# "CORPORATE DIGITAL RESPONSIBILITY MATURITY MODEL "

Aiste Rugeviciute[1,2], Vincent Courboulay[1*]

[1]L3i Laboratory, La Rochelle University, La Rochelle, France,
[2]Square Research Center, Square Management, Neuilly-sur-Seine, France

*Correspondence: aiste.rugeviciute@univ-lr.fr

# FINAL VERSION OF CDR MM

The final version of the CDR MM is comprised of 18 focus areas where an organization should develop its capabilities for CDR along the following 5 dimensions:

1. CDR governance – includes the organization's commitment to CDR, CDR strategy, and its alignment with the broader sustainability strategy of the organization. It also involves the establishment of cross-functional governance mechanisms to ensure that CDR initiatives are not confined to a single department but are deployed and monitored across the entire organization in a continuous manner. Additionally, compliance with both local and global regulatory frameworks is a consideration, as is a comprehensive risk and opportunities assessment related to digital business activities.

2. Workplace & Culture – defines the responsible practices adopted by collaborators as they use digital solutions in their day-to-day operations. Simultaneously it includes harnessing digitalization within the company to generate positive impacts. Central to this endeavor is the cultivation of a responsible digital culture through awareness initiatives, targeted employee training, supporting grassroot CDR initiatives, and implementing diversity and inclusion within digital solution teams.

3. IT assets management – includes digital assets employed by the organization to run its operational activities. It encompasses on-site infrastructure and networks, as well as Infrastructure as a Service (IaaS). It extends to the scrutiny of requirements, maintenance, and the decommissioning of employee-specific, shared, and industry-specific equipment so that the practices would adhere to CDR principles.

4. Digital Services – pertains to the entire life cycle of digital services created and provided by an organization for its internal and external clients. It encompasses responsible practices from questioning the need for solutions and their potential impacts, all the way to their design and development, and maintenance until they reach their end-of-life phase.

5. Ecosystems - covers the spectrum of procurement practices and supplier relationships. It further encompasses customer communications and considerations of scope 3 emissions. It also includes collaborative efforts, such as working with peers, academic institutions, and government partners, to collectively advance responsible digitalization practices.

Table 1 provides descriptions of each focus area perceived, by actors presently engaged in CDR discussions, as important to be considered when evaluating and implementing CDR actions. The concrete CDR actions and principles, grounded in a set of shared values and norms, should be tailored to the organization's specific operational context.
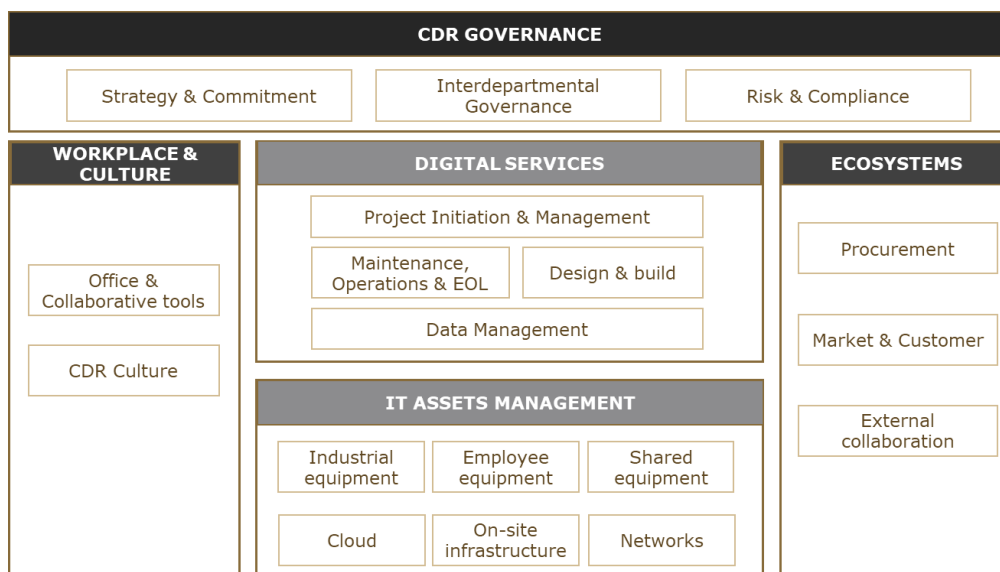
**TABLE 1 FOCUS AREAS OF CDR MM**

