Social Sustainability Reporting Readiness in Software Services: Drivers and Challenges

Bachelor Thesis

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ABSTRACT

Your abstract goes

Contents

List of Figures

List of Tables

1. INTRODUCTION

You have to **submit the Bachelor's thesis** on the submisson date to the department. This is the introduction chapter. Write your content here.

It should provide an overview of your research topic, the problem statement, and the objectives of your study. Discuss the significance of your research and how it contributes to the field.

1.1. Background

Provide background information on your research topic. Explain the context and relevance of your study. This section asd should help the reader understand why your research is important and what led you to choose this topic.

1.2. Problem Statement

Clearly articulate the problem that your research aims to address. Discuss the specific issues or challenges that exist in the current literature or practice. Explain why these problems are significant and worth investigating.

1.3. Objectives

The choice of 2023 as the temporal focus of this study is closely linked to the institutional context. While the Corporate Sustainability Reporting Directive (CSRD) formally entered into force in January 2023, companies are required to disclose in line with the European Sustainability Reporting Standards (ESRS) for fiscal years starting on or after January 2024. Thus, 2023 represented a preparatory phase in which firms faced rising institutional pressure, whereas 2024 marks the first mandatory reporting cycle. This transition reflects the increasing coercive institutional forces that shape companies' readiness for social sustainability reporting.

Social pillars include employment, labor relations, diversity, occupational health and safety, and human rights (Fiechter 2022; Edge 2022).

2. Literature Review and Theoretical Framework

2.1. Prior Literature on Social Sustainability Reporting

Sustainability reporting can be understood under various definitions, including corporate social responsibility (CSR), extended external reporting, and ESG reporting (Edge 2022). As defined by (Rasche et al. 2017), CSR is the integration of social, environmental, ethical, and philanthropic responsibilities into business practice. Meanwhile, the concept of ESG stands for Environmental, Social, and Governance (**UNGlobal2024**). According to (**Krivogorsky2024**), three components of sustainability reporting can be associated with three main drivers of sustainability, namely the reporting entity, society and ecology. Across these approaches, the social dimension consistently emerges as a core aspect (**UNGlobal2024**; **Krivogorsky2024**; Rasche et al. 2017), covering issues such as employment, working conditions and human rights (Fiechter et al. 2022; Morais and Silvestre 2018).

Several regulations and standards have been developed to provide a basis for social sustainability reporting. Among these, the Global Reporting Initiative (GRI) is regarded as the most widely used framework by companies worldwide (Bais et al. 2024; Oorschot et al. 2024). According to GRI 401-406, companies disclose a wide range of social aspects, such as employment, workplace conditions, equality issues and non-discrimination. Marking a significant step forward, the European Sustainability Reporting Standards (ESRS) broaden this scope and make disclosure mandatory. The European Commission adopted the ESRS in July 2023 under the Corporate Sustainability Reporting Directive (CSRD). These standards oblige companies to report on impacts concerning the workforce (S1), value chain workers (S2), affected communities (S3), and consumers and end-users (S4).

Despite these regulatory developments, prior studies show that the social pillar remains underdeveloped within sustainability reporting practices. According to Heldal et al. (2024), the social dimension has not received adequate attention. This can be explained by **Sharma2024**, who argue that social data is a critical but often neglected component of sustainability reporting. Similarly, Morais and Silvestre (2018) point out that the social pillar remains vague, difficult to quantify, and less prioritized than environmental issues. This view is reinforced by Berg et al. (2022), who demonstrate lower inter-rater consensus on social indicators compared to environmental ones.

2.2. Prior Literature on SSR Readiness

Most prior research examines the extent to which firms comply with the GRI Standards when issuing sustainability reports (Fonseca et al. 2014; Vigneau et al. 2015). This emphasis is to be expected, as the GRI has represented a pioneering initiative in defining a common foundation that enables companies to develop stakeholder-oriented sustainability reports (Carungu et al. 2025; Dumay et al. 2010). In 2023, GRI and EFRAG released a draft Interoperability Index to help preparers align GRI Standards with ESRS disclosure requirements in detail (GRI and EFRAG 2024). Given this close interrelation, this study begins by reviewing prior literature on GRI-based compliance in sustainability (CSR) reporting, which provide a basis for the analysis of SSR readiness.

