



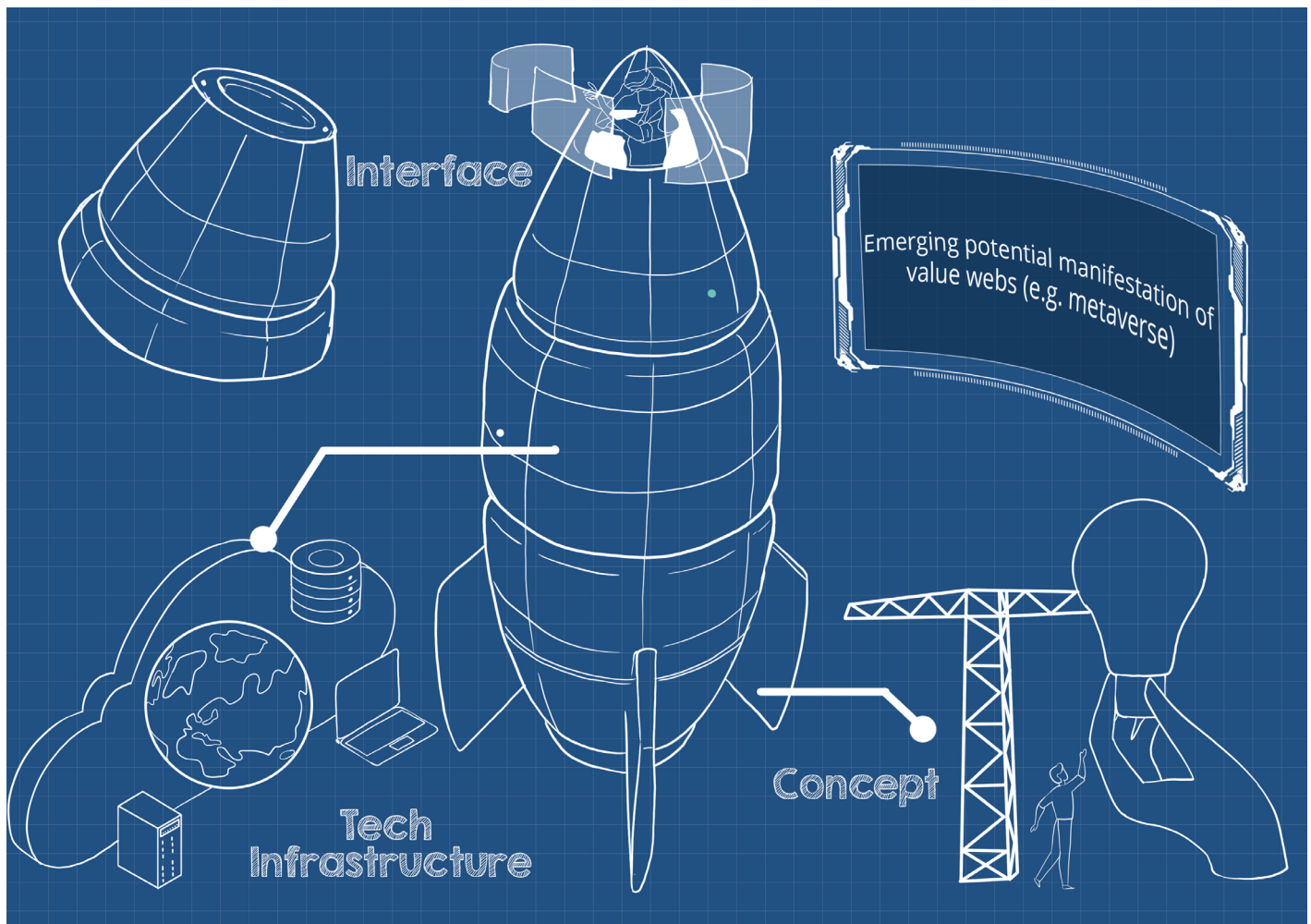
Future of Value Transfer

Realizing sustainable
advantage

It seems that everyone is talking about the metaverse¹, web 3.0 and even web 5.0 – some good, some bad, some critical, some sceptical and many just confused. Organisations of all types and sizes across the world are investing vast amounts of resources to be part of the next generation of the internet scrambling to create shopfronts, procure virtual real estate and position themselves as “leaders” in this space. Simultaneously visions for and definitions of, the future of the web and the metaverse continue to evolve. We are rapidly moving from the early state images of flashy 3D environments enabling interactions between consumers and organisations via virtual or augmented reality to something that represents a **convergence of digital native and physical realities**, spanning across a multitude of domains, potentially without a central owner.

In our journey to unpack the [Future of Value Transfer](#), we have highlighted the similarities and overlaps between “the metaverse” and the emergence of value webs – where physical and digital representations co-exist and create opportunities for mutual value creation, capture and realisation – beyond the current constraints of traditional “monetisation” routes. In fact, both are neither contradictory nor exclusive of each other, the metaverse along with the world of gaming could be considered as pioneering the manifestation of value webs.

The scalability of value webs is intrinsically linked to the evolutionary pathway for value transfer. In essence, metaverse-like environments can be thought of as being underpinned by three interdependent layers which provide the foundations for a functional ecosystem: an interface layer, a tech-infrastructure layer, and a conceptual layer.



The interface layer encapsulates all systems and environments that connect physical and digital realities, i.e., connecting users, reading and writing data, capturing activities, and ultimately transmitting value. The vanguards of this are represented by connecting applications such as augmented reality, virtual reality, smart mobile, wearables and other internet of things (IoT) devices, enabling users to plug into and interact within, as well as, across value webs. Interfaces are highly use-case dependent and pivotal to the integration with the physical world, whilst also being a critical determinant of how much value digital goods and services will create, capture and represent for participants in the future.

Technology already provides open, interconnected, and decentralised environments to facilitate usability and a meaningful user experience. This infrastructure will increasingly be required to connect all participants across currently disconnected ecosystems and execute digital-to-digital, physical-to-digital, and digital-to-physical interactions, accessed via various interfaces.

