

TOWARDS MORE MEANINGFUL AND SUPERIOR DIGITAL EXPERIENCES IN LUXURY AUTOMOTIVE

A design roadmap for the introduction of a blockchain technology ecosystem considering the needs of evolving customers

Introduction

It's the 21st century, and in today's world, a significant portion of our daily interactions occur digitally. This digitalization has intensified due to the Covid-19 health crisis in recent years. Advances in technology and digital experiences have made the digital realm a crucial part of everyday life for all generations, suggesting an increasing adoption trend in the future.

In the digital sphere, virtual items have traditionally lacked scarcity or uniqueness, except in specific cases such as gaming. However, blockchain technology, particularly in the form of non-fungible tokens (NFTs), has revolutionized the way digital assets function, exist, and allow for the ownership of unique virtual goods. These tokens have enhanced the digital domain's significance by introducing uniqueness and scarcity, attributes typically associated with replicable items. Such characteristics of singularity and scarcity are commonly found in traditional "tangible" goods, particularly luxury items, which are scarce and not accessible to everyone, thereby lending exclusivity to their owners. Until the advent of NFTs, transferring these characteristics to the digital domain was not feasible. Now, however, it is possible to permeate virtual contexts with these special attributes.

Blockchain technology presents an opportunity for innovation and added value in luxury automotive companies and their customers. This project began with the goal of exploring the business potential of this technology in the luxury automotive sector. To understand the future context of luxury automotive, creative trend research was conducted to identify upcoming trends and developments. A future vision for luxury Original Equipment Manufacturers (OEMs) was established, providing a strategic reference point for actionable innovations.

In aligning with anticipated user values that present compelling opportunities for business development in the future context, four products were identified. Developing an implementation strategy that aligns with these products and the future vision is crucial. As the result of this project is a roadmap, it is divided into three separate horizons leading to the envisioned future. These horizons target specific goals, aligned with the evolving luxury customer and the integration of the concepts into the roadmap. Below, the future vision and the products are presented, while at the bottom of this poster, the main idea of the final roadmap is outlined.

Future Vision

The future vision for luxury OEMs develops towards leading the way in delivering meaningful and superior digital experiences by harnessing blockchain technology. An ecosystem of new products aligned with the needs of evolving customers triggers the path to make it happen.



The Profile Token stands as a personalized customer token (NFT), offering adaptive and transferable personalization for luxury car owners. It captures and represents the owner's preferences, from in-car settings to brand interactions, ensuring a seamless and tailored experience.

Products



Complementing this, the Digital Passport of the car introduces a transparent and certified record of the vehicle's history (NFT). This digital passport, linked to the car, holds details from VIN numbers to maintenance records, increasing the car's residual value and giving confidence in the second-hand car purchasing process.



Taking the digital evolution further, the **Digital Twin** model of the car represents a unique virtual replica of the owner's car (NFT). Designed for immersive experiences, this digital twin allows owners to engage with their cars in virtual environments, from metaverses to games. It embraces blockchain technology and advanced 3D modeling, offering a personalized and customizable digital representation of the vehicle.



At the center of this digital ecosystem lies the Brand Digital Platform, a digital environment representing the world of the luxury brand, catering to both luxury car customers and fans. Offering immersive exploration through extended reality or traditional web interfaces, this platform becomes a virtual setting for brand enthusiasts. It spans guided virtual museum tours, virtual car launches, behind-the-scenes content, and even the purchase of digital brand merchandise. For profile token holders (that is, customers), the platform unlocks a realm of exclusive features, from private token-gated areas to participation in exclusive events and access to troubleshooting guides.



Laying the groundwork for an initial structuring to establish the new products, given that they are not related to the core business of luxury OEMs.



Digital Platform to be introduced with pilot digital-specific experiences, a marketplace, and a private area for Profile Token holders.



Digital Passport to launch in a basic version for ownership verification, collaborating with key dealerships.



Digital Twin to ensure an engaging digital experience for customers, through automatic generation upon order confirmation



Profile Token to be launched for personalization of email communications, website and app.

Refining existing initiatives and introducing new elements, leading to an enhancement of the overall customer engagement.



Digital Platform to include the full vehicle lineup, live events, localized content, user-generated content tools, and XR features for immersive experiences.

Digital Passport to include a broader array of

services, such as the inclusion of maintenance



records.

experiences.



Profile Token to become more comprehensive and sophisticated, recognizing its user across more brand touchpoints and initiatives (dealerships, lounges, boutiques, events, loyalty programs)

Digital Twin to increase configurability (virtual-only

add-ons) and integrate XR features for engaging

Achieving maximum integration and providing unparalleled, seamless customer experiences across various products and platforms.



The Digital Platform to be a multi-player environment, integrated with third-party digital and gaming platforms, and offer enriched private area of Profile Token holders (schedule and manage service appointments and have interactive troubleshooting guides).



Digital Twin to ensure interoperability for cross-platform use



Profile Token to be allow seamless and tailored experiences also in the car, to provide in-car personalization and recommendations, and collect real-time driving preferences and behavior.

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SPD

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