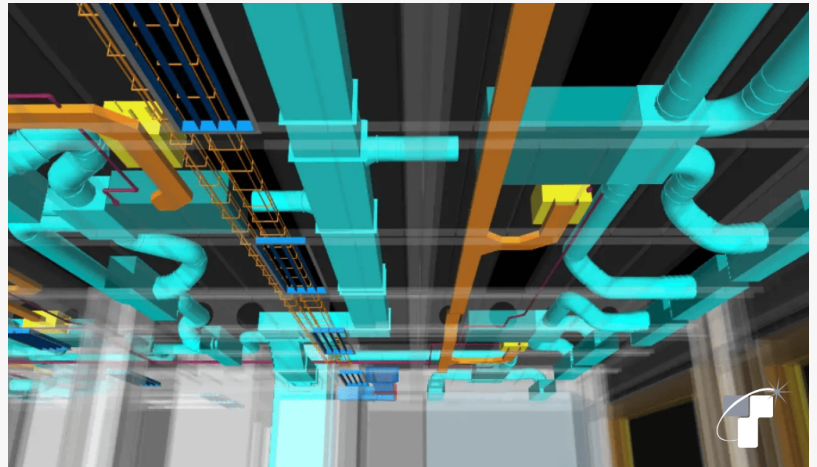


# Tesla Outsourcing Services LLC Applies Complex MEP BIM Expertise to High-Stakes Data Center Sector

*The firm's proven capabilities in coordinating critical facilities are perfectly suited for the zero-failure tolerance environment of modern data centers.*

CA, UNITED STATES, September 29, 2025 /EINPresswire.com/ -- As the global economy accelerates its reliance on cloud computing, AI, and big data, the construction of data centers has surged, creating a need for unprecedented levels of precision and speed. Tesla Outsourcing Services LLC is strategically applying its core

expertise in complex BIM to meet the intense demands of this ecosystem, providing the Building Information Modeling (BIM) essential for the successful delivery of these mission-critical facilities.



HVAC Coordination Of Data Centre

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In data center construction, there is no margin for error. A single clash can lead to millions in losses. Our mission is to ensure digital and physical perfection.”

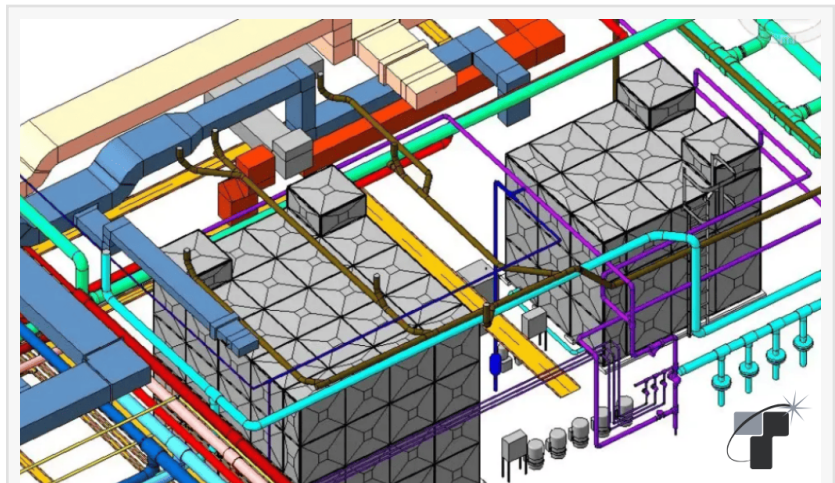
*Ketan Poojara, CEO of Tesla Outsourcing Services LLC*

Unlike conventional commercial buildings, data centers are less about architectural aesthetics and more about pure, high-density performance. They are complex machines housed within a shell, featuring an extraordinary concentration of mechanical, electrical, and plumbing (MEP) systems that must operate flawlessly 24/7/365. Leveraging its deep experience in coordinating high-density MEP systems for other mission-critical facilities like

