

Blockchain-based loyalty programs

Reinvigoration, transformation and expansion via NFTs, Metaverse and Crypto

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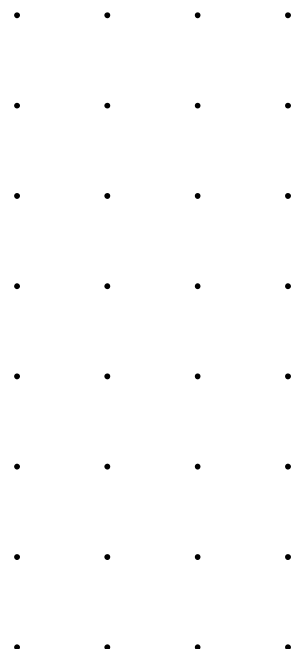
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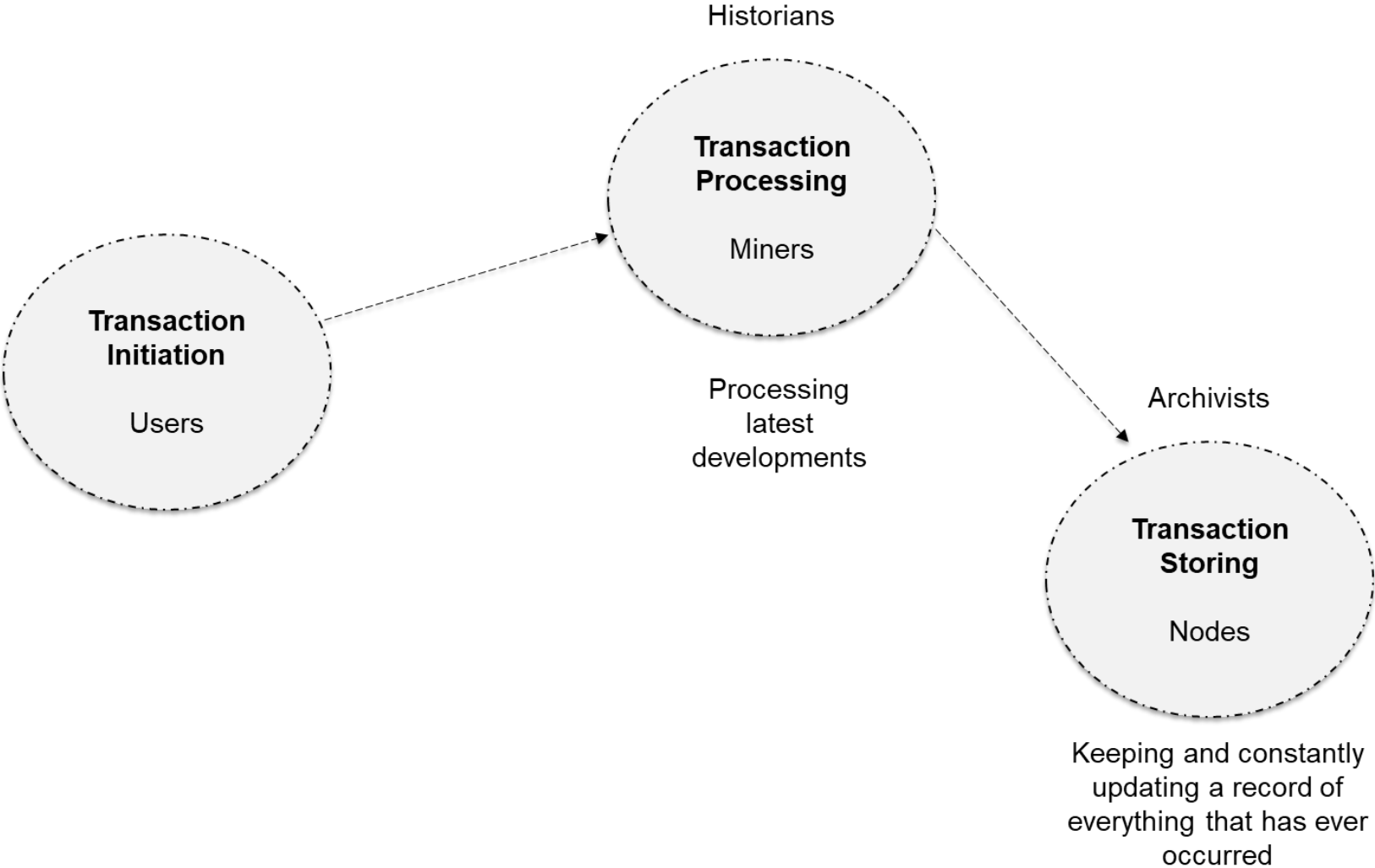
Agenda

- Use cases, applications and benefits of Blockchain technology for loyalty programs.
- The role of NFTs, Metaverse and crypto in loyalty programs.
- Adopting Blockchain-enabled vehicles as the next form of transformative digital loyalty architectural design.
- Final thoughts – concluding remarks.



