



The future of mobility payments: A transition from challenges to solutions

As the need for physical money decreases, the future of mobility payments is rapidly evolving. Services such as parking, refuelling and in-store purchases at service stations are moving toward seamless and integrated payment systems. A notable example is Mercedes-Benz Mobility's Mercedes Pay Plus, leading the charge in transforming traditional payment models at stations with innovative in-car payment solutions.

In this dynamic environment, vehicles are becoming personal service centers, equipped with connected technology that enables personalized experiences through AI and ML algorithms. Cognizant's application of these technologies, as demonstrated with clients such as Aston Martin, particularly in racing scenarios, is integral to our

points of view on mobility and in-car payments. This document explores the journey from legacy payment systems to a visionary future, where Cognizant leads the way.

The challenges in mobility legacy systems

The mobility legacy payment systems pose a formidable challenge in today's digital era. They burden organizations with high maintenance costs, limit potential to innovate and adapt modern technologies, and fall short of meeting modern customer expectations. Here, we delve into these challenges and explore the path forward.

- **High maintenance costs and lack of flexibility:** Legacy systems often burden organizations with high maintenance costs and a lack of the agility needed for innovation, hindering the swift introduction of new products and services to the market
- **Inability to support new standards and technologies:** Existing systems struggle to keep pace with emerging payment technologies and standards, limiting adaptability
- **Failing to meet customer expectations:** Customers now expect seamless payment experiences, highlighting a significant gap in existing systems



Envisioning the future of mobility payments

Cognizant's vision for the future of mobility payments revolves around a transformation of payment platforms to ensure:

- **Support for new payment technologies¹:** Embracing digital wallets, QR codes, open banking and more to align with evolving customer (both B2B and B2C) preferences
- **Seamless customer payments experiences:** Prioritizing hassle-free and frictionless payment experiences for both B2C and B2B customers, setting new industry standards
- **Compliance with global standards²:** Ensuring alignment with international transaction laws and standards, emphasizing cross-border flexibility
- **Enhanced security³:** A strong focus on protecting customer data and transactions in an increasingly digital world
- **Integration with mobility platforms:** Embedding payment systems within vehicles and other platforms—to deliver streamlined and integrated services
- **Proactive revenue generation:** Utilizing data-driven insights to offer timely and relevant products and services, driving revenue and improving services
- **Scalability and innovation:** Creating systems that are scalable and conducive to continuous innovation
- **Reliability and support:** Maintaining a prominent level of reliability while providing comprehensive support

Unlocking the business opportunity with Cognizant

The urgent need for mobility payments transformation presents a significant business opportunity. Organizations that swiftly adapt to the future of payments gain a competitive edge in the market. By embracing Cognizant's support to define the right payments strategy and manage effective and efficient transformations from existing platforms to innovative solutions, businesses can:

- **Enhance customer loyalty:** Delivering seamless payment experiences boosts customer satisfaction and loyalty
- **Increase revenue:** Proactive revenue generation strategies tap into untapped market potential
- **Stay compliant and secure:** Aligning with global standards and enhancing security ensure risk mitigation
- **Lead in innovation:** Innovate continuously to remain at the forefront of the industry
- **Drive efficiency:** Streamlined payment systems reduce operational costs and increase efficiency
- **Expand globally:** Compliance with international standards facilitates global expansion opportunities

Defining mobility payment strategy excellence with Cognizant

As your partner in progress, we invite you to transcend the ordinary. Embrace excellence within your payments solutions. Forge ahead with confidence, knowing that your payment strategies are not just compliant but crafted for the future. Join us on this transformative journey—where innovation meets excellence, and every transaction paves the way for a more exceptional tomorrow. Partner with Cognizant, and together, let us shape the future of global payments.



Footnotes

¹Cognizant's approach to embracing new payment technologies is designed to align with the evolving preferences of both B2B and B2C customers. Cognizant is also focusing on:

- Central bank digital currencies (CBDCs): With numerous countries exploring or launching their digital currencies, CBDCs represent a significant shift in the monetary ecosystem. Cognizant works with clients and partners to deliver solutions that are geared to support transactions with these digital currencies, offering a seamless bridge between traditional financial systems and government-backed digital currencies.
- Non-fungible tokens (NFTs): As NFTs gain traction in various sectors, from art to real estate, their integration into payment systems opens new avenues for secure and unique asset transactions. Cognizant works with clients and partners to deliver platforms designed to accommodate NFT transactions, ensuring flexibility and security in handling these new digital assets.
- Other emerging technologies: Recognizing the rapid evolution in the payment sector, Cognizant works in partnership with clients to explore and integrate other emerging technologies and stores of value such as cryptocurrency payments, tokenization for enhanced security and blockchain-based transaction systems.

²Key examples include:

- ISO20022 standardization (Nexo): This global standard for electronic data interchange between financial institutions is instrumental in harmonizing payment traffic. Its adoption, as seen in Nexo standards for payment acceptance, ensures seamless and secure transactions across different geographies and systems.
- PCI DSS 4.0 (2024 implementation): The upcoming Payment Card Industry Data Security Standard (PCI DSS) version 4.0 brings enhanced security measures and flexible

approaches to compliance. This is crucial for safeguarding customer data and transaction integrity in an increasingly digital payment landscape.

- Additional regulations and standards: To future-proof our solutions, we are actively monitoring and integrating other significant developments such as GDPR for data protection and PSD2 for payment services in the European Union, and emerging with standards in digital identity verification and cryptocurrency transactions.

³In our commitment to protecting customer data and transactions in an increasingly digital world, Cognizant is focusing on advanced security measures that include:

- Strong customer authentication (SCA): In line with regulatory requirements like PSD2 in Europe, our systems incorporate SCA methods. This involves multiple verification steps for electronic payments, reducing the risk of fraud and enhancing transaction security.
- European digital identity and eIDAS: Cognizant aligns with the European Union's electronic identification (eIDAS) standards, facilitating secure cross-border electronic transactions. The integration of European digital identity systems enhances user verification processes, ensuring a high level of trust.
- Biometric authentication: Recognizing the growing need for secure and convenient user verification, Cognizant's solutions include biometric authentication methods such as fingerprint scanning, facial recognition and voice recognition. These technologies offer a balance of security and user-friendliness in transaction processes.
- Additional advanced measures: Alongside these, Cognizant is also incorporating end-to-end encryption, real-time fraud detection algorithms and blockchain technology to further fortify the security of our payment systems.

Authors

Stefano Montanari, Head of Retail and Consumer Goods – Stefano.Montanari@cognizant.com

David Smart, Senior Director Energy Consulting – David.Smart@cognizant.com



Cognizant (Nasdaq:100; CTSH) engineers modern businesses. We help our clients modernize technology, reimagine processes and transform experiences so they can stay ahead in our fast-changing world. Together, we're improving everyday life. See how at www.cognizant.com or [@cognizant](https://twitter.com/cognizant).

World Headquarters

300 Frank W. Burr Blvd.
Suite 36, 6th Floor
Teaneck, NJ 07666 USA
Phone: +1 201 801 0233
Fax: +1 201 801 0243
Toll Free: +1 888 937 3277

European Headquarters

280 Bishopsgate
London
EC2M 4RB, England
Tel: +44 (0)1 020 7297 7600

India Operations Headquarters

5/535, Okkiam Thoraiykkam,
Old Mahaballipuram Road,
Chennai 600 096
Tel: 1-800-208-6999
Fax: +91 (0)1 44 4209 6060

APAC Headquarters

1 Fusionopolis Link,
Level 5 NEXUS@One-North,
North Tower, Singapore 138542
Phone: +65 6812 4000