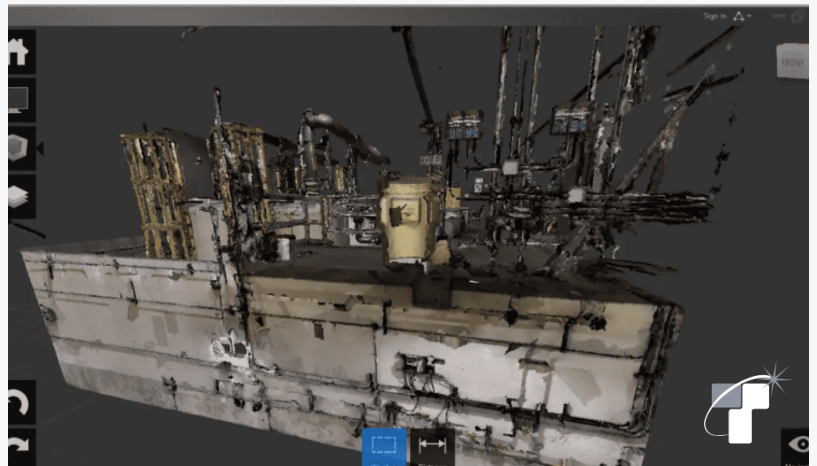
hospitals and industrial plants, the firm is uniquely equipped to manage the zero-failure tolerance required in data center projects. The engineering challenges are immense, involving intricate power redundancy systems, massive HVAC and liquid cooling solutions to manage extreme heat loads, and multi-layered security and fire suppression networks—all condensed

into a tightly confined space.

In this environment, traditional 2D-based planning is obsolete and dangerously inadequate. A misplaced cable tray, an improperly sized coolant pipe, or a ductwork clash with a structural beam are not minor inconveniences; they are project-derailing events that can cause catastrophic budget overruns and delay market entry for time-sensitive digital services. "The density of services within a data center is an order of magnitude greater than in a typical office tower," explains Prex Poojara, V.P. of Tesla Outsourcing Services LLC. "This creates a three-dimensional puzzle of extreme complexity. Our job is to solve that puzzle digitally, ensuring every single component fits perfectly and functions as intended before a single boot hits the ground. Our [MEP BIM services](#) are the foundational tool for achieving that certainty."



Sophisticated MEP-HVAC Coordination



As-Is Condition Scanning for Precise Point Cloud Modeling

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The core value proposition for data center developers and contractors is risk mitigation. The financial stakes are astronomical, and the tolerance for failure is zero. Tesla Outsourcing Services LLC addresses this need head-on through its rigorous BIM coordination and clash detection workflows. By creating a federated 3D model that integrates all architectural, structural, and complex MEP disciplines, the firm's specialists conduct a virtual construction of the entire facility. This process uncovers thousands of potential conflicts that would be impossible to foresee on 2D plans.

This proactive approach moves beyond simple hard clash detection (e.g., pipe hitting a beam). It identifies soft clashes (insufficient clearance for maintenance access), workflow clashes (scheduling conflicts between trades), and discipline-specific issues that could compromise performance. "A significant portion of our work involves creating highly detailed shop drawings directly from the coordinated BIM model," notes Bhagwati Pathak, COO. "This means that when fabricators create ductwork or pipe spools, they are working from data that is already proven to fit within the larger system. This seamless link from the digital model to the manufacturing floor



is what eliminates on-site rework and accelerates the construction timeline, which is paramount in this fast-paced sector."

