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Editorial



Mr. V V Shinde
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With the rapid advancement of technology and an increasing focus on sustainability, user expectations are evolving swiftly. For stakeholders in the mobility industry, from manufacturers to service providers, understanding and anticipating these expectations is essential for staying competitive in this dynamic market. Two fundamental aspects—reliability and durability—are key to meeting the high expectations of modern consumers and addressing the practical demands of the mobility ecosystem.

Electric vehicles (EVs) have captured both the public imagination and market share, driven by their environmental benefits, advancements in battery technology, and government initiatives. As EV adoption increases, the durability of both the vehicles and their supporting infrastructure will be crucial to maintaining consumer confidence and minimizing lifecycle costs.

The emergence of connected vehicles, which communicate with each other and with infrastructure via the Internet of Things (IoT), introduces new dimensions of reliability and durability concerns. Technology providers must prioritize cybersecurity measures, incorporating advanced encryption, regular software updates, and real-time threat detection to guard against vulnerabilities. Durable software architectures that can withstand continuous use and adapt to emerging threats are vital for maintaining the integrity and reliability of connected mobility solutions.

Effective fleet management is also essential for ensuring reliability. Regular maintenance schedules, real-time monitoring of vehicle health, and predictive maintenance technologies help extend the lifespan of shared vehicles. This not only reduces operational costs but also ensures reliable service for users.

Manufacturers are increasingly focusing on sustainable materials that offer long-term durability to reduce environmental impact. Innovations in materials science are leading to the development of composites and recycled materials that do not compromise performance.

This journal on mobility technology and its contributors provides valuable insights not only on reliability and durability but also on comfort, safety, and other sustainability aspects. I am confident that readers will find the articles in this ARAI journal useful for gaining insights into various aspects of mobility technology and advancing the automotive industry.

I extend my warmest wishes to each reader of this journal.