For example, Ehnert et al. (2016) employed the GRI guidelines as an analytical framework to assess aspects of Sustainable Human Resource Management (HRM). The study shows that companies tend to report more extensively on their internal workforce compared to their external workforce (Ehnert et al. 2016). Meanwhile, issues related to collective labor rights are often underreported, as firms exploit gaps in the GRI standards—particularly in disclosures 402 and 407 (Waas 2021). Consistently, Parsa et al. (2018) found that transnational corporations failed to comply with GRI's "labour" and "human rights" reporting guidelines. Similarly, the quality of information disclosed on occupational health, safety (OHS), and employee well-being remains generally low (Mariappanadar et al. 2022). Specifically, Mariappanadar et al. (2022) highlight that firms often provide only generic and anecdotal disclosures to meet GRI requirements, rarely translating their claims into measurable outcomes. In line with these findings, Chauvey et al. (2015) also demonstrate that the quality of human resource-related reporting remains relatively poor.

At present, the introduction of the ESRS shifts attention toward firms' readiness to meet more comprehensive and mandatory reporting requirements. However, most prior studies have addressed overall sustainability or CSR reporting readiness, but have not examined social pillar readiness in isolation. Current research provides only limited empirical insights into the extent to which companies are adjusting to the new sustainability reporting requirements. Notable exceptions are Nicolo et al. (2025), who examined early compliance with ESRS disclosure requirements among Italian listed firms and identified key firm-level drivers of adaptation, and Leal Filho et al. (2025), who assessed the readiness of 20 firms drawn from a cross-sectoral sample of EU companies. Nicolo et al. (2025) reports relatively high levels of early compliance with ESRS requirements among firms falling within the scope of the Omnibus Package. Whereas, Raimo et al. (2025) documents relatively low overall levels of pre-compliance, particularly in integrated reports. Leal Filho et al. (2025) and Milanés-Montero et al. (2025) likewise reveal that disclosure, especially among SMEs, remains limited, due to the absence of concrete metrics, verification mechanisms, and external assurance. Overall, prior studies have focused on sustainability reporting in general and highlighted industry environmental sensitivity as a key determinant of readiness (Leal Filho et al. 2025; Raimo et al. 2025; Nicolo et al. 2025; Milanés-Montero et al. 2025). Specifically, these studies have focused on environmentally intensive sectors such as oil and energy (Leal Filho et al. 2025; Raimo et al. 2025; Nicolo et al. 2025), while techonology industry has received only limited attention (Milanés-Montero et al. 2025).

2.3. Theoretical frameworks

This study employs theoretical frameworks to interpret the drivers and barriers shaping firms' preparedness. Prior studies have highlighted the importance of theoretical perspectives in the study of sustainability reporting (Del Gesso and Lodhi 2025; Rezaee 2016; Lozano et al. 2015). Within the wide range of theories applied in this field, Institutional Theory and Legitimacy Theory are among those frequently employed.

2.3.1. Institutional Theory

Institutional Theory is widely applied in sustainability reporting research (Campbell 2007). This theory explains how organizations adapt to social, political, and economic environments through institutionalized practices (Meyer and Rowan 1977; DiMaggio and Powell 1983). It emphasizes how coercive, normative, and mimetic pressures shape organizational behavior.

Coercive pressures stem from formal laws, regulations, and mandates, as well as from powerful stakeholders, such as governments, regulatory agencies, or large customers. For instance, the European Union's Corporate Sustainability Reporting Directive (CSRD) and the accompanying European Sustainability Reporting Standards (ESRS) impose mandatory disclosure requirements on social, environmental, and governance dimensions. Firms, including those in the software services sector, face coercive pressure to comply with these standards, as non-compliance could result in legal penalties, reputational damage, or restricted access to markets.

