

# **Corporate Digital Responsibility – opportunities and obstacles for businesses and information systems research**

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## **1 Corporate Digital Responsibility – just a new buzzword?**

Responsibility has rarely been as prominent as it is currently and is the subject of numerous discussions on business ethics, morals, purpose management, sustainability, etc. This is by no means surprising considering an increasing maturity of digital technologies, the availability of computing power and data storage and the rapid rise of artificial intelligence (AI) which are defining and altering the demands on employees and managers as well as organizations and society. As AI continues to scale across industries and functions, it also instigates novel ethical, legal, and social issues (Mihale-Wilson et al. 2022). Delegating decisions and power to AI-based systems is inevitably linked with costs, particularly as their functions are often opaque and unobservable and thus frequently coined as a *black box* (Elliot et al. 2021). Yet, organisations are regularly not sensitised to the possible negative consequences or perils of an inadequate implementation and an unreflective use of these technologies. Thus, proper governance, risk management, compliance frameworks, and guidelines for digital technologies and AI which can lead to a more responsible use of these technologies are rarely considered (Giermindl et al. 2022).

Against this background, the concept of Corporate Digital Responsibility (CDR) has emerged. A literature review has shown that the number of publications and user enquiries on CDR has risen sharply. Before 2021, there were almost no publications on CDR in the Scopus and Web of Science databases (Bednárová & Serpeninova 2023). We believe that CDR can serve as a potential collaborative and organisational mechanism to navigate the increasing complexity, proposing guidance frameworks towards responsible corporate digital actions in preserving societal interests. However, this initially requires an intensive examination of CDR on the part of academia, but above all consistent implementation efforts on the part of companies. The purpose of this paper is to a) identify the need for research as well as open research questions for the Information Systems (IS) community and b) to highlight the implementation obstacles faced by companies.

## **2 Corporate Digital Responsibility – basics and research gaps**

Consistent with previous research, we define CDR as a "set of shared values and norms guiding an organization's operations concerning the creation and use of digital technology and data" (Lobschat et al. 2021). Thus, CDR incorporates "companies' extended responsibilities regarding the new opportunities and challenges that technology development and use can bring" (Mihale-Wilson et al. 2022). It is related to CSR which can be understood as "the policies and practices of companies that reflect business

responsibility for some of the broader societal good" (Matten & Moon 2008). Both concepts encompass the obligations that companies have to society and aim to minimise the negative impacts of their activities while maximising the benefits (Mihale-Wilson et al. 2022).

CDR needs to go beyond the traditional triple bottom line and embrace a quadruple bottom line that considers next to economic, environmental, social also technical dimensions (Ivancic & Huber 2018). We believe that the concept of CDR can be explored by combining deontological, utilitarian, and situational dimensions of ethics (Schüz 1999) and that these three perspectives are well suited to highlighting different requirements:

The *deontological approach* assumes that the ethical quality of an action is determined at least partly by the nature of it. This perspective emphasizes adhering to claims and demands. To ensure compliance with CDR, clear articulation of deontological principles (philosophies, values, norms) that outline long-term responsible corporate development are necessary. This requires defining a corporate purpose through negotiation processes involving all relevant stakeholders while considering digital developments both within and outside the company. The *utilitarian perspective* focuses on the consequences of actions to judge the ethical quality, weighing their impact on various internal and external dimensions of the corporation. To meet CDR requirements, thoughtful utilitarian impact assessments are needed to outline the company's development and consider the impact of actions on all environmental spheres. The company should promote corporate integration, considering all relevant stakeholders and surrogate stakeholders (e.g., future generations, the environment, and technology) (IISD 1992). The *situational perspective* refers to the contexts in which value judgments and consequence assessments are made (Crane & Matten 2007). CDR necessitates a deliberate design of situational contextual factors and the recruitment and development of employees with an open (digital) mindset. This, in turn, fosters a corresponding corporate culture that enables responsible long-term development. Relevant research gaps exist in all these three dimensions. Table 1 summarizes these potential research avenues and needs.

CDR Dimensions	Research Avenue	Research Questions
Deontological perspective Corporate Purpose	(1) How can CDR be effectively integrated into the organization's purpose and corporate mindset?	(a) How can CDR be <i>conceptualized</i> and measured? (b) How can CDR be <i>reflected</i> in the use of technology, digital products, and services design? (c) How can companies meet necessary changes in their <i>reasons for existence</i> and <i>purposes</i> without failing due to overriding transformation processes?
Utilitarian perspective Corporate Integration	(2) How can CDR be meaningfully considered in impact analyses of actions and their effects on stakeholder groups?	(a) How should <i>stakeholder integration</i> and <i>digital impact analyses</i> be designed strategically and organizationally? (b) How can the suitability and effectiveness of CDR efforts for different key stakeholder groups be <i>measured</i> ? (c) How does <i>colour washing</i> affect the <i>perceptions</i> and <i>decisions</i> of stakeholders?

