

Press Release

MARELLI INTRODUCES BLOCKCHAIN TECHNOLOGY TO BRING INNOVATION INTO AUTOMOTIVE SUPPLY CHAIN MANAGEMENT

[14 April, 2020]

Marelli has introduced the use of blockchain technology to enhance the management of automotive supply chains, creating a distributed peer-to-peer network to connect suppliers' and carmakers' plants around the world. The use of this technology – which is based on the real-time exchange of "blocks" of immutable and verifiable data – improves traceability of automotive components and raw materials, allowing for more efficient and reliable transactions and operations, bringing advantages to all the players in the value chain.

This important supply chain process innovation has been implemented in a joint project between Marelli Automotive Lighting and the BMW Group, who together designed and developed "PartChain", an application based on blockchain technology.

The "PartChain" application has been adopted, as a first step, for a pilot activity focused on the traceability of headlamps, rear lamps and lighting modules supplied by Marelli Automotive Lighting to a number of BMW Group vehicles. Three Marelli Automotive Lighting plants – located in Jihlava (Czech Republic), Tolmezzo (Italy) and Juarez (Mexico) – and two BMW Group plants – in Spartanburg (US) and Dingolfing (Germany) – were connected through the application. Within this first project, the platform is managing more than 100,000 data directly referred to parts and vehicles.

Ensuring transparency, authenticity, reliability and efficiency in the management of supply chains – stated Sylvain Dubois, CEO of Marelli Automotive Lighting - are crucial goals for all the automotive players. The increasing complexity of products, in conjunction with globally diversified value chains, are in fact presenting the automotive industry with growing challenges and technologies like blockchain, which represents the forefront of innovation in this field, bring a crucial contribution to improve the system".



In extremely complex environments such as automotive supply chains, many parts are exchanged between many plants of suppliers and carmakers, simultaneously. Consequently, the tracking of components, and related sourcing and itinerary data, is not an easy task, also because often the companies rely on different IT systems. Having a unique shared system between all the supply chain actors involved, enables a common, distributed ledger and the possibility - assured by the blockchain technology - to have fixed data packages linking directly components and the final product. These factors finally make the traceability much easier and accessible for all the players, with data quickly available for everybody at the same time. Optimization of logistics and production costs is the consequent benefit.

Thanks to blockchain technology, the next step for the "PartChain" application will be to ensure an even higher data authenticity grade, limiting in a decisive way the risk of counterfeit parts in the supply chain.

Marelli Automotive Lighting aims to extend the use of "PartChain" along the entire value chain, involving further customers and sub-suppliers.

About MARELLI

MARELLI is one of the world's leading global independent suppliers to the automotive sector. With a strong and established track record in innovation and manufacturing excellence (Monozukuri), our mission is to transform the future of mobility through working with customers and partners to create a safer, greener and betterconnected world. With around 62,000 employees worldwide, the MARELLI footprint includes 170 facilities and R&D centers across Asia, the Americas, Europe, and Africa, generating revenues of 14.6 Billion Euro (JPY 1,825 billion) in 2018.