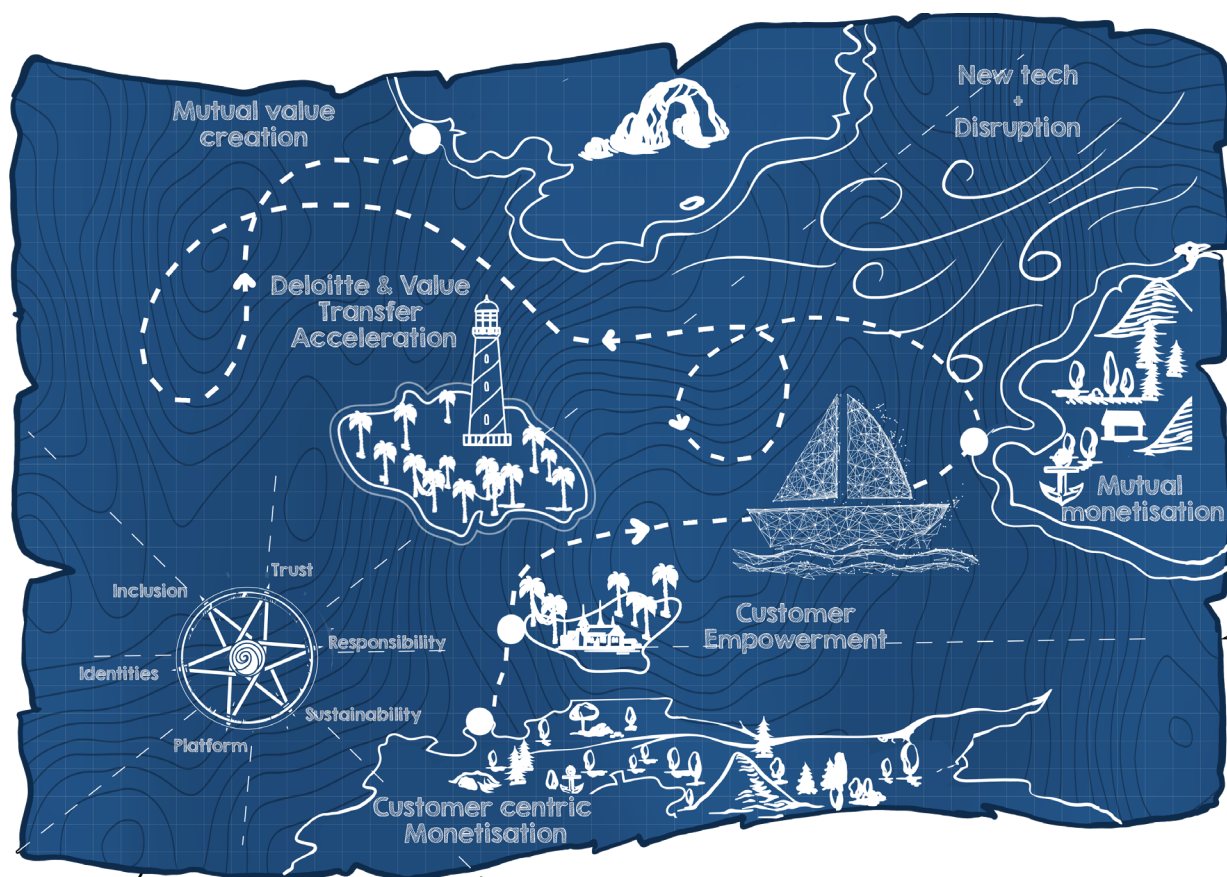
Value webs ultimately underpin the metaverse or any interconnected market environment for that matter, particularly on a conceptual level i.e., interactivity enriched by data flows and holding the promise for the eventual mutuality of value generation.

The evolution from closed-loop systems, delivering hyper-personalised user-centricity to user-empowered value webs needs to play a starring role in defining value within a construct such as the metaverse. Web 3.0 as a starting point in combination with the much-anticipated adoption of increasingly decentralised applications, is highly likely to evolve into the decentralised core infrastructure for mutual value webs and a functional metaverse.

Even though we are yet to arrive in this future - Web 3.0 is still in its infancy - processes of disassembly and reassembly, in terms of the interface and tech layers of value webs, are set to be a constant. The underlying entry points (trust, responsibility, sustainability, identity, platforms and inclusion) introduced across our [Future of Value Transfer series](#) will serve as anchors to determine modality of participation, eventually driving the generation of mutually realizable and transferable value, within and between these ever-expanding webs.

Setting the course

Shifting towards mutual value creation, value capture and value transfer will require value web participants to fundamentally re-assess their strategic positioning, services, and business/operating models.



Familiarising and internalising the bases for the future of value transfer are only the first steps. Unconstrained visioning that lacks appropriate support mechanisms for navigation and measurement will most likely lead to sub-optimal outcomes within any given or network of ecosystems. External influences and continuous disruptions for example by regulators or accelerated developments in technology will further agitate progress and divert focus from the long-term goal of mutual value creation. We believe therefore, that charting a course, with the aid of the compass provided by the [Future of Value Transfer entry points](#), is a necessity.

We are already seeing that business models, initially developed on the premise of hyper customer centricity, are starting to incorporate the concepts of user-empowerment² and mutual value creation.

Greater choice for the user must be supported by agile and evolving regulatory consideration and protection, both at the entity and activity level. Platforms that cater to this will need to create mutual protection, incentivisation plus reward and delve deeper into models of fractional ownership (including subsequent legal considerations) potentially driving the evolution and creation of new asset classes.

