


# Chapter 4

## Corporate Digital Responsibility and Smart Infrastructure for Advancing Sustainable Development Goals

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### **ABSTRACT**

*Over the years, a number of organizations from different countries are working towards meeting Sustainable Development Goals (SDGs), and as time passes by their efforts are increasing in that direction. This is also because of the realization over the decades that fast aimless development while considering short term goals is disastrous not only for humans but for the whole planet. So, it is also important to talk about Corporate Digital Responsibility (CDR) of organisations when digital and smart technologies are leading the development of the mankind, while considering Smart Infrastructure to support such technologies and advancements. This chapter will explain how Smart Infrastructure as well as CDR must be incorporated in fulfilling the SDGs. Then, the current gaps in the literature will be talked about. The possible considerations in CDR will also be discussed along with possible*

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*types of Smart Infrastructures which are essential in the long-term development. Then, some case studies as well graphical analysis will be done, to understand the future of CDR and Smart Infrastructure in the context of SDGs to support the study.*

## **INTRODUCTION**

These days, there is a growing body of specialists acknowledging the overwhelming importance of sustainability and supporting the crucial role of the Corporate Digital Responsibility (CDR) and the smart infrastructure for advancing the Sustainable Development Goals (SDGs) at a global level (Acharya, 2022; Acharya, 2021). Hence, there is a growing consensus among experts that the CDR and the smart infrastructure are pivotal in driving sustainable development, ensuring the future of humanity, and, additionally, creating endless connections with the environment (Wang & Wang, 2025; Weber-Lewerenz, 2020).

A sustainability catalyst, CDR mainly refers to the ethical and responsible use of technology by corporations in times in which the main accent is positioned on digitalization and the intense use of the Internet (Wang et al., 2025a; Wang et al., 2025b). Although some would initially connect CDR with cybersecurity and data privacy, it needs to be remembered that CDR goes far beyond them. Numerous other aspects can be included here, as stated in the lines below (Šebestová & Popescu, 2022):

- First of all, the environmental impact of digital operations is an important part of CDR. In this matter, a good example that can be offered here is the energy use of data centres, which should be done in a responsible manner, tackling the needs of individuals and companies while focusing on sustainability and the good of the Planet (Yang & He, 2025; Yu et al., 2025).
- Second of all, CDR relies on the ethical artificial intelligence deployment and the algorithmic transparency which provide valuable connections between the people, the business environment, and the infrastructure depending on the way in which the artificial intelligence and the algorithms are being used (Zhang et al., 2025; Zhang & Mao, 2025). By centring on explaining to the individuals the connections that are created in this way by helping the environment and by supporting sustainable development will lead to a better understanding of how digitalization and technology could foster better and more secure lives for all (Zhang & Zhu, 2025; Zheng et al., 2025).
- Third of all, CDR is strongly interconnected with the way in which equitable access to the technology, in general, and to the digital technologies, in particular, is ensured (Hahladakis, 2025; Horgan et al., 2025). It is of great importance to support the digital inclusion which ultimately leads to the sustain-

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