The Adoption of Enterprise Blockchain Solutions and Tokenisation in Managing eMSP[1,2]

Preface

Under the *Memorandum of Collaboration* (MoC) signed on Feb 19, 2024, between *MALAYSIA AUTOMOTIVE ROBOTICS AND IoT INSTITUTE* (MARii), *GENO GROUP LIMITED* (Geno), and *ACO Tech SDN BHD* (ACO Tech) for the application of blockchain solutions in Malaysia's *Electric Vehicle* (EV) infrastructure - *E-Mobility Service Platforms* (eMSP), the parties are pleased to announce, at *Malaysia Autoshow 2024* on May 25, 2024, the release of this White Paper with the project blueprint and implementation plan. An updated version is released on December 29, 2025.[1]

The key components of the project are:

- Adopting an enterprise blockchain solution, particularly with *Web3-powered Direct-to-Customer* (W3-D2C), a commercialised tokenised loyalty points (LPs) programmed on GenoChain that complements ACO Tech's eMSP. This project is designed to ensure compliance with legal standards and is committed to full transparency, ensuring the credibility and integrity of the first industrial use case of tokenisation in the electric mobility system.

- The solution ensures data privacy and sovereignty, and ultimately supports the establishment of a new ecosystem with sustainable growth, attracting strategic investors as long-term partners.

- The solution deploys smart contracts to enhance engagement between brand owners, vendors, and customers. All stakeholders are incentivized to participate in the ecosystem.

- In addition, the launch of the *Geno Traceability Solution* in supply chain management in Malaysia will be undertaken as a separate task.

This ground-breaking project aligns with Malaysia's *New Industrial Master Plan* (NIMP) 2030 and the *National Energy Transition Roadmap* (NETR). The Government aims to achieve 20% of *Electrified Vehicles* (EVs) by 2030, 50% by 2040, and 80% by 2050. The transformation of the automotive industry from Internal Combustion Engine (ICE) vehicles to EVs, especially with connected and electric features, is reshaping the entire industry from technology and product development to the entire manufacturing process and after-sales servicing, recycling. Innovation is thus the key to success.

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[1] *This White Paper was originally published on May 25, 2024, and subsequently updated on December 29, 2025, with clarified terms according to the BNM's "Asset Tokenisation in the Malaysian Financial Sector" October 30, 2025.*

[2] *Geno, as a blockchain service provider in the program, has received the regulatory clarity from Bank Negara Malaysia (BNM), which, while not constituting any endorsement, confirmed that its Web3-powered Direct-to-customer (W3-D2C) Tokenised loyalty model can be marketed in the real business environment without undergoing regulatory sandbox testing.*

This White Paper outlines the application of enterprise blockchain solutions in line with the objectives defined in the MoC. It presents an industrial use case of applying Web3 methodology in a fully regulated environment for traditional industries. By ensuring full compliance with the regulation, the project can better fit the risk preferences of industrial brand owners concerning reputation and brand positioning.

In the updated version, we further elaborate on the benefits of upgrading Web3-D2C to support the national eMSP Project. Web3-D2C is the customer engagement and retention layer, creating self-owned traffic touchpoints with tamper-resistant, loyalty utilities governed by smart contracts. For customers, they earn non-monetary utility entitlements or points which can be exchanged for products, services, or experiences. For partners and businesses, the platform provides a scalable mechanism for multi-party reconciliation and settlement by utilising a MYR-denominated, permissioned settlement unit[3] (i.e. MYR-backed stablecoin), on the production-ready GenoChain to facilitate B2B net clearing among approved ecosystem participants (such as CPOs, OEM/dealers, service partners, and platform operators). Aligned with the direction in Bank Negara Malaysia's discussion on asset tokenisation—notably programmable assets and atomic, rules-based settlement to reduce friction and improve auditability—the settlement unit is not a retail payment instrument; rather, it is activated only after verified end-user redeems to automate partner-to-partner settlement under pre-agreed commercial rules.

1. Current Situation & Prospects

The automotive industry is a crucial pillar of Malaysia's economy, with significant government investment aimed at ensuring its viability and success. As the industry transforms EVs and Industry 4.0 technologies, Malaysia faces both substantial opportunities and notable challenges.

Opportunities lie in the growing domestic demand resulting from an increasing middle-class population with rising disposable incomes and urbanisation driving the demand for personal vehicles. At the same time, regional trade agreements creates new business opportunities for Malaysia to act as a strategic export hub for neighbouring markets. The government announces favourable policies promoting local manufacturing and technology development to encourage a shift towards EV production and related capacity. Additionally, adopting Industry 4.0 technologies in manufacturing aligns with Malaysia's sustainability goals and further support the growth and production of electric and hybrid vehicles.

Challenges arise from competition with other countries and higher requirements for regulatory compliance, such as adhering to stringent environmental regulations and safety standards, and keeping up with global automotive industry norms and practices. EVs must be cost-competitive with accessible infrastructure to achieve mass adoption, which requires significant capital investment in R&D, infrastructure, and product development alongside an evolution of the supply chain to meet new production demands. Further complicating the

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[3]*BNM's Discussion Paper on Asset Tokenisation encourages exploration of tokenised deposits and MYR-denominated stablecoins as forms of tokenised money, provided they uphold the singleness of money and meet high standards for stability and redemption. The Web3-D2C can be upgraded to fit within this perimeter: a fully-reserved, MYR-backed, ring-fenced stablecoin used only for regulated hire-purchase and trade-finance flows on a permissioned network, with final settlement anchored in central bank money.*

landscape are market dynamics such as fluctuating global demand, volatile in raw material supply chains, and rising prices that affect production costs.

