Rationale for Grouping

- Facilitates identification of thematic strengths and weaknesses;
- Enables multi-level readiness assessment – at the criterion, mid-group, and main group levels.

Scoring System

- Sub-criteria: scored 0 or 1 (No / Yes – information present);
- Mid-groups: scored from 0 to 3:
 - 0 = No information;
 - 1 = Criteria are mentioned but not quantified;
 - 2 = Specific data or bargaining is reported for one dimension (e.g., gender);
 - 3 = Comprehensive reporting, including bargaining across two or more dimensions
- Main groups: average of mid-group scores.
- Total score: average of all 7 main group scores.
- Each company's total score reflects a relative level of SSR readiness.

3.3.2 Data Analysis

Analytical Steps

- Score each company based on the framework;
- Aggregate scores by thematic group;
- Compare across companies to identify common patterns and notable differences.

Descriptive Statistical Techniques

- Means, frequencies, and standard deviations for total and group-level scores;
- Visualization tools (bar charts, radar charts, etc.);
- Identify salient factors and trends in SSR readiness.

3.4 Research Ethics and Methodological Limitations

Research Ethics

- Only publicly available and legally accessible data from official sources is used;
- No individual company is evaluated or criticized—the goal is to provide an industry-level analysis;
- Adheres to academic integrity and protection of potentially sensitive data (if applicable).

Limitations

- The sample is limited to 30 companies and may not represent the entire software industry;
- Data quality is dependent on the extent and clarity of each company's public disclosures;
- The framework remains in a preliminary stage and has not been internally or externally validated.

Chapter 4

FINDINGS AND ANALYSIS FROM EMPIRICAL RESEARCH

4.1 Overview of SSR Readiness Across the Sample

Sample Overview

- This section provides a brief description of the 30 software companies included in the sample, covering:
 - Geographic distribution
 - Company size (small, medium, large)
 - Status of ESG/SSR report disclosure

Table 4.1: Basic Information of Sampled Companies (Appendix A)

Company	Country	Size	Status of ESG & SSR report disclosure
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Table 4.2: Sample Classification by Region and Company Size (Appendix B)

Region/Size	Number of Companies	SSR Readiness Score
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Overall Results

- SSR readiness scores across the sample range (to be completed with data).
- There is substantial variation in average scores across companies and countries.

Table 4.3: SSR Readiness Score for Each Company

Company	Score accounting sub-sectors (0-246)	SSR Readiness Score (0-3)
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Figure 4.1: Histogram/Bar Chart of Readiness Score Distribution

Table 4.4: Average Readiness Score by Country

Country	Average Readiness Score
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4.2 Readiness by Company Characteristics

Comparison of readiness based on:

- Company size (SMEs vs. large)
- Geographic location (Western vs. Central & Eastern Europe)
- Business model
- ESG disclosure status (presence of standalone ESG report)

Table 4.5: Readiness Score by Company Characteristics

Attribute	Number of Companies	Average Readiness	Std. Dev.
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Figure 4.2: Bar Chart Comparing Readiness by Attribute Groups

4.3 Analysis by the Framework Categories

Readiness across thematic groups: (To be altered by further analysis)

- Workforce Characteristics: Key themes across all categories
- Collective Bargaining and Social Dialogue: Often limited or absent in SMEs
- Compensation: Commonly disclosed and relatively easy to quantify
- Training and Development: Present but rarely detailed with clear metrics
- Health and Safety: Frequently addressed, though metrics vary
- Work-Life Balance: Mentioned, but coverage is often vague
- Human Rights: Unevenly addressed; more prevalent in larger firms

Table 4.6: Readiness by Main Groups (Appendix C)

Figure 4.3: Bar Chart of 7 Main Group Readiness (Appendix D)

Readiness by Mid-Groups

- Each main group is further divided into mid-groups, which provide more granular insights into specific reporting areas.
- Mid-groups reveal strengths and weaknesses within each thematic category, highlighting areas for improvement.

Table 4.7: Readiness by Mid-Groups (Appendix E)

Figure 4.4: Bar Chart of Mid-Group Readiness (Appendix F)

Top and Bottom Reporting Sub-Criteria

- Identify the top 5 sub-criteria with the highest reporting rates (e.g., >70%).
- Identify the bottom 5 sub-criteria with the lowest reporting rates (e.g., <30%).
- Discuss potential reasons for these patterns, such as ease of measurement, stakeholder demand, or sector norms.

Table 4.8: Top 5 Highest and Lowest Reporting Sub-Criteria

4.4 Empirical Drivers and Challenges

Key Drivers of Reporting Readiness

- Sub-criteria and mid-groups with high disclosure rates (e.g., >70%) indicate areas where reporting is either well established, easy to quantify, or commonly requested by stakeholders.
- These drivers include elements such as compensation transparency, health and safety incidents, and DEI statements.
- Their structure, familiarity, or measurability contribute to higher readiness.

Key Challenges Hindering Reporting Readiness

- Low-scoring criteria (e.g., <30% disclosure rate) signal inherent challenges.
- These include vague or qualitative dimensions (e.g., collective bargaining quality, freedom of expression), lack of existing frameworks (e.g., social dialogue outcomes), or sensitivity of topics (e.g., grievances, wage gaps).
- These challenges hinder readiness not because companies refuse to report, but due to structural complexity, ambiguity, or lack of metrics.