| | | |
|---|---|---|
| **CDR Governance** | Strategy & Commitment | Develop a shared CDR vision and strategy aligned with organisation's values and other internal strategies. Demonstrate the long-term commitment to CDR by dedicating enough financial and human resources to drive continuous improvement. Ensure that CDR objectives are communicated transparently with internal and external stakeholders. Identify new business opportunities that may result from CDR actions. |
| | Interdepartmental Governance | Include governance mechanisms to ensure and monitor that CDR would be applied in day-to-day processes across different business lines. Set up appropriate KPIs to measure the progress and impact of digitalisation within the whole company. Strive for "CDR by design" adoption across all teams. Require accountability for CDR decision making across the organisation. |
| | Risk & Compliance | Enable and demonstrate compliance with local and global legislation and regulation on CDR topics. Have mechanisms in place to evaluate and prevent digitalisation risks from a double materiality perspective (for business, employees, clients and society at large). |
| **Workplace & Culture** | Office & Collaborative Tools | Minimize the adverse effects on both the environment and the digital well-being of collaborators arising from the use of office and collaborative tools. Create provisions for digital solutions to enable positive CDR outcomes across the organization. |
| | CDR culture | Implement CDR principles, defined in CDR Governance, across the organisation through awareness and job-specific training, by putting in place participatory and collaborative mechanisms. Include collaborators in change management processes and encourage diversity and inclusion in digital service teams. Prioritise ongoing engagement, capacity building and continuous improvement on CDR topics. |
| **IT asset mas management** | Industrial equipment | Adopt internal policies and actions to operate and decommission industrial equipment, such as IoT or industrial printers, according to CDR principles. Continuously verify the need and utility of the equipment. |
| | Employee equipment | Adopt internal policies and actions to maintain and decommission employee equipment, such as laptops or company owned mobile phones, according to CDR principles. |
| | Shared equipment | Adopt internal policies and actions to operate and decommission shared equipment, such as printers or audio-visual equipment in conference rooms, according to CDR principles. Continuously verify the need and utility of the equipment. |
| | Cloud | Choose the IaaS or private Cloud providers adhering to CDR principles. Include mechanisms in place to monitor the real-time impacts of the usage of cloud services. |
| | Onsite Data Centres | Source, operate and dispose of equipment in own and co-located Data Centres in a way to reduce their negative impacts. Manage own Data Centre facilities (cooling, managing physical security, etc.) to reduce the negative impacts on the environment, collaborators and local communities. Ensure the minimum and necessary requirements to ensure the resilience of Data Centres. |
| | Networks | Ensure cybersecurity, manage network equipment and operate all type of networks (LAN, WAN, cellular, etc.) between different sites and entities so that their negative impacts on the environment would be minimized. |
| **Digital Services** | Project Initiations & Management | Put mechanisms in place to ensure that CDR principles are considered during business modelling and requirements gathering phase, as well as during the standardisation of digital processes. |
| | Maintenance, Operations & EOL | Adopt internal policies and actions to maintain, operate and decommission digital solutions according to CDR principles. Continuously verify the need and utility of the proposed solutions and functionalities. |
| | Design & Build | Design and build digital solutions for internal and external clients using responsible design principles. Adopt international standards and guidelines when possible. |
| | Data Management | Ensure that CDR principles are adopted in all stages of data lifecycle - from its creation and operation, to refinement and retainment. Adopt international standards and guidelines to ensure that data is used, especially in emerging technologies, such as AI, according to a shared set of values of the society. |
| **Ecosystems** | Procurement | Define and adopt responsible purchasing policies for each type of the product and digital service. Give preference to providers that have a proven CDR record and transparently share their progress. Have mechanisms in place that favour resiliency and flexibility to reduce dependency on a handful of providers. Work with suppliers to actively implement CDR principles across the entire value chain. Have mechanisms in place to continuously screen and monitor CDR performance of the main vendors. |
| | Market & Customer | Communicate in a transparent and ethical way with customers and ensure their fair treatment, aligned with CDR principles. Account for the impact of digital solutions on customers and generated by customers. Ensure the processes and governance mechanisms are in place to manage digital marketing practices, such as social media policies or new digital ways of targeting customers, aligned with CDR principles. |
| | External Collaboration | Work together with peers, academic, governmental and other actors to share, promote CDR practices and contribute to industry best practices. |

## MATURITY LEVELS

Building upon the SICT-CMF and Dörr (2021), as well as discussions with practitioners in the empirical development stage and insights for the Delphi study participants, 6 maturity levels are proposed:

Level 0: Non-existent. No CDR actions taken.