Overall, widespread EV adoption depends on a well-developed service infrastructure. Today, public chargers and fast-charging hubs in Malaysia are still unevenly distributed, often concentrated in a few urban areas, with limited coverage along highways and in rural areas. Drivers still face range anxiety, long queues or out-of-service chargers, and a fragmented user experience across multiple apps and payment systems. At the same time, many workshops are not yet equipped or certified to service EVs, and spare-parts and diagnostic capabilities remain thin. These gaps increase perceived risk for car buyers and fleet operators, slow down OEM sales, and make it harder for policymakers to hit national EV targets.

By leveraging these opportunities and addressing the challenges, Malaysia's automotive industry aims for sustainable growth and global competitiveness. Clear guiding policies with well-allocated subsidies and tax benefits, along with the adoption of innovative solutions, will enable the successful transition. Strong initial growth in driving EV ecosystem is expected in servicing-related businesses. For this purpose, the eMSP connects all stakeholders through consent-based data sharing, enabling higher asset utilization, better customer experiences, and sustainable growth, while embedding privacy by design.

2. Project Objectives and Scope

The eMSP is a comprehensive service platform for the EV ecosystem, designed to optimize facility utilization and efficient energy consumption. It delivers tangible business value to Charging Point Operators (CPOs) and utility suppliers, while also positioning the ecosystem to attract long-term strategic investors and business partners.

This project proposes the integration of enterprise blockchain solutions and tokenisation into the eMSP, enabling the platform to function reliably and cost-effectively. Specifically:

- Blockchain technology will ensure data privacy and sovereignty;
- Blockchain-powered tokenisation LPs (See "Section 5.1" for GenoChain architecture details) will support data ownership while protecting sensitive information;
- The tokenised LPs (See "Section 5.1" for GenoChain architecture details) under Web3-powered Direct-Customer (W3-D2C) will revolutionise customers' interactive relationship with the brand for stronger engagement;
- Collectively, the objective is to establish a sustainable, scalable ecosystem that supports continuous business growth.

The diagram below illustrates the evolving automotive landscape and its urgent shift from product-centric models to ecosystem-driven value creation . In this context, the eMSP plays a critical enabling role, with W3-D2C serving as a key mechanism to unlock its full potential. The eMSP will turn end-user customers' behaviours into measurable value, supported loyalty rewards incentivized by brands and service providers. This approach enables the ecosystem to break through the existing boundaries of siloed functions into integrated, service-oriented processes that better engage customers.
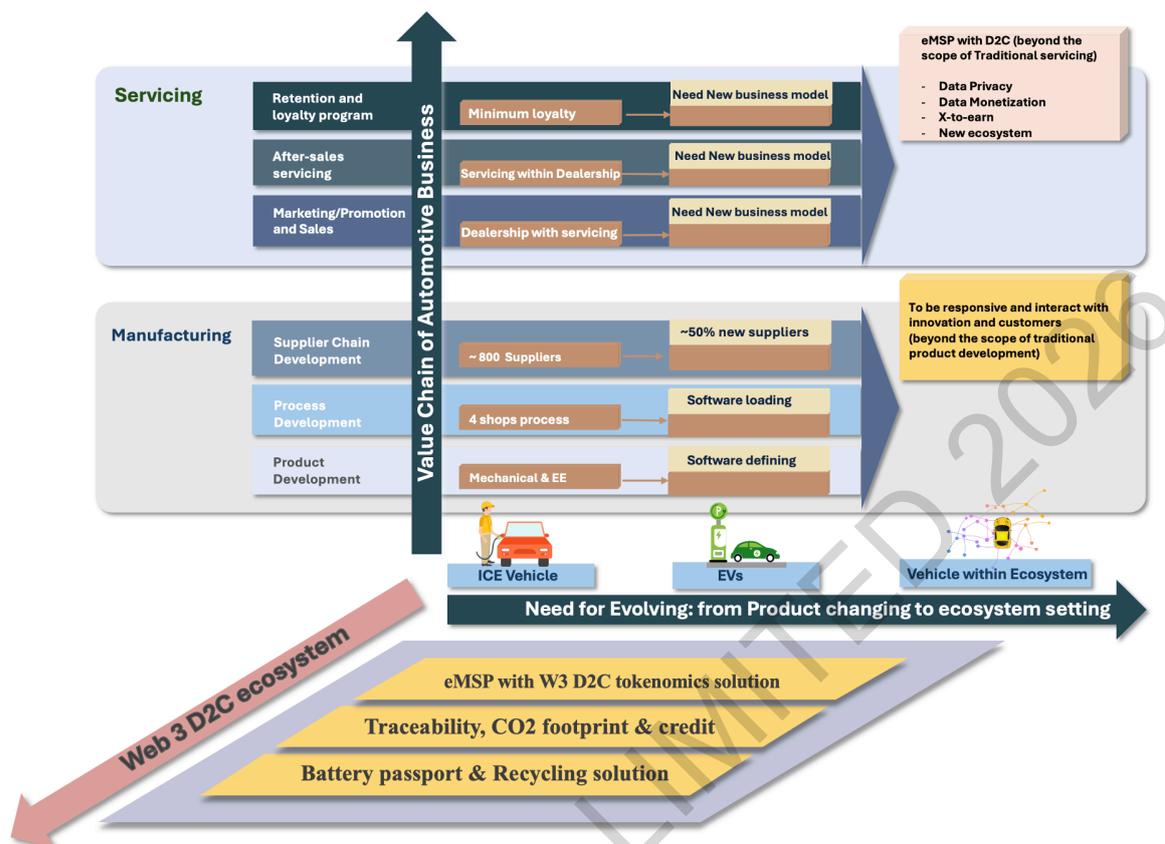
Diagram 1. Evolving Landscape of the Automotive Industry:

from product changes to ecosystem development

The adoption of Web3-powered technologies is expected to yield significant economic impact, including job creation, increased capital inflows, and enhanced global competitiveness. This initiative also aligns closely with Malaysia's national objective for digital transformation and sustainable development.