In turn, this will enable an organic evolution for 'future-back' ecosystems - digital barter and tokenomics - that are less and less reliant on explicit monetisation to ultimately support value realisation.

It is important to recognise that with a tech-enabled democratisation of wealth, access will remain a mirage unless coordinated actions are taken via public policy to impact underlying societal and civil infrastructure development needs. Insinuating that blockchains and decentralisation therein, can be a cure for all ills is a misrepresentation. Use-cases need to be purposefully designed and stress-tested, balancing the promise of exponential connectivity with secure protocols and flow-through mechanisms that benefit many.

To support this journey and operate successfully in the value webs of the future, Deloitte has identified three core building blocks to help navigate the evolution of value web-enabled environments:

1. Developing products, goods and services focused on fluid **digital presences** rather than static digital identities
2. Moving from customer centricity toward customer **empowerment**
3. Moving from a monetisation through payments mindset to incorporate value realisation through **exchange**

1. Digital identity to presence

Regulators and policy makers continue to enact and enhance regulations, laws and measures to provide and enhance protection to and for consumers that will shift the power balance. Eventually, in combination with other market-led trends like decentralisation, this could help realise fully empowered customers who are able and willing to control and manage their own value creation, capture and transfer.

The future therefore will see a move from data pools to data flows, essentially the information highways of value webs.

Self-sovereign identity (SSID) concepts and the re-alignment of data ownership and access are already being seen aimed at levelling the playing field for customers and corporates³.

This space is set to continuously expand with increasing user adoption, choice and support from regulators. It is conceivable that service models relying on data ownership will become less and less dominant in the future, instead organisations must cultivate trust and enable responsibility as part of their customer interfaces. In a world where the user commands greater control over what and how much data they share, they will be able to choose their preferred service partners rather than service providers choosing preferred customers. Empowerment – not choice – will mean that many services will need to be re-designed and re-configured to be more acceptable to being bought (pull) as opposed to sold (push).

Zero-trust and the reversal of data ownership and data storage enabled by advancements in Distributed Ledger Technology (DLT) will support a digital identity that is an immutable representation of a person, object or thing in the digital space that can be validated through mutual verification. SSID and zero-trust environments will therefore need to move towards ensuring conditions for highly contextualised data access and organic moderation of said data's quality.

Bad players will be punished, as empowered users can revoke all access to their data instantaneously, switching service providers without lock-in effects due to true ownership of their user profiles and accounts. In such an environment, trust becomes a serviceable good and organisations must provide for purposeful design of service propositions that account for the value incorporation of multi-lateral co-dependency.

Finally, with the continued acceptance and adoption of SSID concepts in value webs, digital identity will evolve into a digital presence that is native to consumers and entities alike. While digital identity is a static concept that captures who one is - e.g., name, address, age - digital presence is fluid and evolves constantly with the actions that an individual or entity takes.

Future services must be built with presence in mind - providing the possibility for users to actively participate in the service and generate collateral value from it to the benefit of the broader ecosystem.