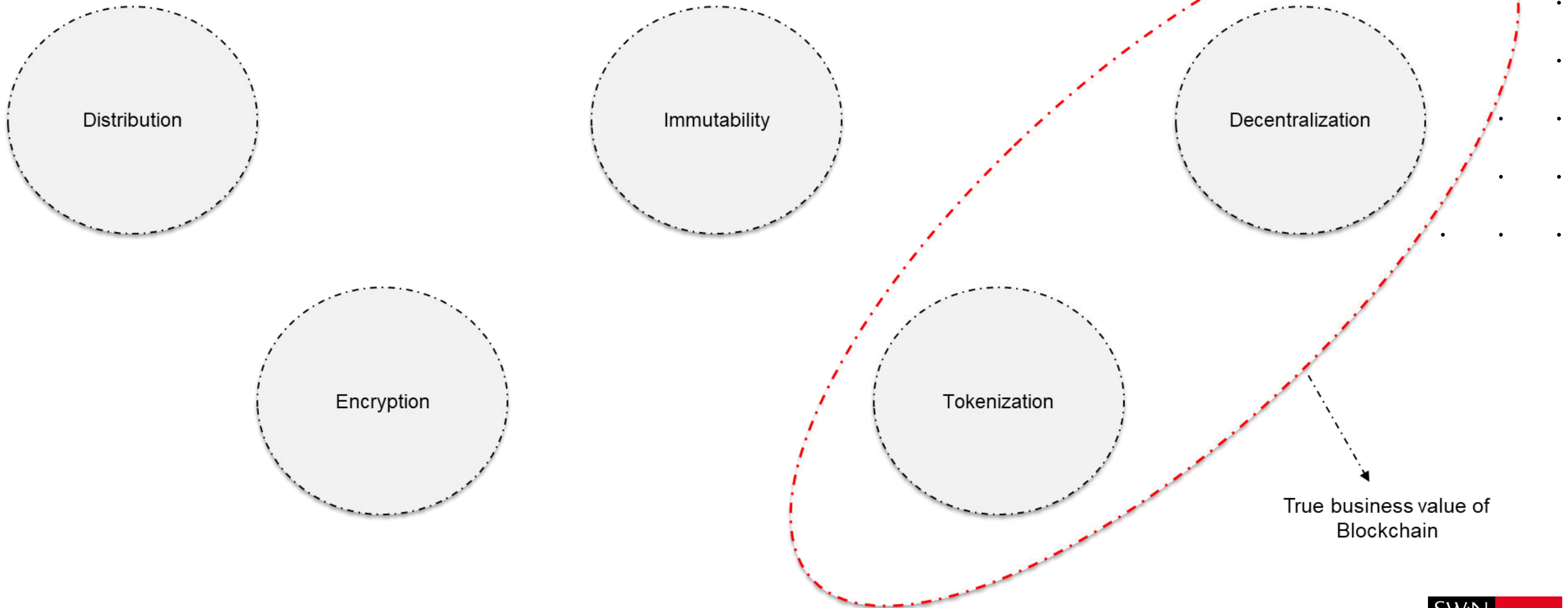
Blockchain technology: from ambivalence to trust

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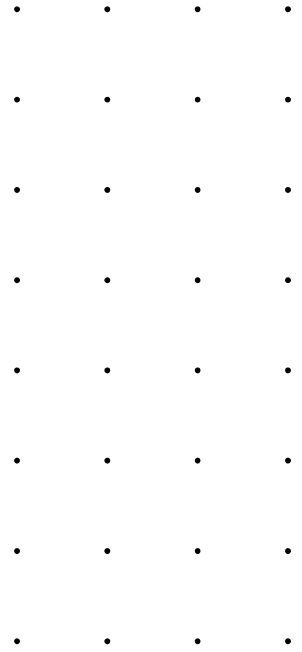
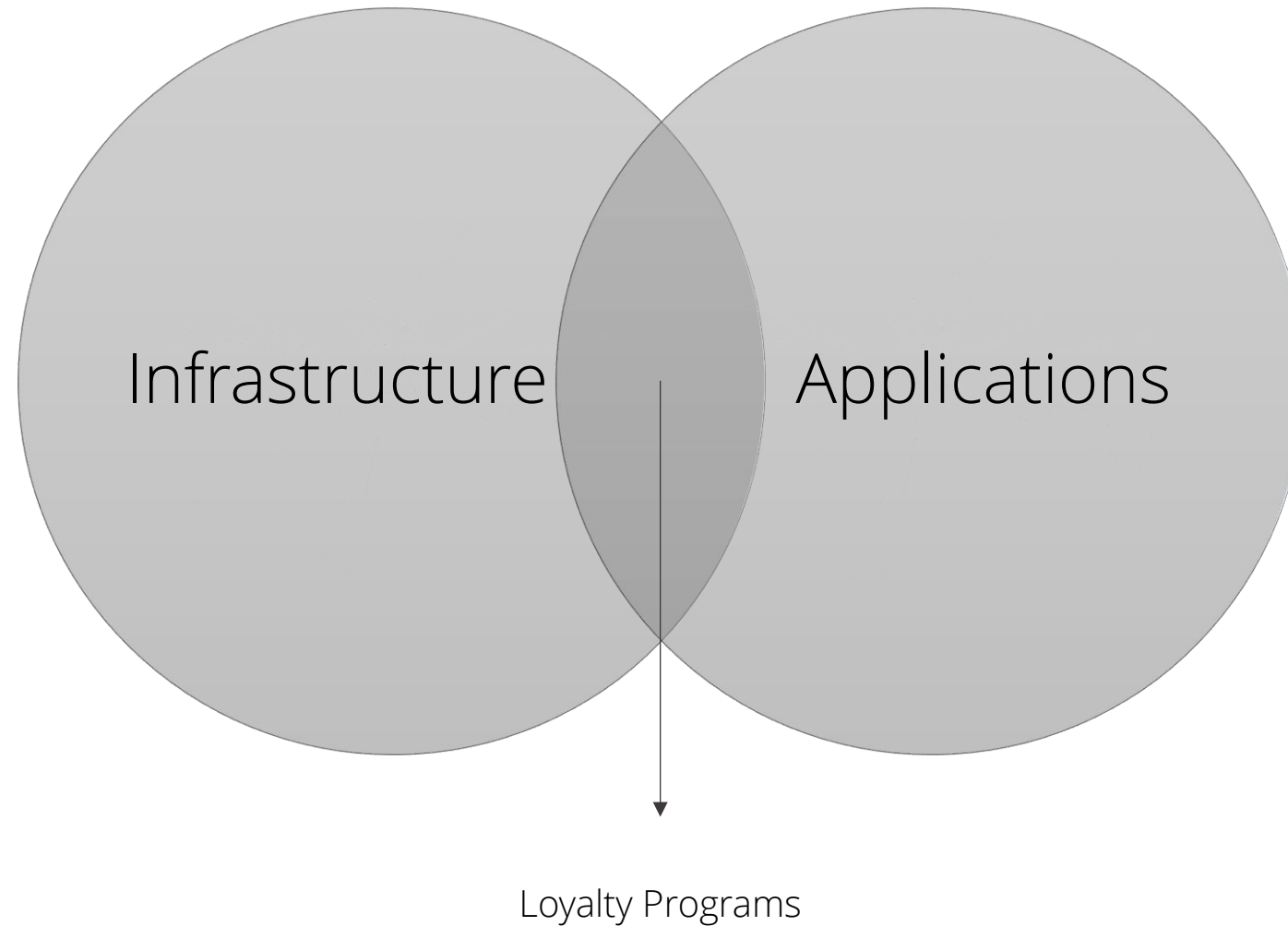
Source: Developed by Dr Dimitrios Salampasis.