3. Problem Statement

The effectiveness of the eMSP depends on both sufficient operational resources and a well-planned infrastructure network. However, traditional approaches to customer acquisition and retention are losing effectiveness, while customer access to charging and related services remains limited. This combination leads to under-utilised assets, slower EV adoption and a weaker business case for OEMs, CPOs and financiers, thereby constraining the overall impact the eMSP can deliver. The key challenges can be summarized as below:

- Sales-funnel management is hindered by organisational silos.

- Poor resource allocation results in mismatched services, undermining the customer experience and stifles engagement. This impedes the development of trust and referrals, creating a cycle that demands further investment to resolve.

- Ineffective Loyalty Programs, such as Frequent Flyer Programs (FFPs), are accounted as liabilities rather than assets. This perception leads to underinvestment,

shifting focus to reactive "after-sales" service rather than proactive early-stage customer engagement–a common pitfall in the automotive industry.

- Lack of self-owned traffic entry points and the downstream data capture, resulting in the following challenges:
    - Incomplete first-party data
    - Broken feedback loops
    - Partners use different data formats, timestamps, identifiers, and definitions, causing a single customer to appear as multiple partial records.
    - Consent, purpose limitation, retention rules, and cross-border constraints often restrict the usability of data even when partners can share data.
    - Low data quality with missing fields, delayed syncs, and inconsistent identifiers make both reporting and the financial close contentious processes.
- The supporting infrastructure in Malaysia remains insufficient, with limited coverage along main commercial areas:
    - Many locations offer only one or two chargers, creating bottlenecks and long waits; while others are installed where utilisation is low.
    - Access is fragmented across multiple apps, cards and tariff structures, and workshop/service capabilities for EVs are uneven.
    - These gaps create range anxiety, inconsistent user experience and low asset utilisation, slowing EV adoption and weakening the business case for OEMs, CPOs and financiers.
- The ecosystem struggles to attract both end users and service providers due to insufficient activated traffic and business flow.

Taken together, these challenges discourages potential investors from capitalizing the opportunity unless real pain points are addressed through genuinely disruptive solutions. Accordingly, this white paper presents the critical procedures and processes underpinning the W3-D2C solutions, which have been designed to address these challenges. For more detailed insights into the aforementioned challenges, please refer to the Geno Research Report[4].

4. Overview of Geno W3-D2C Tokenised Loyalty Points

Tokenised Loyalty Points (LPs) program refers to the design and implementation of economic systems using tokenised points within blockchain-based platforms, and in this case, refers to GenoChain and the tokenisation solution. It involves creating, distributing, and managing tokenised loyalty points to incentivize behaviours, facilitate transactions, and create value within a digital ecosystem. In this project, the loyalty point can be exchanged with the utility or service provided by vendors /service providers or by OEM.

Key components and concepts of a W3-D2C Tokenised LPs program are:

- Loyalty points: Tokenised loyalty points to provide access to a product or service within the ecosystem.

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[4] *Reviving D2C with Web3 Ecosystem - A disruptive solution for better brand engagement with customers, and converting loyalty points from liability to digital asset; https://www.geno.io/resourcelibrary*

- Rewards: Tokenised loyalty points are distributed as rewards for validating transactions, and encouraging desirable behaviours (like shop visits, participation, contribution, and loyalty)

- Economic Model: Managing the supply of tokenised loyalty points to align issuance with programme economics and liability management, while ensuring transparency for regulators and stakeholders.

- Utility and Value Creation: Ensuring LPs provide real utility and benefits to users, creating inherent demand for the LPs.

- Smart Contracts: Automated contracts that execute predefined actions when certain conditions are met.

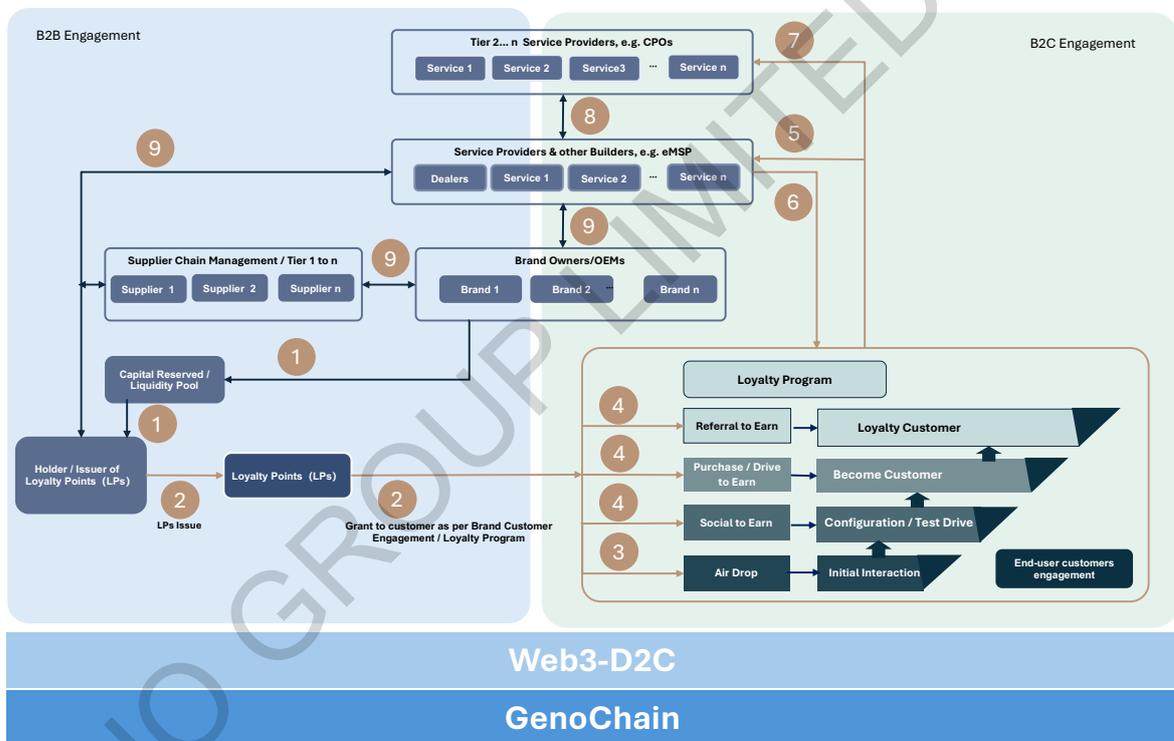## 4.1 **Solution Framework and Details**