Normative pressures arise from professional standards, ethical expectations, and industry-specific norms. Firms experience these pressures when stakeholders, including investors, clients, employees, and industry associations expect organizations to follow best practices in social responsibility and sustainability reporting. In the context of software services, normative pressures manifest through expectations for transparent disclosure of workforce-related metrics such as employee training, diversity and inclusion, labor conditions, and occupational health and safety. Professional networks and industry consortia often establish benchmarks or guidelines, which further reinforce these normative pressures.

Mimetic pressures occur when organizations emulate peers, competitors, or leading firms in uncertain or ambiguous environments. In sectors characterized by intangible assets and rapid technological change, such as software services, firms may lack clear guidelines on social reporting practices. As a result, they often look to industry leaders or larger firms with established CSR or ESG reporting mechanisms as models. Mimetic behavior helps firms reduce uncertainty and demonstrate alignment with perceived best practices, thereby reinforcing legitimacy among stakeholders.

Institutional theory has been widely applied to explain the adoption of corporate social responsibility (CSR) and sustainability reporting across industries. Previous studies suggest that organizations are motivated to adopt reporting practices not solely for intrinsic ethical reasons but to conform to institutional expectations and to signal legitimacy to stakeholders (Marquis et al., 2007; Campbell, 2007). Firms'readiness to implement social sustainability reporting frameworks, such as ESRS, can therefore be interpreted as a response to these institutional pressures. Adoption patterns may differ depending on firm size, ownership structure, international exposure, and prior experience with sustainability initiatives.

2.3.2. Legitimacy Theory

Legitimacy theory posits that organizations continuously strive to maintain congruence between their actions and the norms, values, and expectations of the society in which they operate (Suchman, 1995). This alignment, often described as a "license to operate," is essential for sustaining social acceptance, stakeholder trust, and long-term organizational survival. Legitimacy is not a static attribute but rather a dynamic construct that must be actively managed through organizational strategies, communication, and reporting practices.

Suchman (1995) categorizes legitimacy into three principal forms: pragmatic, moral, and cognitive. Pragmatic legitimacy emerges when stakeholders perceive that organizational actions serve their interests or provide tangible benefits. Moral legitimacy derives from the perception that an organization's actions are "the right thing to do" according to societal norms and ethical standards. Cognitive legitimacy is obtained when organizational practices are comprehensible, taken-for-granted, and aligned with prevailing societal expectations, such that they are seen as appropriate and inevitable. Organizations often navigate a combination of these legitimacy types to ensure broad stakeholder support.

In the context of corporate social responsibility (CSR) and sustainability reporting, legitimacy theory provides a robust explanatory framework. Organizations may adopt CSR initiatives and disclose information about social, environmental, or governance performance to signal alignment with societal expectations, maintain stakeholder confidence, and preempt criticism or regulatory scrutiny. This signaling function is particularly relevant when organizational activities are visible to external stakeholders or when past incidents have raised concerns regarding ethical conduct, social responsibility, or environmental stewardship. By strategically managing legitimacy through disclosure, organizations aim to reduce potential reputational risks, reinforce stakeholder relationships, and demonstrate accountability.

Legitimacy theory also elucidates why organizations may engage in selective or symbolic reporting practices. When the cost of substantive social or environmental action is high, or when stakeholders' expectations are ambiguous or inconsistent, firms may prioritize the appearance of responsible behavior over the implementation of substantive measures. This strategic use of reporting allows organizations to maintain perceived legitimacy without incurring the full costs associated with actual compliance or performance improvement. Such practices underscore the complex interplay between organizational behavior, societal norms, and stakeholder perceptions.

Academic research has highlighted the pervasive influence of legitimacy considerations across diverse sectors and organizational contexts. For instance, firms in high-visibility industries—such as finance, energy, and consumer goods—often engage in structured disclosure practices to demonstrate compliance with societal norms and to enhance their public image. Legitimacy theory explains not only the adoption of reporting mechanisms but also variations in reporting quality, transparency, and emphasis across different organizations, as firms calibrate their practices to match the expectations of key stakeholder groups.