The emerging role of Blockchain technology: core attributes

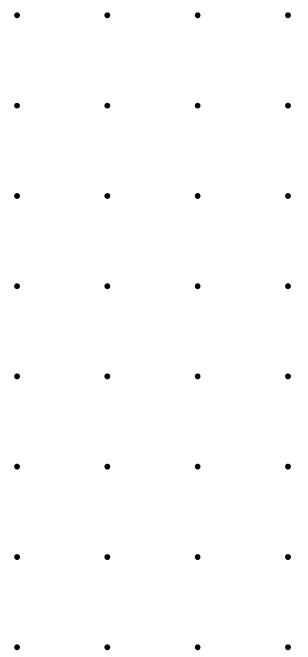
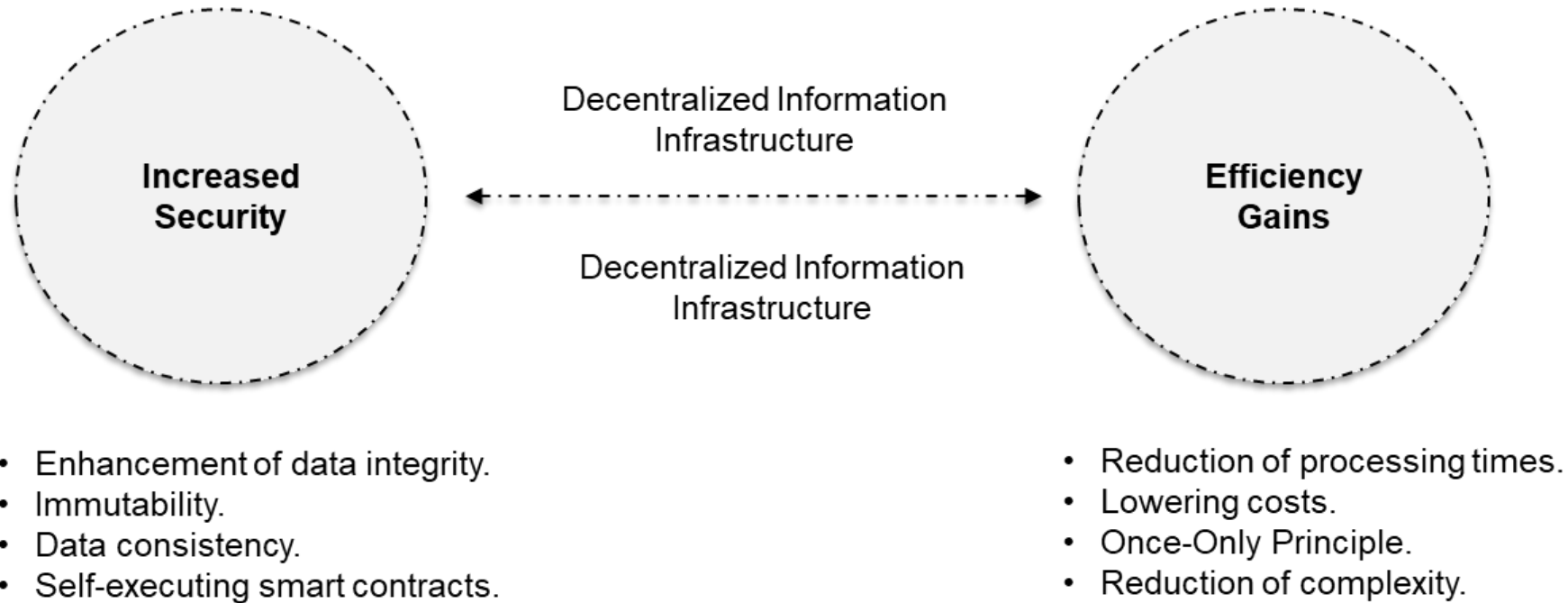


Source: Developed by Dr Dimitrios Salampasis.

Blockchain-enabled loyalty programs: a 2-sided approach



Blockchain and loyalty rewards programs: initial observations and incremental benefits



Blockchain-enabled loyalty programs: selected use cases

Use case	Description
American Express	<ul style="list-style-type: none">Partnership with online wholesale retailer Boxed.Transaction data saved on the Blockchain. Award points in the loyalty system are created by smart contracts.Solution developed by Hyperledger Fabric.
KornChain	<ul style="list-style-type: none">LoyalIT: global marketplace for the exchange of Blockchain-based loyalty points.Provision of network partner services.Working with both international organizations and SMEs.
Loyyal	<ul style="list-style-type: none">Blockchain-based loyalty services.Interoperability.Cashback program (no expiration date).Three-year commercial vendor agreement with the Emirates Group (Emirates, Skywards Miles and flydubai).

Source: Developed by Dr Dimitrios Salampasis.

Blockchain-enabled loyalty programs: selected use cases (*cont.*)

Use case	Description
MercadoLibre	<ul style="list-style-type: none"> • Creation of MercadoCoin. • Will be implemented in Brazil as part of its loyalty program. • Clients will earn MercadoCoins as cashback when buying products on the e-commerce platform. • Will be initially valued at \$0.10 a piece before being open to market fluctuation. Will not be traded on other exchanges. • Focusing on long term opportunities rather than on short term market movements.
Rakuten Group	<ul style="list-style-type: none"> • Single membership ID and loyalty points program. • Rakuten Token and Rakuten Wallet. • Conversion of Rakuten Super Points to cryptocurrency.
FootballNet	<ul style="list-style-type: none"> • Blockchain loyalty platform for football club owners. • Tailored loyalty-building experiences using gamification techniques. • Motivation to participate in challenges and receive Blockchain token-enabled rewards. • Accumulated tokens and rewards points determine a fan's profile level (tiered points system).
Singapore Airlines	<ul style="list-style-type: none"> • KrisPay; world's first Blockchain-based airline loyalty miles-based digital wallet. • KrisPay: Blockchain version of KrisFlyer.

Source: Developed by Dr Dimitrios Salampasis.

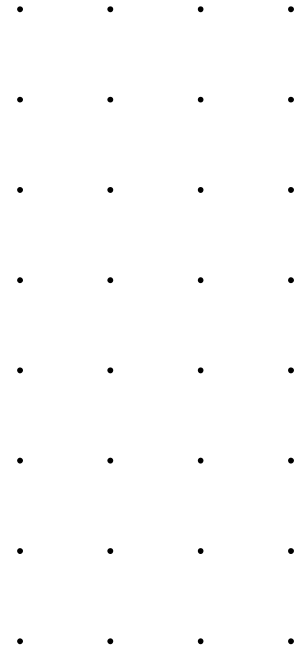


Image source: Creative Bloq ([link](#)).