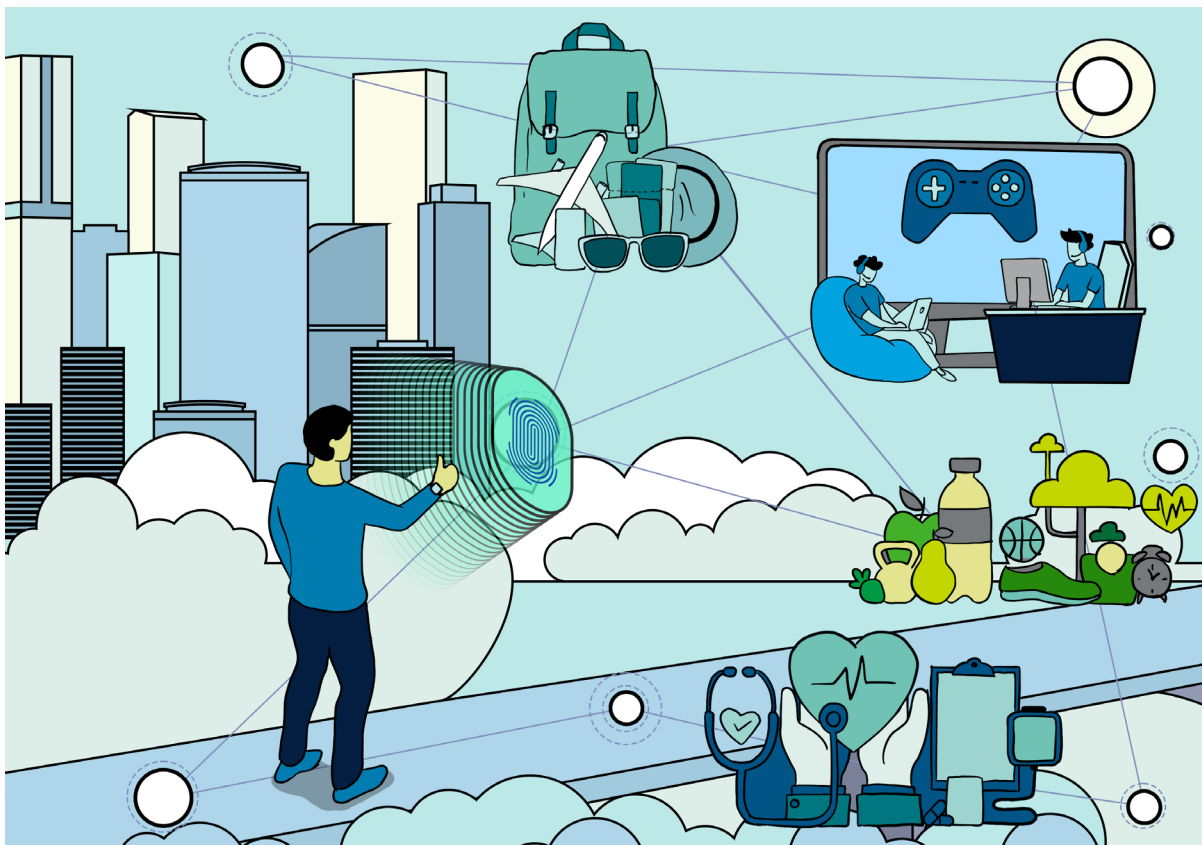
Digital presence not only affects consumers, but it is also relevant from a corporate perspective. Early representations of how activity generated value is continuously captured and utilised are being increasingly seen in the climate and sustainability space. Digital twins, carbon capture, trading and sequestration and the evolution of institutional measures of building and diminishing natural capital are all being facilitated using tokens, web 3.0 and value webs. The future of climate and sustainability is the next horizon for the intersection between corporate, institutional, and real-world challenges⁴.

2. Customer Empowerment & Democratisation of Data

In a world dominated by value webs, self-sustaining services not only let customers create value for themselves, but they also offer the possibility to utilise explicitly created value of other internal or external services, to generate value across ecosystems. We already see this happening in

centrally controlled closed-loop ecosystems, usually offered by a single service provider, in which using one service unlocks benefits for another. Increasingly collaborative models that are at the core of the development of value webs are now moving to expand ecosystem and platform reach – applying similar proven principles. Services like Finastra connect ecosystems and extend service capabilities of financial services providers to connect with more customers and other market players, creating and facilitating open ecosystems via API based payment solutions that promote interaction and mutual value creation.

These early value webs serve as proof of concept for interoperable value creation and will likely become forced open for participation in increasingly decentralised and democratised value webs.



Therefore, it is critical for sustainable business models to design and aspire future-proof services in consideration of multilateral connectivity and/or platform integration to reinforce interoperability between ecosystems, enhancing inclusion and value transfer.