Diagram 2. Framework of GENO W3-D2C Ecosystem

The main flow of the framework includes:

1. Brand owners / OEMs inject reserved capital for Issuer to issue LPs;

2. LPs are issued and granted to customers as per Brands' customer engagement / loyalty program;

3. LPs airdropped to the audience: Identify potential customers who are aware of the brand and are interested

4. Social engagement rewards: Reward those who engage socially and interact with the brand with LPs, enabling brands to develop their target audience more quickly and efficiently.

- Incentives for deeper interactions: Offer incentives for those who engage in deeper interactions, with a commitment to providing substantial utility, empowering participants as influencers in the community and market.
    - Community member rewards: Community members earn rewards through referrals and other contributions to the ecosystem, with positive discrimination to reward those who buy products and services or have a high Net Promoter Score (NPS).

5-7. LPs Usage: These LPs can be used for the exchange of goods and services provided by vendors who are also builders or partners of this ecosystem

8. Service Providers / Vendors who collect LPs for service can pay their sub-vendors based on smart contract operating on GenoChain: further circulation of LPs among business partners, or, where permitted by programme rules and applicable regulations, redeemed by the primary issuer into MYR.

9. For B2B settlement, there would be a faster settlement using the MYR-denominated, permissioned settlement unit described in the Preface, which can engage more service providers / operators, to participate the ecosystem, under the guidance of BNM's "Asset Tokenisation in the Malaysian Financial Sector" (October 30, 2025)

4.2 Stakeholders and Benefits

5.2.1 End Users

- Transparent rewards and clear redemption rules, with seamless redemption across multiple providers.

- Higher motivation to engage with brands (e.g., referrals, reviews, and completing brand-initiated tasks).

- Improved service experience (booking, bundles, reminders, targeted offers) with opt-in consent controls.

- Reduced friction through a unified ecosystem wallet/profile for rewards and redemptions (subject to the onboarding model).

- A richer benefits layer that attracts more providers, expanding user choice and utility.

5.2.2 Dealers / Service Centres

- Higher retention and repeat visits via lifecycle engagement (service reminders, win-back campaigns).

- Lower fraud and fewer disputes through ledger-recorded issuance/redemption and smart-contract governed rules.

- Better operational planning (parts demand, workshop capacity) using aggregated, consented signals.

- Lower customer engagement cost through always-on, self-owned touchpoints that drive recurring traffic.

5.2.3 OEMs and Mobility Ecosystems (eMSP)

- Stronger customer relationships beyond the vehicle sale, with measurable engagement and after-sales value.

- Accelerated cross-provider partnerships across aftermarket, after-sales services, and insurance/financing bundles.

- Higher ecosystem participation enabled by programmable incentives and auditable partner economics.

- Establishment of self-owned traffic touchpoints operated through the ecosystem to reduce reliance on third-party channels.

5.2.4 Banks / Financial Institutions (FIs)/ Suppliers

- FIs: provide compliant funding and settlement rails; enable merchant settlement and controlled consumer use where applicable.

- Suppliers: enable rebates, warranty programs, and performance-based incentives with stronger auditability and faster reconciliation.

5.2.5 Additional Benefits

- Innovation and Collaboration: Loyalty utilities incentivize brands and service providers to co-create campaigns and services, strengthening cross-industry collaboration and improving end-user outcomes.

- Redefined Customer Loyalty: Tokenised loyalty transforms rewards from passive liabilities into programmable engagement tools, allowing brands to identify customers earlier, invest in interactions directly, and improve conversion and retention.

- Ecosystem Empowerment: The solution supports digital transformation for brands and ecosystem builders, using carefully designed incentive mechanisms to sustain participation and minimize value leakage across participants.

- Data-Driven Insights: Interaction and redemption signals generate actionable insights (with consent) to help brands understand customer behaviour, personalize offers, and optimize service design.

5. Technology Stack - GenoChain

GenoChain is the foundational platform designed for enterprise applications, notably the Geno W3-D2C. Its core purpose is to enable secure, transparent, and verifiable data sharing across a multi-node ecosystem. It supports trusted digital identities and enhanced privacy to improve user experience and foster customer loyalty.

5.1 Underlying Technology Stacks

- Architecture Layers:

   1) Network Layer: Comprises peer-to-peer networking, Distributed Ledger Technology, and cryptography. It is designed for high-speed, permissioned operation, with the technical capability to support interoperability with other regulated platforms in future, subject to approval from the relevant authorities.

   2) Consensus Layer: Ensures agreement on transactions using an optimized "Byzantine fault tolerance" (BFT) mechanism.

3) Accounts and DID (Decentralized Identifiers) Layer: Defines the decentralised identity framework, including processes for creating identity objects and conditions for lawful anonymity revocation.

4) Execution Layer: Provides the interface (API/SDK) for users to submit transactions and deploy smart contracts.