Image source: Qantas NFTs ([link](#))

Non-fungible tokens: digital uniqueness economy – digital property marketplace

- A 'one-of-the-kind' cryptographic tokenized version of an asset, digital or otherwise that cannot be replicated.
- Non-fungible digital assets that vary in tradability, liquidity and interoperability.
- Represent non-fungible assets (e.g. artwork, real estate, collectibles): cannot be swapped interchangeably for another NFT.
- Tokens that offer unique characteristics that make them different and digitally scarce.
- Recorded on the Blockchain, have metadata and a unique identifier. They are ERC-721 compliant, minted using a smart contract protocol. A way to validate unique ownership.
- An NFT is not the digital asset itself!

Non-fungible tokens: attributes

High market
transparency

Availability 24/7

Relatively high
transaction cost

Price evaluation
is not objective

Heterogeneous
asset

Verifiable

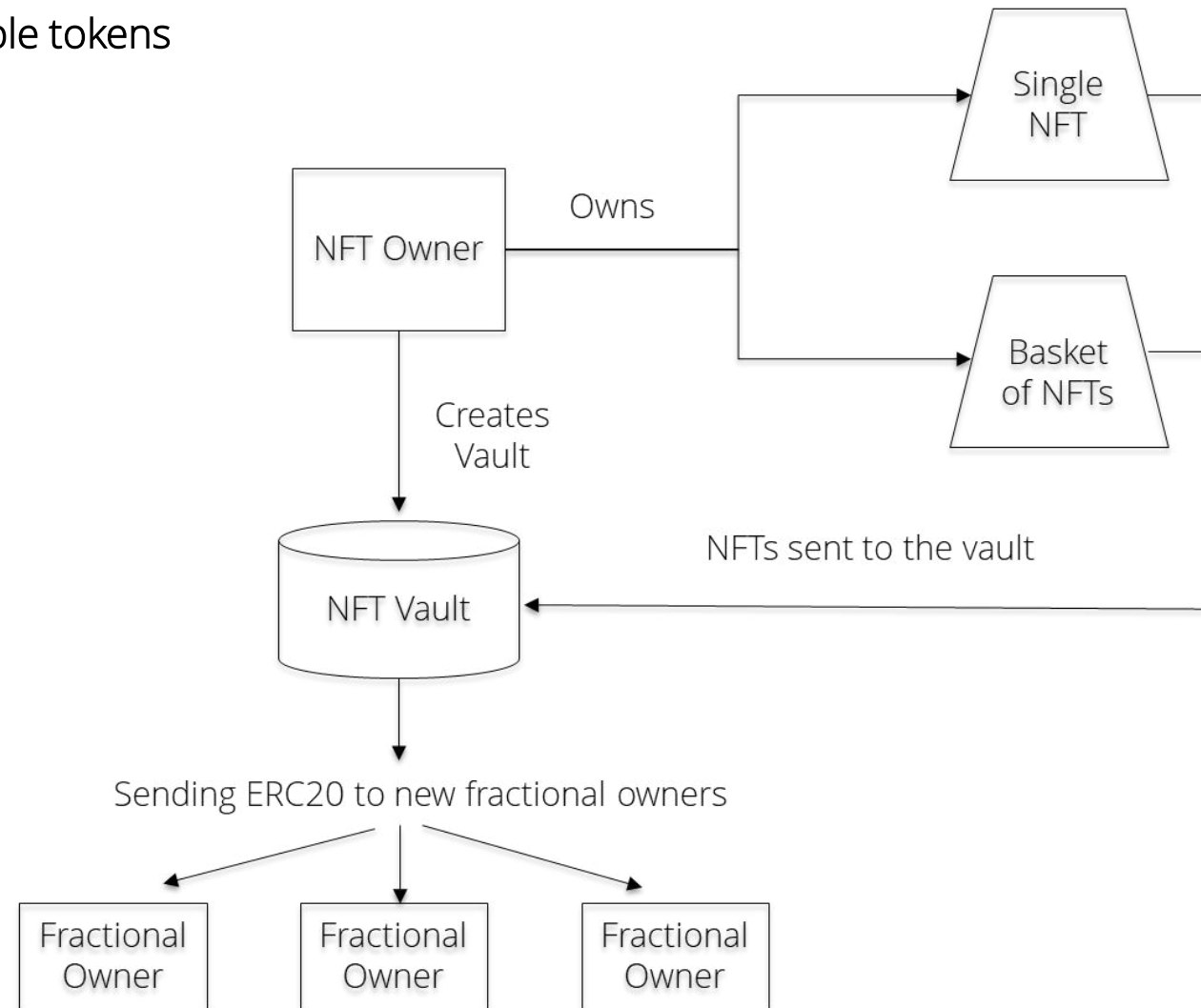
Low liquidity

Higher elasticity
of supply than
physical arts

Psychological
factors of owning
NFTs are different
from owning
traditional assets

Source: Schaar, L. and Kampakis, S., 2022. Non-fungible tokens as an alternative investment: Evidence from cryptopunks. *The Journal of The British Blockchain Association*, p.31949.

Fractionalized non-fungible tokens



Source: Developed by Dr Dimitrios Salampasis.

Non-fungible tokens: categories

Categories	Characteristics
Digitally native	<ul style="list-style-type: none">• Digital in nature.• Do not rely on real-world assets for their existence.• Collectibles, in-game assets, artwork.
Related to other assets	<ul style="list-style-type: none">• Link to real-world-assets (tangible or intangible).• Representation or interest (e.g. title or evidence of title).• Physical artwork, real estate, sound recording, diamond, company share with bespoke rights, vehicle.



Non-fungible tokens: types

Types	Description
Digital artwork	Digital version of physical paintings, drawings or photographs.
Music	Reaching fans directly No music piracy and intermediaries.
Video clips and GIFs	The motion version of painting and digital drawings Loop videos, memorable sports moments.
Memes	Fun Mint, trade, own and prove ownership.
Avatars/Profile Pictures Collections	Thousands of unique avatars that vary in rarity according to their traits.
Video game items	Buying, collecting and trading NFTs in multiple forms (characters, creatures, virtual weapons, etc.).
Trading cards	Evolution of traditional collectable cards (play in the game collectable).

Source: CoinPayments (2022). Types of NFTs explained.