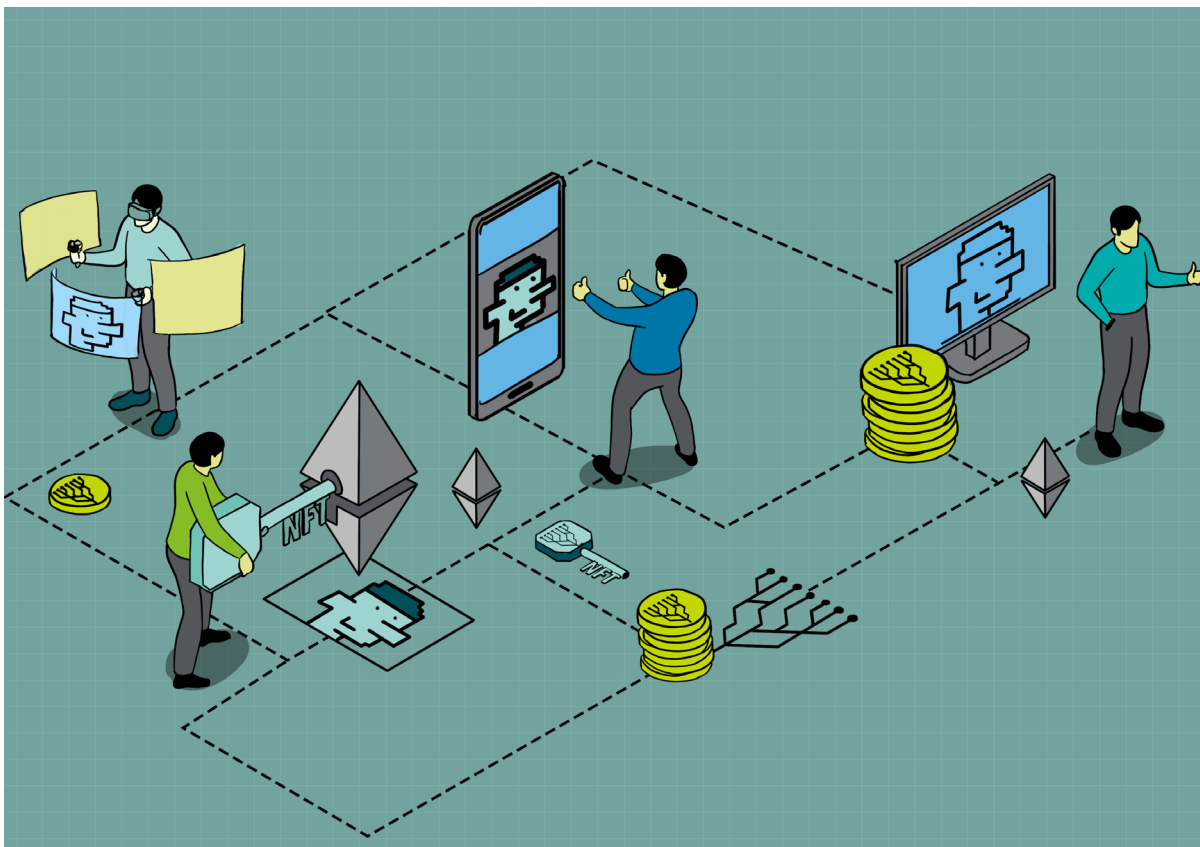
3. Mutual value generation and potential exchange

The activation of non-monetary value attribution, customer empowerment, and the embedding of digital presence will fuel a shift from pure monetisation of services towards concepts of value realisation – incorporating the direct exchange of value, accelerated by the digitisation of physical assets, digital natives and direct, decentralised peer-to-peer transactions.

Crypto currencies, private stable coins (both fiat backed and the more controversial algorithmic versions) and central bank digital currencies (CBDCs) will represent some component of digitised

monetary value and will likely remain in use in the foreseeable, if not perpetual, future.