Diagram 3. GenoChain Technology Stack
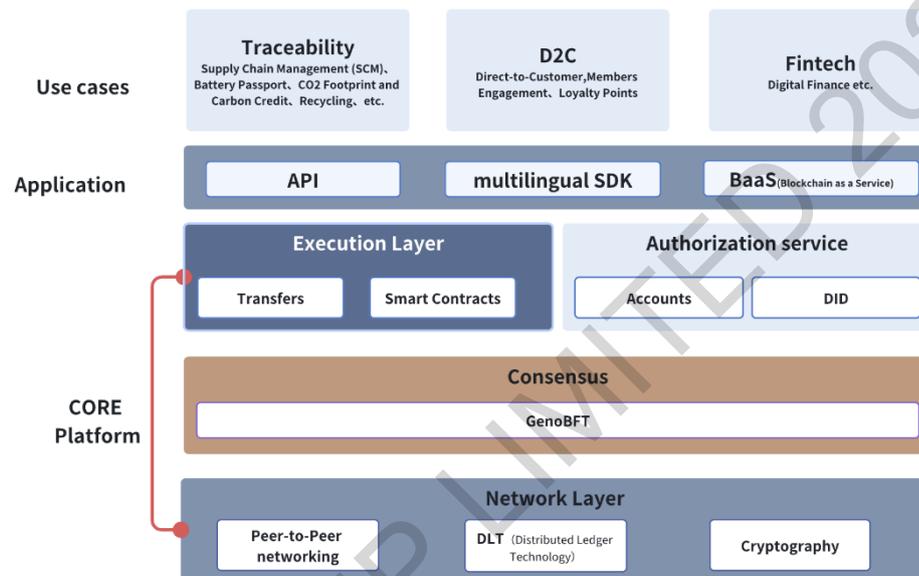
- Consensus Mechanism:
  - The platform uses Geno BFT, a pluggable, polymorphic consensus mechanism optimized from classical BFT.
  - Key Improvements: Simplified state machines and the use of digital signatures for proposals/votes to trace malicious nodes.
  - Performance: Requires two rounds of voting with a more than 2/3 nodes majority, tolerate up to $f=(N-1)/3$ faulty nodes, prevents soft forks, and high transaction throughput.
- Smart Contract Support:
  - Supports WASM and JVM virtual machines.
  - Allows development in common languages like Rust and Java, enhancing developer efficiency, security, and performance.

5.2 **Key Features and Components**

- DID & Verifiable Credential (VC)

1) DID (Decentralized Identifiers): A self-sovereign, distributed digital identifier that resolves to a DID Document (containing keys, algorithm, status). Eliminates the need for centralised ID registration.

2) Verifiable Credentials (VC): A standard for describing an entity's attributes, secured with digital signatures and zero-knowledge proofs, enabling trust based on cryptographic evidence.
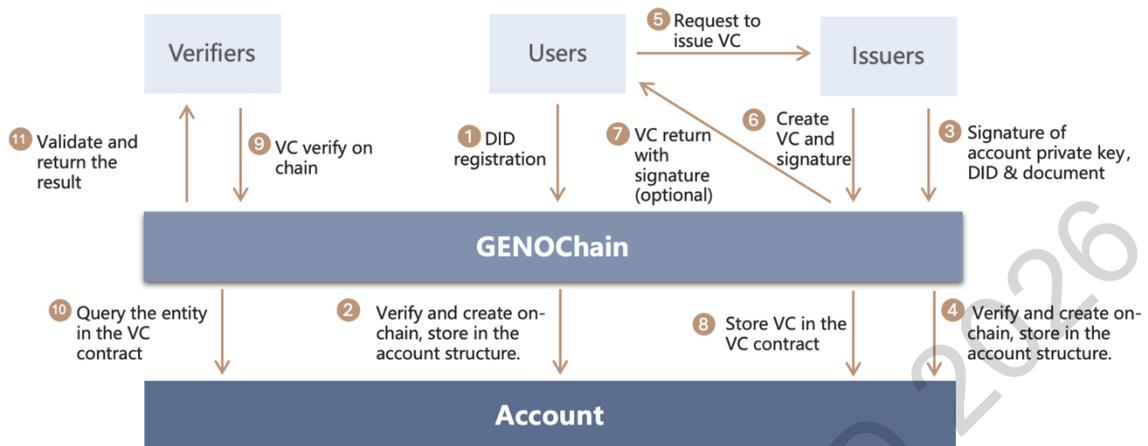
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Diagram 6. DID and VC framework

- Selective Disclosure (Future Exploration)
    - Aims to allow users to minimally disclose authentication data using zero-knowledge proofs (ZKP), enabling proof of attribute possession without revealing plaintext values.
- Scaling Blockchain Execution
    - Implements parallel execution using Block-STM (Software Transactional Memory) and MVCC (Multi-Version Concurrency Control) to manage transaction conflicts and enhance on-chain transaction speed

5.3 Industrial Use Cases

Geno Chain's advantages in data security, transparency, and transaction simplification make it suitable for:

- Supply Chain Traceability
- Circular Economy & Recycling
- Carbon Asset Management
- Tokenised Loyalty-Point Systems

