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COVER STORY



DIGITIZATION OF INDIA'S EV FLEET MANAGEMENT

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INNOVATIONS SHAPING
THE COMMERCIAL EV
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KNOW WHY

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MAKING AFFORDABLE
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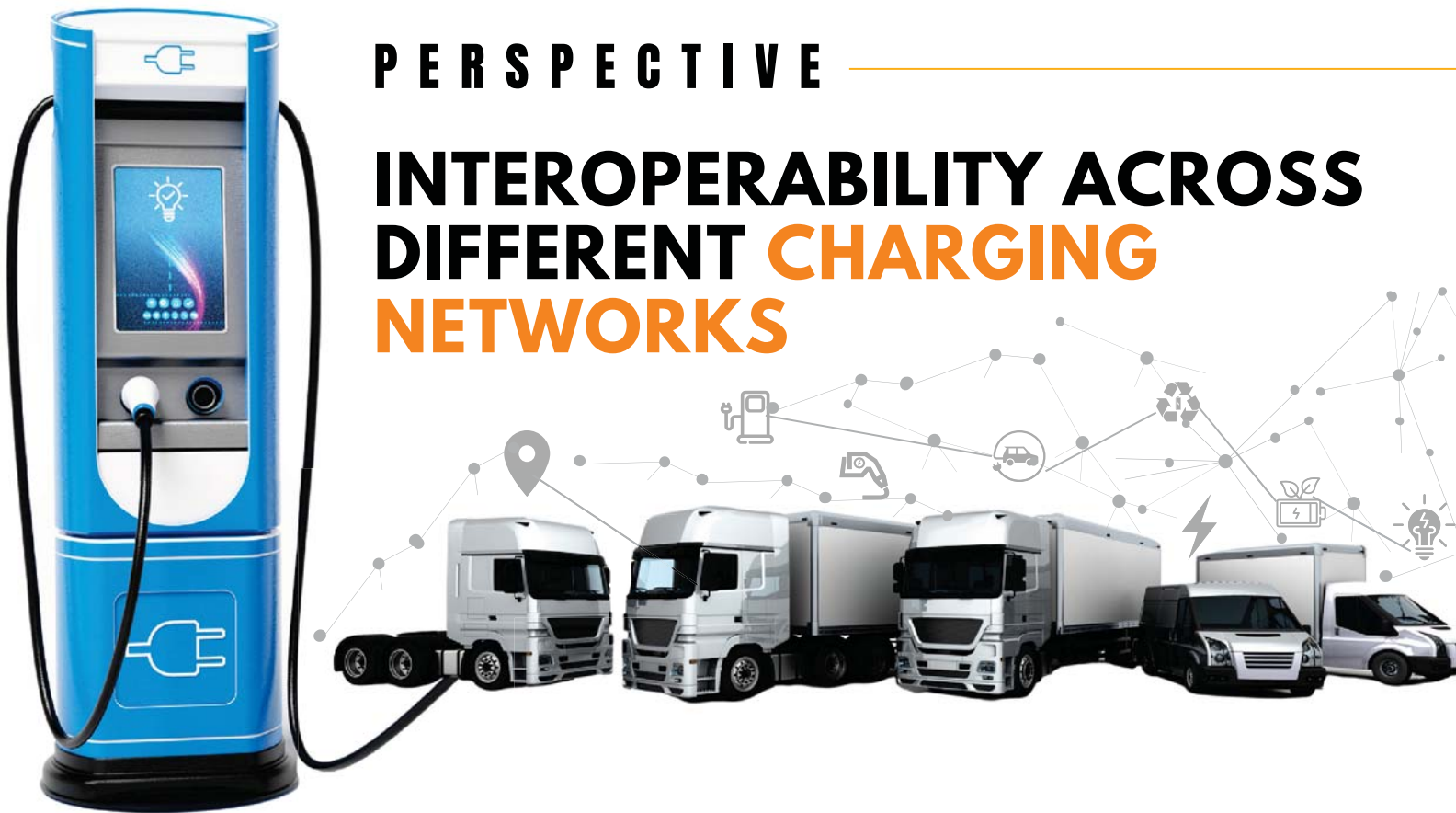
“Driving Towards
a Sustainable Future:
Our Vision and Mission
as a Leading EV
Charging Operator

ARJUN D PAWAR —
Founder & CEO
Nikol EV



PERSPECTIVE

INTEROPERABILITY ACROSS DIFFERENT CHARGING NETWORKS



As EVs gain prominence, it becomes increasingly crucial to address the challenges surrounding the charging infrastructure. One of the most significant hurdles faced by EV owners and stakeholders alike is the lack of interoperability across different charging networks.