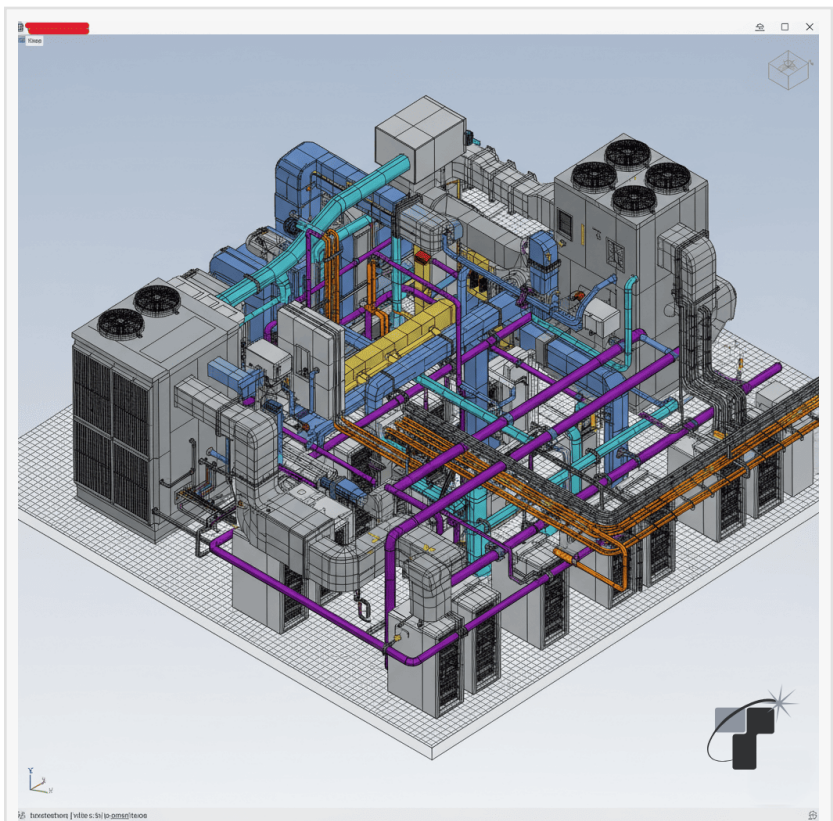
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The demand for new data center capacity is relentless, and construction timelines are highly compressed. To meet this need, Tesla Outsourcing Services LLC leverages its strategic operational structure, combining its main office in Albany, New York, with a large-scale, state-of-the-art drafting and production center in India. This global delivery model enables a 24-hour work cycle, where coordination reviews and model updates can occur overnight for US-based project teams.

This "follow-the-sun" model provides a significant competitive advantage, allowing for faster iterations, quicker problem resolution, and a more responsive workflow that aligns with the aggressive schedules of hyperscale build-outs. For general contractors and engineering firms, this means having a dedicated, [scalable team of BIM experts](#) working as a seamless extension of their own, driving the project forward around the clock without the overhead of maintaining such a large, specialized in-house team.

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As the data center industry continues to evolve, the BIM model created during construction is becoming an increasingly valuable long-term asset.



Detailed 3D BIM model of data center's internal HVAC and utility systems



3D BIM model of a data center campus with multiple buildings and external utilities

For existing facilities undergoing upgrades or expansions, the firm's [Scan to BIM services](#) provide the essential, millimeter-accurate as-built model needed to plan complex retrofits. Furthermore, the final, coordinated model serves as the foundational "Digital Twin" for the facility, supporting long-term operations, maintenance, and asset management. By providing this comprehensive, data-rich deliverable, Tesla Outsourcing Services LLC ensures that its clients are not only building for today's needs but are also prepared for the operational demands of tomorrow.

Tesla Outsourcing Services LLC is a premier provider of digital engineering solutions for the global Architecture, Engineering, and Construction (AEC) sector. Since 2007, the company has built a legacy of precision and reliability, completing over 5,000 projects for clients in more than 25 countries. Its team of 150+ dedicated BIM specialists and engineers utilizes cutting-edge technology to deliver a comprehensive suite of services, from initial design modeling to detailed construction documentation. With a commitment to international standards for information management, including ISO 19650, the team is dedicated to helping clients minimize risk, enhance collaboration, and achieve exceptional outcomes.

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