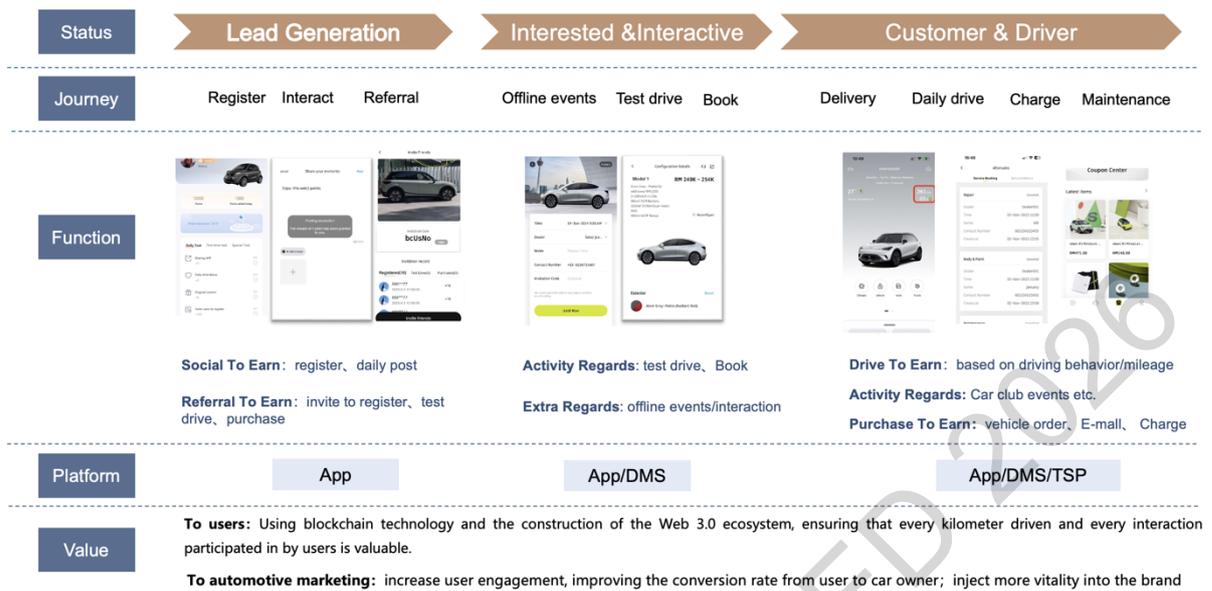## 5.4 Pilot Deep-dive: W3-D2C Use Case for a Global Automotive Brand

Diagram 8. 'X-to-earn' throughout the complete journey of the customer

As a pioneer case of innovation for the Malaysian automotive industry, a global automotive brand has partnered with Geno to launch a new EV under the W3-D2C platform. The project's initial phase adopts the X-to-earn model, presenting users with a more diversified experience and rewards upon completing agreed tasks.

Compliance with the current regulatory environment and alignment with the customer risk appetite and reputational consideration are foundational. Subject to explicit regulatory approval, Geno, in collaboration with its partners and builders, may explore additional connectivity or interoperability options with other regulated platforms, while maintaining permissioned access, KYC and strong safeguards.

6. Risks and Compliance

6.1 Security

The eMSP requires strong protection of system integrity, confidentiality, and availability aligned with regulatory expectations and security best practices. Controls include:

- Risk Management: A three-line risk defence system is established on the frontier line, internal control level, and internal independent auditing line.
- Security Controls: Implement strong access controls, use robust encryption, secure the network, audit smart contracts, have an incident response plan, and carefully manage third-party vendor risks.
- Training and Awareness: Provide regular training programs to ensure total employees' risk-management awareness.
- Continuous Improvement: Regularly review and follow up on updates.

6.2 Data governance and privacy (PDPA-aligned)

- Minimization: Only collect the data necessary to deliver services and operate the program.
- Security: Encrypt user data, restrict access via role-based controls, and maintain logging and monitoring.
- Policy upkeep: Regularly review and update privacy policies and data processing practices.
- Technical measures: Apply anonymisation or pseudonymisation as appropriate, support user education, and maintain capabilities for continuous monitoring and incident response.

To address privacy data risks and protect user data security, Geno has established a comprehensive privacy policy that complies with Malaysia's main regulations on data protection and data privacy, namely the Personal Data Protection Act 2010 (PDPA).

- Methods and Strategies for Privacy Protection: Data anonymization techniques, access control, employee training, secure infrastructure, third-party audits, emergency response plans, and user education have been deployed to keep updates regularly.
- Legal Compliance: Geno is committed to complying with all applicable data protection laws and industry standards, including but not limited to the PDPA.
- Continuous Monitoring: Geno has implemented a continuous risk management system to detect and respond to potential data security threats in real-time.

6.3 **LP Reputation and Creditability**

Geno works with industrial clients that have a very low tolerance for regulatory and reputational risk, and designs its LPs accordingly. LPs are intended solely to provide access to goods or services within the Geno ecosystem. Their issuance and operation will be conducted in full compliance with applicable Malaysian laws and regulations. Geno is committed to maintaining the credibility and integrity of its LPs through transparent token operations and ongoing dialogue with the relevant authorities, including readiness to participate in any regulatory sandbox or similar arrangements if deemed appropriate.

6.4 **Business Integration and Transformation Risk**

There is a risk of strategic misalignment if innovations do not align with the customer's core strategy or long-term goals. It is critical to ensure continuous alignment through strategic reviews and active involvement of senior leadership in decision-making.

There is also a risk of misjudging market demand or customer acceptance of the innovation. This should be addressed through thorough market research, pilot programs, and customer feedback loops.

In addition, innovations may disrupt existing operations, potentially causing downtime or reduced efficiency. To mitigate this risk, comprehensive change management and contingency plans should be readily available to minimize operational disruptions.

7. **Scale growth beyond the Pilot**

7.1 **Implementation Strategy**

- Launching phase (pilot case): Construct fundamental infrastructure and pilot product

1) Develop a loyalty program empowered with blockchain technology in Malaysia
2) Based on independent research and development permissioned blockchain, enhances scalability and performance, increasing privacy and control over data sharing, and improving security as only trusted business parties collaborate and interoperate in a designated ecosystem.
3) Design a tokenisation model that incentivizes user engagement and rewards loyal customers with LPs that provide tangible utility within the ecosystem.
4) Implement smart contracts to automate reward distribution and ensure consistent, rules-based interactions between users and the loyalty program, with full audit trails for regulated participants.
5) Upgrade Web3-D2C to launch the MYR-denominated, permissioned settlement unit described in the Preface, and scale the growth of eMSP.