However, fractional ownership and digital identity attribution have created a myriad of paths for non-fungible tokens to push the limits on the 'pure' use of money and the concept of monetisation being the only true form of value realisation. Decentralised, smart contract driven exchanges enable autonomous market making, continuously increasing the liquidity of digital asset markets with a growing number of use-cases while maintaining relative transparency of price and/or value determination (even though currently somewhat reliant on speculation). It is an equally conceivable next step that one would not need to cross traditional or digitised payment rails (monetisation) to transfer and realise value. Banks, private players, and governments alike, experiment with digital currencies and assets beyond Central Bank Digital Currencies (CBDC). The Singapore stock exchange and DBS already host digital financial assets⁵ like smart contract driven bonds while Switzerland has introduced tokenised equity⁶.



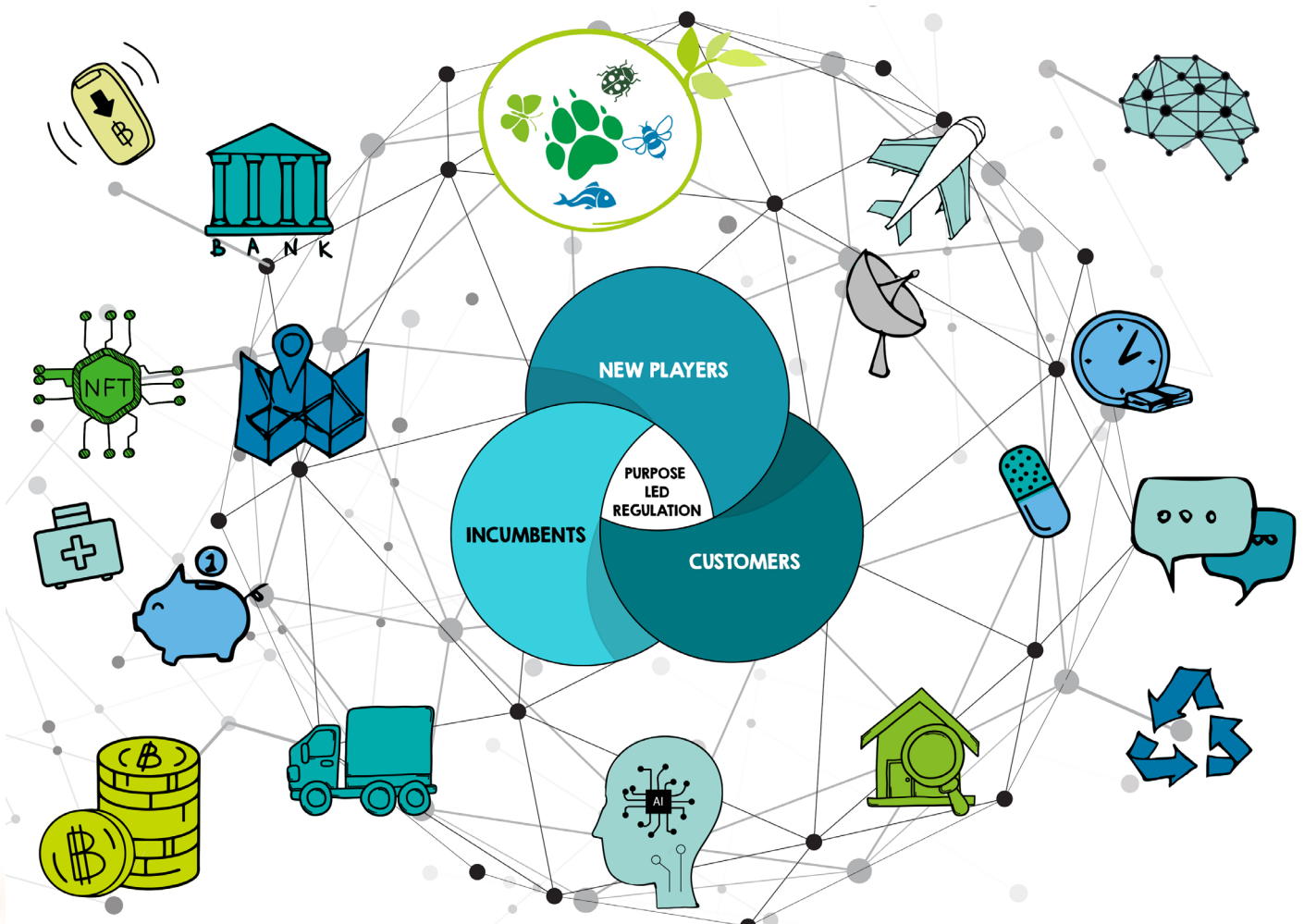
The more integrated and interoperable digital markets and assets become the more liquid they will be. The exchange of value – tokenised at first - will increase in relevance and establish dependable use-cases and context-based payments and thereby exchange of value.

