

RESPONSIBLE DATA OWNERSHIP: ADOPTION OF DIGITAL TWINS IN DIGITAL GOVERNANCE

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Digital Twin (DT) systems are sensor-coupled computational mirrors updated through IoT streams and predictive inference, enabling simulation, anomaly diagnosis, and system optimisation. India is scaling DT adoption via Digital India, Smart Cities, ABDM, and Industry 4.0 initiatives. While the DPDP Act 2023 governs consent and minimisation, India lacks statutory doctrine for autonomous-inference liability and DT-specific certification, unlike EU and UK audit-driven assurance models. This study highlights regulatory fragmentation and proposes BIS-MeitY led, auditable AI-DT certification pipelines for safe national deployment.