Interoperability, the ability of different charging stations to communicate and interact seamlessly, is an essential aspect in promoting the mass adoption of electric vehicles. Currently, various charging networks are operated by different service providers, each offering distinct charging protocols, payment methods, and access systems. This fragmentation poses significant inconveniences for EV owners and creates barriers for EV adoption on a broader scale. In this context, KAZAM EV and Servotech have given their perspective on Interoperability on different charging networks in India.



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Discuss how charging infrastructure OEMs are adhering to international standards such as CCS (Combined Charging System) and CHAdeMO to ensure compatibility and ease of charging for EV users.

In the rapidly expanding EV industry, adherence to international standards such as CCS is crucial. These standards have gained significant traction globally, promoting interoperability and convenience in EV charging. Having multiple standards is a waste of time and money. The amount of money spent on supporting multiple standards could have been spent on supporting one good standard.

The EV charging industry has witnessed a shift towards widespread adoption of CCS (Combined Charging System) as the preferred standard. This transition is driven by several factors, including the

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growing popularity of CCS ports in EVs and the increased cost-effectiveness associated with having a single standardized port. CCS not only offers savings in vehicle manufacturing, whether due to the design of a common AC /DC connector or the lack of additional communication data lines as a benefit of the HomePlug Green PHY protocol, but it also has greater industry support and will eventually drive the charging industry to support the Winner. If we had to compare this to the mobile phones of the early 2000s and 2010s, CHAdeMO is the Nokia and losing the battle to Apple of charging, the CCS.

Every EV automaker now integrates CCS ports into their vehicles, making it the preferred choice due to its ability to cater to a broader range of EV models. This uniformity simplifies the charging experience for EV users, eliminating the need for multiple adapters or specialized charging infrastructure. As the industry progresses, charging infrastructure OEMs have recognized the market demand and prioritized CCS compatibility to ensure seamless and convenient charging solutions for EV users.

This industry-wide alignment with the CCS standard reflects the collective commitment to meeting the evolving needs of the EV market while streamlining operations and driving cost efficiencies. The adherence to international standards also boosts consumer confidence, encouraging the widespread adoption of electric vehicles. It is crucial for charging infrastructure OEMs to prioritize adherence to these standards as the EV market continues to grow, contributing to the successful transition to sustainable transportation.

By embracing the CCS standard, the EV charging industry avoids the pitfalls of multiple competing standards and ensures a more efficient and cost-effective charging infrastructure. This commitment to a unified standard, like the transition from Nokia to Apple in the mobile phone industry, positions CCS as the leading choice in the charging battle, overshadowing alternatives such as CHAdeMO. This strategic decision benefits EV manufacturers, charging infrastructure providers, and ultimately, EV owners by offering a streamlined and standardized charging experience.



Evaluate the progress made in establishing interoperability across different charging networks.

I am pleased to witness the progress made in establishing interoperability across different charging networks in the electric vehicle (EV) industry. The adoption of common standards like CCS has significantly improved compatibility between EV models and charging stations. Roaming agreements and open protocols such as OCPP have also played a crucial role in enhancing convenience and communication among networks. Collaborative efforts with international organizations have further harmonized standards, promoting interoperability. However, challenges remain, including the presence of competing standards and proprietary systems, the need to retrofit legacy infrastructure, and ensuring sufficient grid capacity. We recognize these challenges and are committed to working with industry stakeholders to overcome them and provide a seamless and interoperable charging network for the benefit of EV users worldwide.