Non-fungible tokens: types (*cont.*)

Types	Description
Metaverse land NFT virtual land	Buying, selling, trading and owning virtual real estate Metaverse properties.
Virtual fashion	Digital closet for virtual life (accessories for your avatar).
Domain names	Decentralized domain names.
Text-based NFTs	Anything written can be minted as NFT Single copy of newspaper, letter, Tweet etc.
Ticket and membership NFTs	Entry tickets for events (metaverse) or commemorative tickets (physical events).
Real-world assets	Tokenization of real-world assets.

Source: CoinPayments (2022). Types of NFTs explained.

Non-fungible tokens marketplaces: types

Type	Description
Mass NFT marketplaces	<ul style="list-style-type: none">• Few large marketplaces.• Home to any NFT collection.
Non-curated, self-service NFT marketplaces	<ul style="list-style-type: none">• Free access to all users.• Registration required.• Payment of transaction fee to mint an NFT required.• Content varies in quality.
Curated or invite-only NFT marketplaces	<ul style="list-style-type: none">• Selective.• Creators need to submit an application form (stringent selection criteria), long waiting period.• Higher quality and trust.
Gaming platforms	<ul style="list-style-type: none">• Gaming and VR.• Unique NFT collectibles.
Sports NFT marketplaces	<ul style="list-style-type: none">• Sports highlights.• Popular memorabilia websites.
Niche NFT marketplaces	<ul style="list-style-type: none">• Particular collection or type of NFT.• E.g. auction tweets as NFTs or NFT place in a virtual cemetery etc.

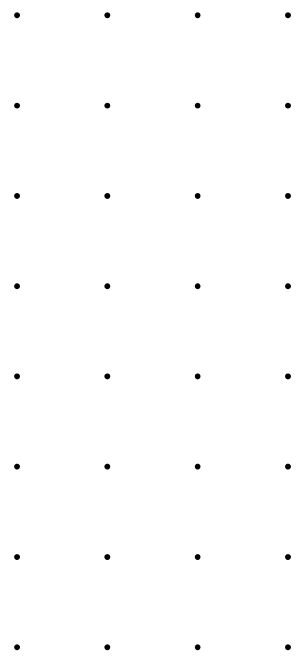
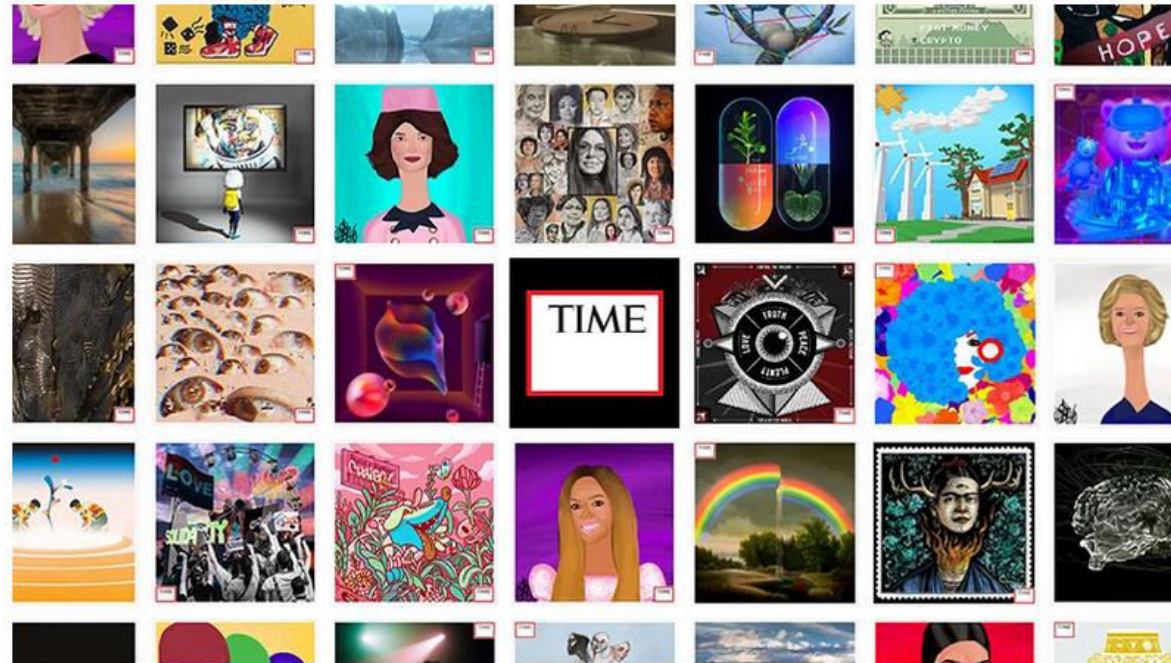
Source: Developed by Dr Dimitrios Salampasis.

TIMEPIECES

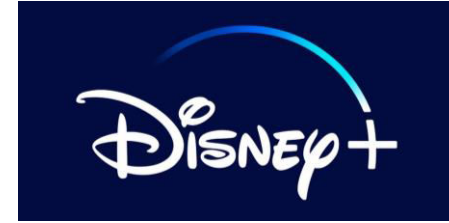
TIMEPieces is a NFT community initiative inclusive of four collections to date: Genesis, Inspiration, Long Neckie Women of the Year, Slices of TIME, and the newly announced, Beatclub Collection.

NEW! TIME & The Sandbox bring TIME Square to the metaverse. Will launch Call for Architects. [Enter email to learn more.](#)

View TIMEPieces on [OpenSea](#)



Disney and NFTs: towards the 'next generation of storytelling efforts'



- Strategy focusing on the future of immersive experiences.
- Disney wishes to accelerate the growth of companies which specialise in technologies such as augmented reality (AR), non-fungible tokens (NFTs), and artificial intelligence (AI).
- Opportunity for developers and enterprises to be able to build Web3 experiences and give users low-cost, high throughput transactions.
- The broader focus on the metaverse demonstrates growing support for the digital asset space.



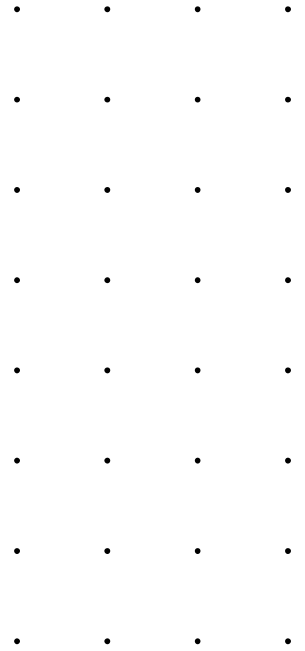
Non-fungible tokens and loyalty: the case of Starbucks “Third Place” concept



- Collection of branded NFTs: programmable, brandable digital assets, which also provide utility access.
- NFTs connected with loyalty and unique community membership and exclusive benefits (similar to Starbucks rewards program).
- Blending a unique experiential proposition for customer engagement (brand, history, art and rewards).
- *Coffee art and storytelling.*
- *The themes of these collections will be born of Starbucks artistic expressions, both heritage and newly created, as well as through world-class collaborations with other innovators and like-minded brands.*
- Commitment to sustainability and environmental protection: multi-chain (chain agnostic) form of Blockchain technology.

