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InfraVerse: Breaking boundaries for XR sustainability

Leveraging advanced BIM to revolutionize telecom infrastructure design, deployment, and maintenance for seamless, intelligent, and efficient networks.

The solution:

InfraVerse applies AI, drones, and telecom-specific building information modelling to digitize and accelerate infrastructure deployment—cutting cost, delay, and rework. By replacing static plans with dynamic, data-rich models, it gives CSPs a faster, smarter, and greener way to build the networks of tomorrow.

Addressing the challenge:

AI-driven, modular approach: Transforms telecom site planning and compliance through automation, digital twins, and remote collaboration, aligned with TM Forum standards.

Key components:

- **Digital Twin Generation:** Creates high-fidelity 3D site models using drones/scanners, enriched via TM Forum Open APIs.
- **AI & GenAI Intelligence:** Automates compliance checks, asset tracking, BOM, and documentation.
- **XR Remote Collaboration:** Enables real-time, remote site validation and design via Extended Reality.
- **Data Fabric & Automation:** Orchestrates workflows and automates field coordination, reporting, and document handling.

As Vodafone's Digital Strategy Lead, I'm excited about InfraVerse's potential to transform how we plan and manage networks. By automating 35% of site operations and cutting deployment costs by up to 40%, we'll accelerate 5G rollouts and indoor coverage—while reducing our carbon footprint.

Beyond Vodafone, this approach sets a new industry benchmark for autonomous networks, driving sustainable connectivity and bridging the digital divide in underserved communities.

Mostafa Helmy
Manager, Digital Strategy Network Development

vodafone

Business impact:

InfraVerse enables autonomous networks by **cutting emissions, reducing waste, and accelerating inclusive coverage** with digital twins.

Champions:

verizon vodafone

Participants:

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