- Development phase (scale growth): Extend business and incentive scenario partnership with business synergy

1) Marketplace development with the settlement unit to facilitate seamless transactions across multiple industries within Malaysia. This synergy allows for the integration of diverse services, products and participants in the domestic marketplace.
2) A well-networked charging system uses loyalty programs to build brand loyalty among early adopters, encourage repeat infrastructure usage, increase customer satisfaction, and ultimately incentivize more investment in charging infrastructure construction.

- Expansion phase (ecosystem exploration):

1) The Geno ecosystem ("Geno Avenue"), along with its Tokenised LPs programme, is expected to grow and expand to accommodate new partners and broader cross-industry collaboration within Malaysia. Any regional or cross-border collaboration would only be considered at a later stage, subject to the policy direction of Bank Negara Malaysia and other relevant regulators.
2) Using the MYR-denominated, permissioned settlement unit described in the Preface, will act as a catalyst, attracting a broader network of builders and service providers to the Geno ecosystem and, in turn, increasing the utility and benefits for all members.
3) The overall implementation of the Geno ecosystem is planned with a phased rollout, beginning with a Malaysia-focused pilot. Any potential expansion beyond Malaysia would be assessed at a later stage.
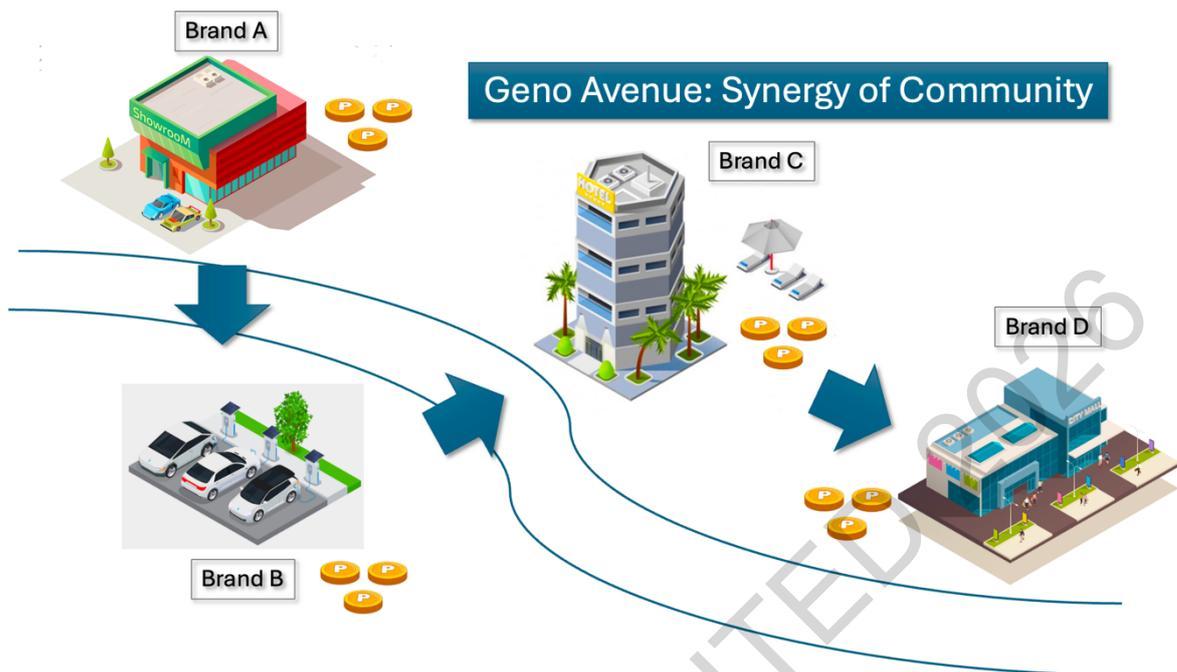
Diagram 9. Geno Avenue: Synergy of Community

7.2 **Data Sovereignty and Monetization**

By leveraging blockchain technology, the Geno ecosystem enables data owners to derive value from their data in a transparent and user-centric manner, where permitted under applicable laws and consent agreements. Data sharing is governed by consent-based agreements that clearly define how specific data points may be used, allowing users to selectively share information with participating partners, and enable direct, controlled interactions between approved participants on a shared platform.

Through the eMSP Project, data generated from LPs usage can unlock new revenue streams, enhance customer experiences, and optimize operations. Insights into user behaviour and consumption patterns supports the delivery of more customized and targeted services.

Looking ahead, and only where permitted by Bank Negara Malaysia and other relevant regulators, interoperability with other regulated platforms could enable efficient transfer and exchange of digital assets among trusted participants, further enhancing collaboration.

7.3 **Transformation and Partnership**

Service providers are ecosystem builders and partners rather than passive vendors. Beyond delivering goods and services, service providers actively participate in the issuing of new LPs, and share full economic and strategic benefits of the ecosystem, including long-term partnership value.

7.4 **Other Industry Use Cases**

Other industrial use cases that can be seen soon include sports, retail, and luxury goods. All of these various applications are based on an integrated foundation layer and technology, as

indicated previously, a massive scalable growth with great synergy ensuring further expansion and interoperability.

Specifically, the user cases include, but are not limited to the following:

- Sports: Reward fans for their engagement in events, matches, and social activities of the sports clubs.

- Retail: Reward customers for their purchases, referrals, and engagement with the brand.

- Hospitality: Hotels, airlines, and travel agencies can incentivize customers through personalized rewards, exclusive offers, and seamless redemption options.

- Tokenised frequent flyer: Rewards offered by airlines to passengers for their loyalty and continued use of the airline's services, improved tracking of mileage points, easier redemption options, and increased interoperability between different airlines and travel partners.