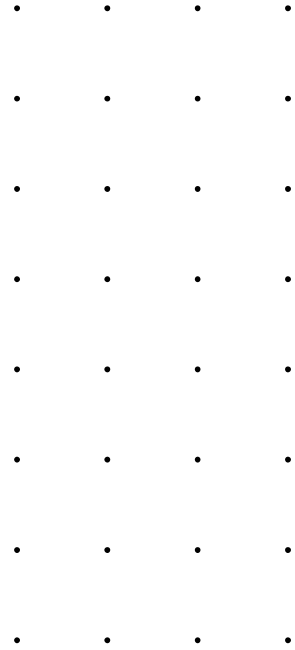
Non-fungible tokens and loyalty

- Collectible NFT promotions campaigns: digitalization of collectibles [fusion between gamification and social media interaction].
- A 'smart' version of contractual agreement between the brand and the consumer.
- Different kinds of rewards could be pegged to an NFT.
- Potentially a novel way of reconceptualising loyalty leveraging on new streams of data for customer engagement.
- **50%** of Australian consumers would feel comfortable sharing data about themselves for better service (2022 Digital Consumer Trends Index).
- **52%** of Australian consumers would be willing to trade personal and preference data so as to feel being part of a brand's community (2022 Digital Consumer Trends Index).



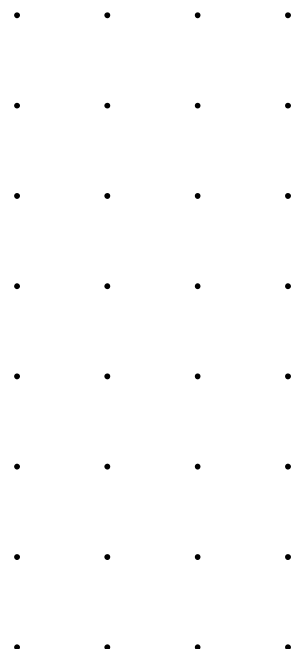
Non-fungible tokens and loyalty (*cont.*)

- Emotional connection between companies and customers.
- Creating a unique loyalty rewards experience proposition for customers that cannot be found anywhere else.
- Building a community with NFT holders receiving exclusive benefits and offerings: access to a physical experience and rewards.
- NFTs cannot only be leveraged as an investment but also used to strategically expand the digital business model of organisations or companies.
- A gradual shift from collectible space and verification of ownership to community-focused development and participation activities and building of loyalty. Moving away from 'greed-based communities' to providing practical utility for consumers.



Non-fungible tokens and fundraising

- NFT fundraising and philanthropy.
- Doing good (corporate sustainability), creating a unique value for audiences, empowering supporters, maximizing crypto-related tax incentives and making NFTs and crypto mainstream.
- Direct donations, donating NFTs, NFT charity auctions, perpetual giving via smart contract and in-platform donation methods.



Metaverse: new horizons of extended reality

- The next version and evolutionary transformation of the internet (embodied internet).
- A parallel and real-time immersive worlds for 3D social connection (enhanced AR/VR, cryptocurrencies, cloud networks, edge computing, AI, and IoT).
- A virtual space (or entire societies) where humans interact as avatars [virtual representations] with interoperable assets and experiences.
- The advent of experiential virtual economy: enabling metaverse ecosystems by connecting multiple virtual business worlds simultaneously (unlimited reality).
- The future medium of business, society and work: digital, connected places where people congregate for work and socializing into one immersive form, enabling also the power of digital and crypto assets.
- Businesses' and consumers' annual global spending related to the metaverse could reach \$5 trillion by 2030 (McKinsey).

Metaverse: Wimbledon's Virtual Hill



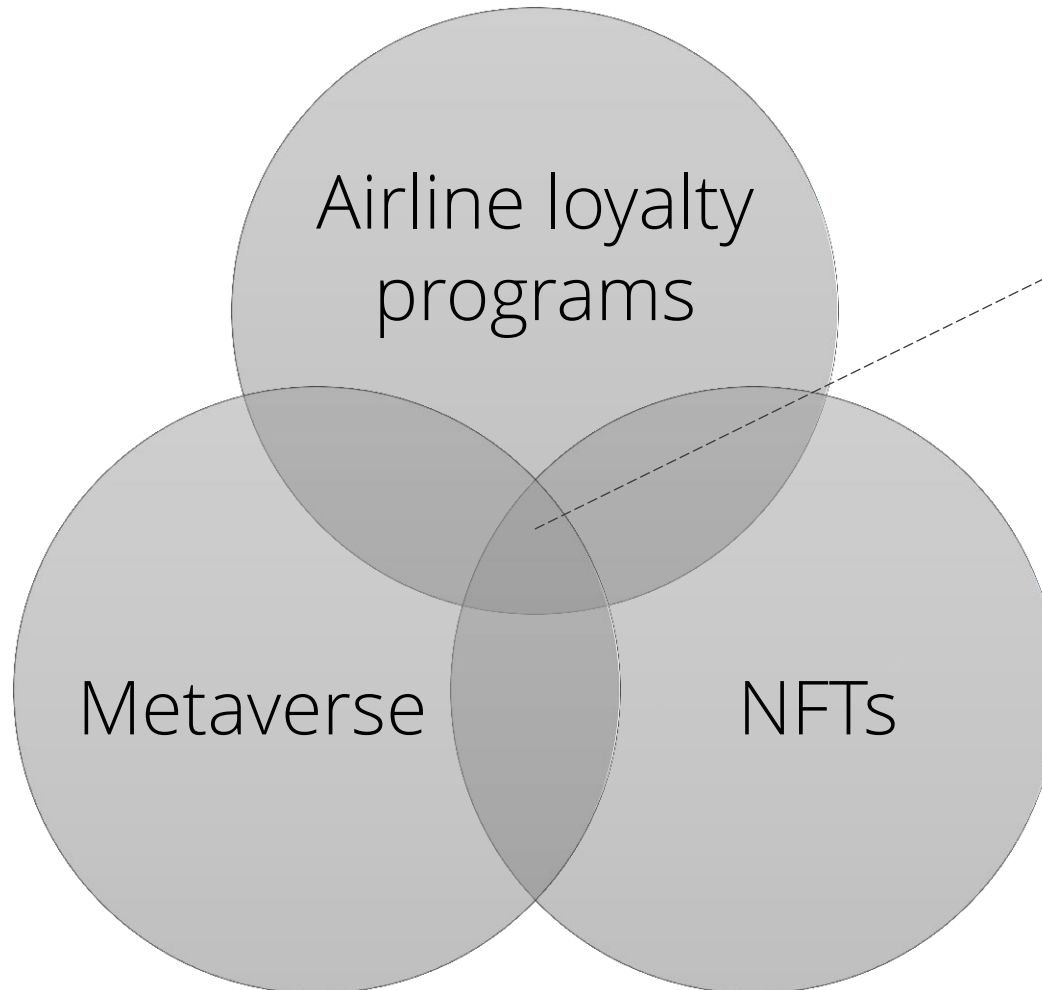
Image source: Daily Mail Australia ([link](#))