Situational perspective Corporate Culture	(3) How to promote the development of a corporate culture that uses the potential of CDR without running the risk of hyper-digitization?	(a) Which <i>structures</i> need to be designed to develop digitalization potentials without overemphasizing technical aspects? (b) Which <i>recruitment</i> and <i>development</i> measures are necessary to get employees excited about digitization and make them fit without overburdening them? (c) How can the <i>risk</i> of euphoric digitalization be prevented, disregarding possible side effects, repercussions, and long-distance effects?
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Table. 1: Needs for further research (Ivancic & Giermindl 2023)

The concept of CDR represents a promising avenue for research that encompasses individual (employee/consumer), organizational, and societal perspectives. However, there are significant gaps in knowledge and, above all, implementation in this field, which are closely related to systemic constraints and downsides of companies.

### 3 Systemic constraints and self-interests

To date, CDR is only a voluntary commitment by organizations, just like corporate efforts to mitigate the negative impacts of digital technology use and to deal with digital technologies responsibly (Mihale-Wilson et al. 2022). However, companies do not always represent community interests in terms of *good* digital business practices and digital sustainability. Thus, they often fail to provide collaborative guidance on addressing social, economic, and ecological impacts on digital society (Elliot et al. 2021) as well as to develop sound and targeted strategies for different reasons:

Despite all the benefits and necessities of CDR, it is tempting for companies to exploit the possibilities of digitalization while abandoning fundamental ethical attitudes. They are pursuing self-interests when adopting and deploying new digital technologies and data analytics tools. For instance, they introduce data analytics applications (such as Microsoft Analytics) to effectively measure employee performance and engagement. As a result, employees are automatically monitored, and their performance analysed with potential detrimental effects for both organisations and employees (Giermindl et al. 2022). Further, organisations engage in colour washing for marketing purposes to mislead their stakeholders and to be perceived as eco-friendly and socially engaged (de Freitas Netto et al. 2020). This dilemma between company's self-interest and responsibility in turn gives rise to numerous tensions between a sustainable use of technologies and a possible gain in knowledge. Conversely, a responsible approach to digital technologies and analytics would mean that not everything that is technologically possible should be done and that companies would have to be sensitized to its perils (Giermindl et al. 2022).

Further, since companies traditionally work with limited resources, the introduction of CDR in daily business depends on whether and which measures and activities eventually pay off. As described above, however, the measurement of the suitability and effectiveness of CDR activities is still in its infancy. Consequently, systemic constraints and the external

environment often force companies to exploit the potential for increasing profits to the neglect of other values. Precisely because of these constraints and interests, the question arises as to whether it is sufficient to hold only companies responsible or whether it is expedient to leave the decision to assume digital responsibility to them? This in turn gives rise to various approaches to promoting CDR based on different levers.

#### **4 CDR push and pull mechanisms**

From a strategic perspective, the outside-in perspective of the *market-based view* classifies firms as passive market elements whose strategies are driven by market needs. This implies a demand for CDR within the business environment. Corresponding power and responsibility to act can be located on the part of customers, other stakeholders, civil society and (supra-)governmental institutions. Thus, due to various public, competitive, and industry-specific factors, all organisations will sooner or later feel the pressure to engage in CDR activities (Lobschat et al. 2021; Mihale-Wilson et al. 2022). On the other hand, the inside-out perspective of the *resource-based view* emphasises strategy formulation based on resources, knowledge, and skills. As a result, CDR can become a specific capability of the company that helps to optimise costs and realise advantages in markets and social spheres. As organisations gradually realise that CDR, like CSR, will soon become a strategic competitive advantage (Mihale-Wilson et al. 2022), it becomes a key management task and an essential responsibility of (sustainable) leadership.

These fundamental drivers can be used to identify points of contact for promoting CDR, ranging from business and civil society to interest groups and (supra-)governmental institutions. As a *pull approach*, the creation of a global authority, such as the US Better Business Bureau (Schüz 1999), with the capacity to monitor, audit and sanction, could be conducive. Effective implementation of a *CDR push* involves the rigorous application of value-based management principles. This builds a foundation of trust with stakeholders by maintaining a balanced relationship and creating stakeholder value, which leads to sustainable competitive advantage and is therefore consistent with the systemic logic of business. Another approach to promoting ethical behaviour among different stakeholders is to emphasise the importance of CDR through communication, creating both demand pull and push pressures. All these approaches are suitable for promoting essential developments within organisations, such as customer orientation, value creation, innovation, and social responsibility, to fulfil the responsibility towards society.

#### **5 Conclusion**

Ultimately, it is the responsibility of individuals in their various roles within institutions, governments, companies, etc. to drive the desired developments and ensure full compliance with CDR. IS researchers can help fill research gaps, raise awareness, educate, and provide concrete suggestions and guidance on how companies can implement CDR in their day-to-day operations. We hope that close collaboration with different companies in the areas of research, consultancy, services, education, and training will lead to significant progress in

the implementation of CDR. In this way, a critical mass can be achieved through a multiple nucleus approach to drive the necessary change. By exploring how to maximise the benefits of digital technologies while minimising their negative impacts, the IS community can make a significant contribution to an issue of great social and economic importance.

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