- Financial services: Banks and fintech companies can reward customers for their financial activities, such as saving, investing, and using specific services.

The W3-D2C solutions have the potential to make traditional loyalty programs across a wide range of industries by offering more transparent, secure, and customizable rewards systems powered by blockchain technology.

8. Next Steps and Action Plan

8.1 Next steps

The next phase of the Geno ecosystem focuses on onboarding strategic brands and mobilising capital to accelerate adoption. These partners and participating brands contribute complementary expertise, operational capabilities, and established user network. In addition, by leveraging the settlement unit described in the Preface, the ecosystem enables cross-industry transactions within Malaysia, aligning stakeholder strengths to build a more resilient and sustainable ecosystem.

8.2 Action plan

By implementing the Geno ecosystem, ensuring the validity and financial cost-effectiveness of verification processes is crucial for sustainable business models, which include:

- Implementing a tokenisation model with clearly defined incentive structures for participating nodes. Ecosystem partners can help offset verification costs and ensure the sustainability of the business model.

- Partner with Banks and Financial Institutions to ensure the launch of the settlement unit.

- Developing a clear roadmap for investment post-validation of the Web3 direction involves strategic planning, resource allocation, and continuous monitoring of market developments.

By focusing on efficient validation mechanisms, cost-effective financial models, and a well-defined roadmap for the investment, businesses in the Geno ecosystem can position themselves for sustainable growth and success in the evolving digital landscape.

9. Summary

Malaysia's automotive industry has achieved significant maturing, with robust end-to-end R&D, a comprehensive supply chain, effective go-to-market channels, and completed after-sales service coverage. After more than four decades of sustained growth, the sector is now entering a transformative new phase.

Market competition has intensified, while accelerating innovation demands faster responses and greater resource commitment. In this context, W3-D2C solutions presents a new opportunity for building a new ecosystem with Tokenised LPs programs, enabling collaborative value creation and sustainable growth for all stakeholders.

Key Contributors

Azrul Reza Aziz, CEO of MARii, with a background in mechanical and automotive engineering, transitioned from finance and banking to strategic roles, including Chief Strategy Officer of a Malaysia conglomerate, COO of an investment holding company, and subsequently as Group CEO of a Government-Linked-Company. Served as an investment committee member of a private equity company, registered with the Securities Commission.

Ian Zhang, Founder and CEO of Geno Group, previously served in the fin-tech industry as Board Director of Concordium Foundation, Board Director of Saxo Bank, and in the capacity of the Chairman of the Audit Committee. Ian has rich managerial experience in the automotive industry, including Polestar, Geely, Praxair, Robert Bosch GmbH/AlliedSignal Inc., and most recently the Group CFO of Polestar Automotive Holding.

Li Pu, PhD in Electronic Information. Founder and CEO of ACO TECH SDN BHD, founding member of ECARX, a Nasdaq-listed company, with rich experience in telecom operation, in charge of launching the IPTV business in Shanghai. Key planner of the eMSP-related project.

Ts. Nizmar Mohd Nazar, Deputy CEO of MARii, with more than 18 years of experience in Automotive, Information Technology (IT) & Mobility industry as CIO, CTO, Database Administrator (DBA) & System Analyst. Involved in formulating NAP 2020 core elements, such as Mobility as a Service (MaaS), Industry 4.0 & NextGen Vehicle (NxGV) to transform the Malaysian Automotive Industry moving towards Connected Mobility Ecosystem by the year 2030.

Peter Dellhage, CFO of Geno Group, with 30 years of experience in the automotive industry. Founder of MCI Invest.

Aleksandar Bijelic, CTO of Geno Group, with more than 20 years of experience in Information Technology and Organisation transformation from 13 different countries, 10 years of experience in supporting innovation, start-ups, business angles, and VC investments. Former CEO of MVP Workshop and the President of the Board of Serbian Venture Network in incubating Web3 start-ups.

Trevor Leung, Business Director of Geno Group, with more than 20 years of experience in banking and fintech industries in Hong Kong and China. Former Senior Manager in the Blockchain Sector of a global automotive company, former Assistant Vice President of China CITIC Bank (International), and former Development Manager of BNP Paribas (Hong Kong), Bank of East Asia, and Hong Kong Interbank Clearing Limited.

About

MARii (Malaysia Automotive, Robotics & IoT Institute) is an agency under the purview of the Ministry of Investment, Trade and Industry ("MITI") that serves as the focal point, coordination centre, and think tank for the nation's automotive, robotics and Internet of Things (IoT) industry, particularly to enhance technology, human capital, supply chain, market outreach and aftersales capabilities of all automotive stakeholders and ecosystems as well as for the spurring development and adoption of robotics and IoT applications. For more information, visit https://marii.my/

Geno Group Limited is in the business of Baas (Blockchain-as-a-Service), providing enterprise solutions applying blockchain or DLT (Decentralized Ledger Technology) for industrial enterprises to adopt an innovative solution ensure continuous competitiveness. For more information, visit https://www.geno.io/

ACO Tech Sdn. Bhd. is in the business of providing vehicle connectivity development, sales, and services in relation to the in-vehicle infotainment operating system, which comprises mobile automotive operator, mobile internet connectivity services, vehicle safety, autonomous vehicle, and IoT technology products. For more information, visit https://acotech.my/

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Disclaimer

This document reflects Geno's current plans regarding the functionality and specifications of eMSP (technology, blockchain, and ecosystem). Readers should be aware that:

1. The actual and future development of the platform may deviate from what is described in the document;
2. Investors and customers are reminded that Bank Negara Malaysia issued a regulatory clarity letter to Geno which, while not constituting any endorsement, indicated that Geno's Web3-D2C programme may be offered under the existing regulatory framework. The letter also clarified that, under current regulations, commercial banks do not recognise digital loyalty points as legal tender or as a form of payment instrument.