Level 1: Initial awareness. At this level, an organization has minimal awareness of CDR and is at the starting point of its CDR journey across all themes. There is no structured approach in place, and CDR-related activities are ad hoc. The organization lacks a clear understanding of CDR concepts, and there are no established policies or strategies. Accountabilities for CDR are not defined. The organization is just beginning to understand the relevance of CDR.

Level 2: Reactive measures. At this stage, an organization has taken initial steps toward CDR implementation. There is a recognition of the need for CDR, and reactive measures are in place in response to specific circumstances or external pressures. However, these measures are often inconsistent and lack a formalized and systematized approach. CDR is not yet fully integrated into the organization's strategy and operations.

Level 3: Proactive and standardized measures. The organization has embraced a proactive approach to CDR. CDR initiatives and policies are in place, and there is a growing emphasis on standardization and a structured approach. The organization has developed skills related to CDR across different themes. Capacity building, responsibilities, and resources supporting CDR practices are in place. Targets and metrics (KPIs) are tracked at a project level and CDR is becoming an integral part of the organization's operations.

Level 4. Continuous and measured improvement. The organization demonstrates a commitment to continuous improvement in CDR. A well-prioritized CDR policy is consistently integrated into the organization's operations and strategies. CDR progress is actively measured, and there is an ongoing effort to enhance CDR practices based on data-driven insights. The organization is focused on achieving excellence in CDR.

Level 5. Industry Leadership and Innovation. CDR is fully integrated into the organization's strategic planning and core business processes. There is an alignment between CDR goals and broader business objectives. The organization is an innovator in the field, implementing best practices, sharing their knowledge, and driving industry standards and legislation. CDR practices extend beyond organizational boundaries, involving customers, suppliers, and partners in responsible initiatives.



*Towards CDR maturity*
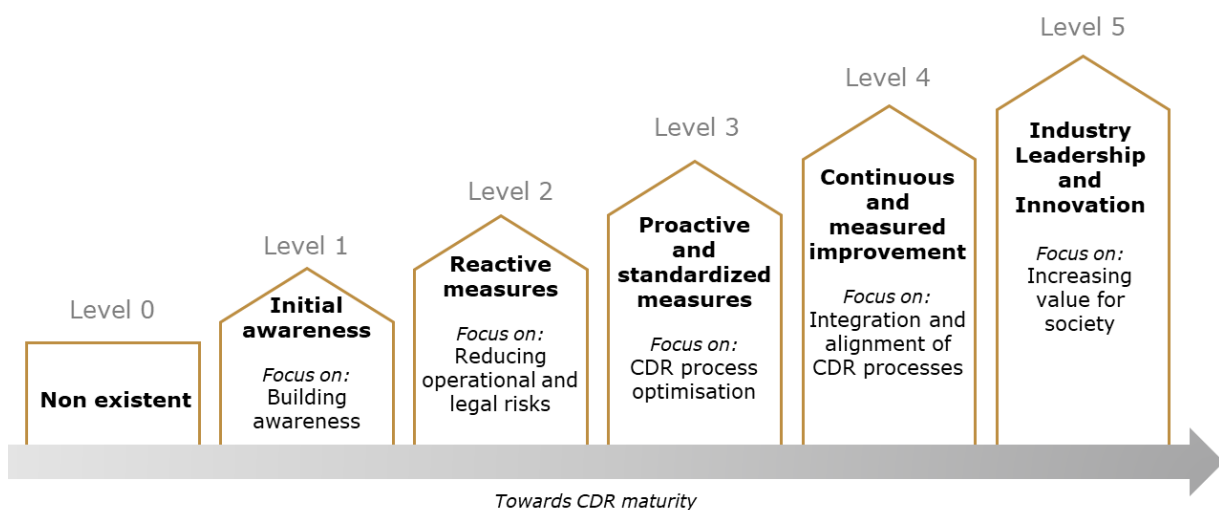
## METHOD OF APPLICATION

Both qualitative and quantitative measures can be used to assess CDR maturity. Our proposed model presents focus areas, deemed by actors currently involved in CDR implementation, as necessary to assess when evaluating CDR efforts. Notably, we have refrained from introducing specific, prescriptive questionnaires or best practices, as these must be tailored to the unique nature and context of each organization. The impacts of digitalization span a wide spectrum, with varying relevance to different organizations. Thus, an organization needs to define its CDR scope and identify the most important CDR principles for its business and stakeholders prior to employing the maturity model. The proposed descriptive model, designed with mutability in mind, serves as the foundational step in the development of more comprehensive frameworks, encompassing precise questions customized to specific contexts.