Table 4.9: Summary of Key Drivers and Barriers

Category	Description	Number of Companies
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4.5 Summary of Findings

- Strong and weak reporting categories
- Factors positively/negatively affecting SSR readiness
- Prepares for discussion

Chapter 5

DISCUSSION ON EMPIRICAL RESULTS

5.1 Summary of Key Findings

Brief recap of key results from Chapter 4:

- Average SSR readiness among the 30 companies
- Strongest and weakest thematic categories
- Differences across company groups (by size, geography, etc.)
- Unexpected or counterintuitive observations

5.2 Theoretical Interpretation of Drivers and Barriers

5.2.1 Drivers of Social Sustainability Reporting Readiness

Table 5.1: Drivers of SSR Reporting and Theoretical Interpretation

Driver	Theoretical Interpretation
Regulatory pressure from CSRD, EFRAG, SEC	Institutional Theory: Coercive pressure driving behavioral change
Demands from customers and large investors	Stakeholder Theory: Stakeholder expectations incentivize transparency and reporting quality
Talent shortage → SSR used for employer branding	Stakeholder & RBV: SSR becomes a competitive advantage in recruitment and reputation
Large firms with clear ESG leadership	RBV: Strong organizational capabilities, leadership, and ESG integration into strategy

5.2.2 Barriers of Social Sustainability Reporting Readiness

Table 5.2: Industry-Specific Challenges and Theoretical Interpretation

Challenge	Theoretical Interpretation
Difficulty in collecting and standardizing non-financial data	RBV: Reflects lack of systems, tools, and personnel—organizational capabilities not yet developed
Informal labor, globalization, remote work	Institutional Theory: Fragmented settings weaken legal coherence and coercive pressure
Lack of sector-specific social standards	Institutional Theory: Normative pressure is underdeveloped; no established "social norms" for the sector
SMEs lack ESG budget/personnel	RBV: SMEs often lack the strategic resources to build internal reporting capabilities

5.3 Implications for Practices

For Businesses

- SSR should be viewed not merely as compliance but as a strategic investment in long-term competitiveness (Barker 2025)
- There is a need to improve the quality of reporting and avoid symbolic or superficial disclosures (Nava 2023)
- SMEs may consider cost-sharing solutions: industry coalitions, standardized tools, and shared digital resources (Najjar 2024)

For Policymakers

- Develop sector-specific SSR guidance, particularly for technology services
- Support SMEs through simplified tools, training, tax or financial incentives
- Promote open APIs and standardized formats (e.g., SRN) to enhance comparability and transparency

For Standard-Setters and Rating Agencies

- Refine social indicators tailored to the digital sector (e.g., DEI, personnel data protection)
- Clarify materiality thresholds to reduce ambiguity in reporting

5.4 Academic Contributions

- Extends ESG research into the software industry, a largely underexplored area
- Develops a transferable SSR readiness framework applicable to other service sectors
- Integrates three organizational theories in a complementary way to explain ESG reporting behavior

Chapter 6

SUMMARY AND CONCLUSIONS

6.1 Research Summary and Conclusions

Research Summary (Proposal)

The primary aim of this research was to develop and apply a Social Sustainability Reporting (SSR) readiness framework tailored to the European software sector. The research process involved:

- Designing a comprehensive framework comprising 246 criteria based on established standards;
- Systematically scoring 30 software companies over the period 2022–2023;
- Analyzing SSR readiness patterns across thematic groups;
- Identifying key drivers and challenges influencing SSR implementation within the sector.

Key Conclusions (Proposal)

- **Overall Readiness:** The analysis revealed that overall SSR readiness among the sampled companies remains moderate, with substantial variation across organizations.
- **Strongest and Weakest Thematic Groups:** The strongest thematic categories were related to workforce characteristics and health and safety, while collective bargaining and social dialogue showed the weakest readiness.
- **Key Drivers:** Key enablers of SSR adoption included regulatory pressure (e.g., CSRD), stakeholder expectations (e.g., from clients or investors), and reputational benefits tied to ESG positioning.
- **Major Challenges:** Primary barriers identified were resource constraints, the absence of standardized social metrics, and a lack of tailored guidance for the software services sector.

Unique Sector Traits

- The software sector exhibits distinct characteristics compared to other industries, including:
 - Rapid innovation cycles;
 - Intangible value creation (e.g., through intellectual capital);
 - Heavy reliance on digital infrastructure.
- These traits significantly influence how SSR practices are implemented and prioritized.

6.2 Contributions of the Study

Academic Contribution

- **New Perspectives:** Provides new insights into SSR readiness within digital service industries, emphasizing sector-specific challenges and opportunities.
- **Theoretical Synthesis:** Applies a multi-theoretical approach (Institutional Theory, Resource-Based View, and Stakeholder Theory) to explain variations in SSR readiness across companies.

Practical Contribution

- **Usable Framework:** Introduces a simplified and practical SSR readiness framework that enables software companies to assess their status and identify improvement areas.

6.3 Recommendations

- **For Companies:**
 - Treat SSR as a strategic capability;
 - Invest in data infrastructure and assign dedicated personnel;
- **For Policymakers and Standard-Setters:**
 - Develop SSR standards tailored to the software/services sector;
 - Provide support for companies through model reporting tools and open data platforms (e.g., APIs).

6.4 Research Limitations

- **Sample Size:** The study is limited to 30 companies, all based in Europe.
- **Framework Testing:** The SSR readiness framework is preliminary and has not yet been tested widely.
- **Data Sources:** Only publicly available data were used; no interviews or internal data were collected.

6.5 Suggestions for Future Research

- **Expand Sample and Coverage:** Future studies should include more companies and extend to non-European regions.
- **Cross-Industry Application:** Apply the framework to related service sectors to test generalizability.
- **Validation Methods:** Incorporate surveys or expert interviews to validate the framework's design and scoring logic.
- **Statistical Analysis:** Conduct advanced statistical analyses to explore correlations between SSR readiness and business or ESG performance metrics.

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