Beyond the adoption of reporting practices, legitimacy theory emphasizes the dynamic nature of organizational legitimacy. Stakeholder expectations evolve over time, influenced by cultural, social, and regulatory shifts. Consequently, organizations must continuously monitor external expectations, assess the alignment of their actions with these norms, and adjust their strategies accordingly. Failure to do so can result in legitimacy deficits, reputational damage, or loss of market opportunities. Conversely, proactive management of legitimacy can confer competitive advantages, strengthen organizational resilience, and foster stakeholder loyalty.

In sum, legitimacy theory offers a comprehensive conceptual framework for understanding the motivations underlying organizational behavior in relation to societal expectations. By emphasizing the importance of social approval, stakeholder alignment, and ethical conformity, it provides scholars and practitioners with a lens to analyze how organizations justify their actions, communicate performance, and navigate the complex landscape of social responsibility. While the application of legitimacy theory can extend to specific industries and practices, this discussion focuses on its theoretical underpinnings, providing a foundation for later application in the analysis of sector-specific drivers and challenges for social sustainability reporting readiness.

2.4. Sectoral Characteristics and Reporting Practices in Software Services

The software services sector is a service-oriented industry that primarily provides intangible assets in the form of digital goods (Buxmann et al. 2015). Within this sector, the workforce plays a particularly crucial role (Buxmann et al. 2015). Investment in employee capacity development through training programs and certification initiatives has been shown to positively impact company performance in the global IT services industry (Chatterjee 2017). Furthermore, Nowak and Grantham (2000) emphasize that intellectual capital constitutes a core value of the software industry. This highlights why the software services sector has drawn significant attention in research related to CSR reporting (Holder-Webb et al. 2009).

The software industry has received particular attention in prior research examining the relationship between CSR reporting and financial performance (**Okafor2021**). However, social aspects, including employee relations and human rights ratings are not significantly associated with financial performance (**Okafor2021**).

To date, there remains a lack of empirical research specifically addressing the social pillar of CSR reporting within the software industry. For example, Holder-Webb et al. (2009) examined software companies within a sample of 50 firms across multiple industries in the United States. The results indicate that employment-related issues as well as health and safety are relatively well addressed in the software sector (Holder-Webb et al. 2009). In contrast, other social aspects, such as human rights and community engagement, are not reported in a comprehensive manner (Holder-Webb et al. 2009).

Moreover, the software industry experiences a rapid rate of technological change (**Li2010**). Such continuous changes require companies to rapidly adapt to new regulations, such as the ESRS.

Reporting on key aspects such as work environment, work-life balance, and training is often inconsistent and rarely comprehensive (Greig et al. 2021). Similarly, disclosures on gender diversity were limited and linked to worse gender pay gaps, suggesting a reputational motive (Huang and Lu 2022).

Bornar2025 highlights that certain variables, including Average Training, Employee Accidents, Total Accidents, Employee Turnover, Employees with Disabilities, and Employee Injury Rate, exhibit a significant relationship with firms' financial performance indicators. In contrast, factors such as Gender Pay Gap, Trade Union Representation, and Employee Fatalities do not appear to be financially material. Additionally, several indicators—namely Employee Satisfaction, Women Managers, New Women Employees, and Lobbying Contribution, seem to have potential financial relevance but are not yet mandated in reporting requirements. It has been found that mandatory disclosure requirements enhance social performance and that social and financial performance are positively associated.

In recent years, the importance of the social aspect within ESG has grown, according to **BaidJayaraman2022**.

Additionally, contemporary political events have reinforced the relevance of the social component in ESG frameworks (**She2022**).

Prior studies have highlighted persistent weaknesses in CSR report quality (Di Chiacchio et al. 2024), largely due to the scarcity of quantitative and monetary data (Michelon et al. 2015).

2.5. Prior Research on Drivers and Barriers of SSR Readiness

2.5.1. Drivers of SSR Readiness

3. RESEARCH METHODOLOGY

4. FINDINGS AND ANALYSIS FROM EMPIRICAL RESEARCH

5. DISCUSSION AND IMPLICATIONS

6. SUMMARY AND CONCLUSIONS

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