WimbleWorld in the Metaverse: Wimbledon's Centre Court on Roblox



Image source: Sportspromedia ([link](#))

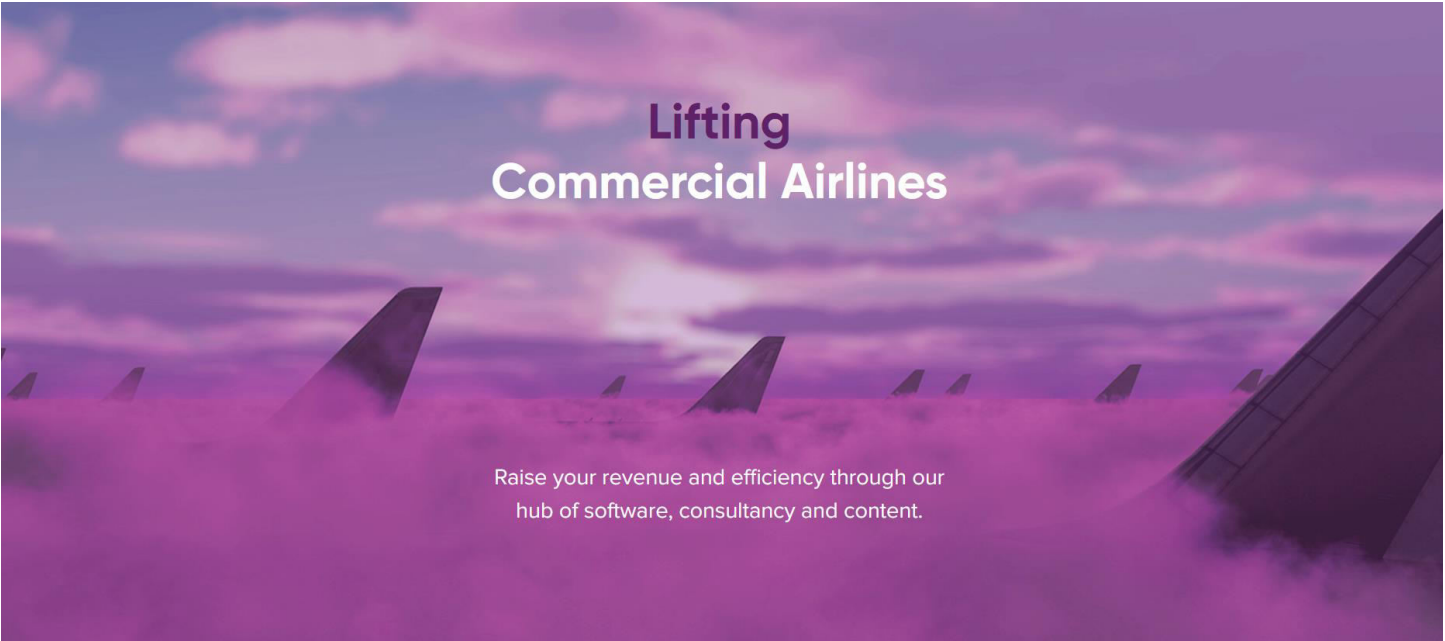
Nexus: non-fungible tokens, metaverse and loyalty



- Beyond miles-based frequent flier programs.
- Unique experiences.
- Rewards experiences at the airport, during flight and beyond.
- Living an airport, lounge and flight experience without actually being physically present.

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Nexus: non-fungible tokens, metaverse and loyalty (cont.)



- Frequent flyer programs in the metaverse.
- Lounge access: a) only at the airport?, b) only before the flight?, c) only for frequent fliers? d) only when a customer is flying?

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Cryptocurrencies and loyalty: promise or fad?

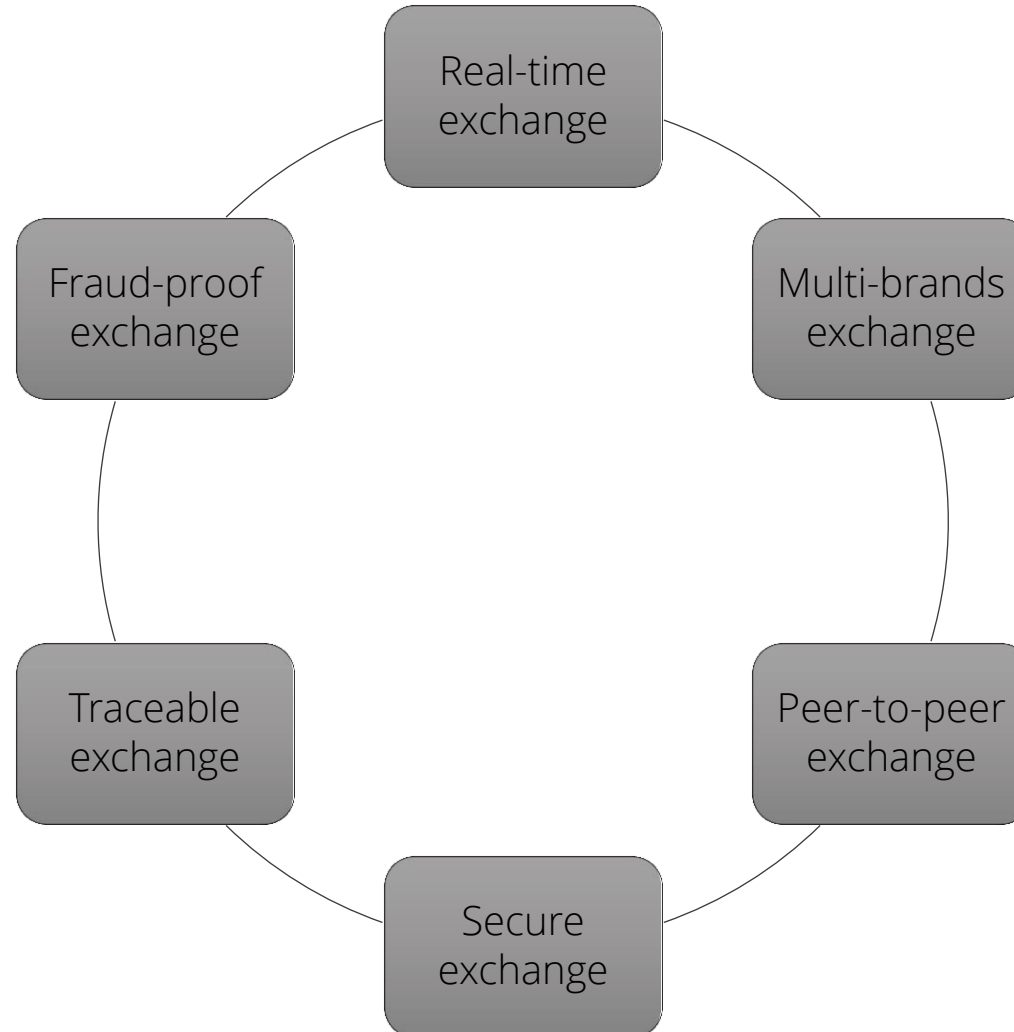
Gemini and Mastercard: crypto rewards credit card



- Gemini Credit Card.
- Earning cryptocurrency rewards in real time.
- Holding crypto soon after the purchase (benefiting from potential price appreciation).
- Accrued rewards deposited into Gemini Exchange Account.
- Rewards in Bitcoin, Ethereum or more than 50 other cryptocurrencies.
- Flexibility, no exchange fees and total control over rewards balance.
- Customizable luxury.
- Meeting both industry and consumer demands, while committing to the crypto space.

Implementing a Blockchain-enabled loyalty rewards program

Key design characteristics

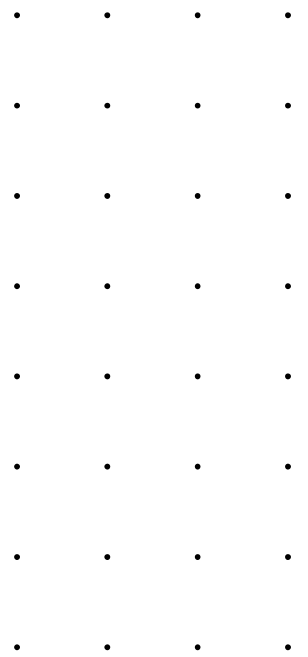


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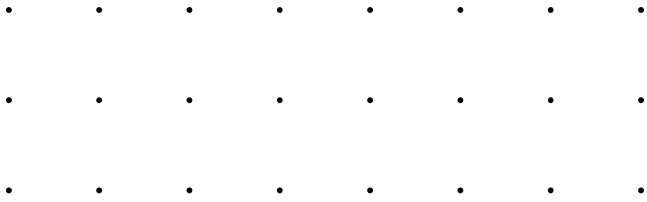
Future pathways and thoughts

- Traditional loyalty programs will not be replaced by Blockchain.
- Organizations will keep on leveraging loyalty rewards programs to deepen relationships with their customers.
- Blockchain will serve the purpose of the underlying technology facilitating and automating transactions. Ethereum is currently the main platform but other networks are picking up.
- Customer experience is important but it is not scalable: ensuring interoperability and value creation across multiple partners will be key for customer satisfaction.
- Blockchain technology will be able to modernize the existing legacy loyalty rewards programs architecture.
- Loyalty rewards programs beyond cash generation vehicles: true individuated service and experience.

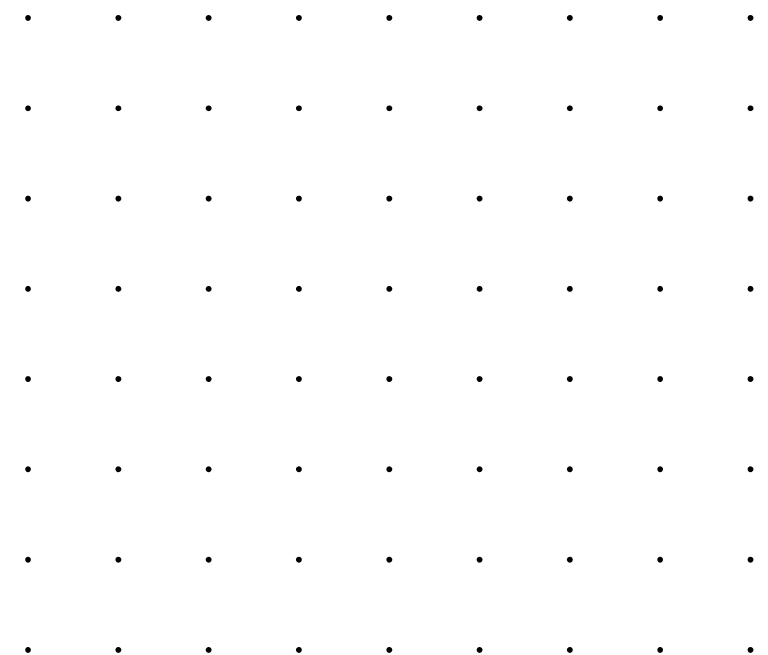


Future pathways and thoughts (*cont.*)

- The connection between crypto and loyalty rewards is not as straightforward as it seems: brand management (rewards) vs market management (crypto volatility).
- Fusion of customer data and smart contracts: automated special and unique treatment not available to other customers.
- Data and token monetization: connectivity beyond the core for loyalty maximization.
- New pathways for creating, rewarding and managing customer incentives.
- New vehicles of value exchange within a network-enabled ecosystem of partners.
- Tokenization: new narratives of data-enabled relationship and value co-creation.



Thank you very much for your kind attention



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