Sustainable business models must identify the value created explicitly and implicitly through their services to evolve strategies (and services) to capture that value, as well as its externalities, in explicit form whilst transitioning to platforms and ecosystems that facilitate, incorporate, and create both payments and exchange.

Regulation and the role of Value Transfer Accelerator Platforms

The strategic realignment and consideration of the three core capabilities highlighted above are fundamental to creating sustainable success from the opportunities that emerge in the future of interoperable value webs. Interoperability implies interconnected networks and infrastructure consisting of a multitude of directly connected nodes and sub-systems, some centralised, some decentralised, built to incorporate market segments/industries and corresponding offerings. In short, the opportunity is immense but, as time and experience are proving, they are not without risk.

We are still in the very early days of the evolution to the future of value transfer, still gaining perspective on the “unknown unknowns”. Despite massive growth in the use of digital currency



alternatives, tokenised assets and other forms of fractional ownership exchange, the markets remain largely illiquid, prone to misconception and manipulation, and subject to fraud and continual threats from bad actors.

Accelerating developments in the future of value transfer will require purposeful and thoughtful navigation by all of those concerned. Beyond the allure of technical creativity, we need to embrace the wisdom and knowledge developed over the period of sustained innovation, including the successes and failures that have created this. With this in mind, purpose driven regulation is needed as value creation for value's sake has, and always will be, a zero-sum game.

Absent a true purpose in value creation and regulation – any efforts to create and capture value will undermine the sustainability of the shift to value webs and ultimately the whole concept of value transfer.

The more exploitation and manipulation, the greater the regulatory and political pressure will be to protect and manage the risk of unintended consequences for those that have neither the inclination nor ability to manage it themselves. This task cannot be left to regulators alone, nor can it fall solely to the market participants themselves to self-govern and resolve.

We need mechanisms established to provide for accelerated thinking, bringing together the creative and innovative forces

that technology provides, to balance with the measured and considered basis that human nature needs to sustain. The value transfer accelerator platforms of the future will be those collaborative platforms that go well beyond the current trend of “sandboxing” by:

- Bringing together the diverse interests and perspectives of the market (public & private) to coalesce on critical value-oriented solutions
- Driving protection without stifling innovation and creativity
- Pushing the boundaries of use cases without exploitation and manipulation, and
- Working for the benefit of mutual value creation, capture, transfer, and realisation.

Such is the pervasive nature of the future of value transfer – it will take the collective and collaborative power of the market to realise the true value of our digital native future. Within the Future of Value Transfer series, we continue to evolve our thinking regarding entry points into future value webs; **be it though trust, responsibility, sustainability, Identity, platforms and inclusion**. In addition, we hope that the core building blocks highlighted in this report serve as cardinal directions on a metaphorical compass for value webs – measuring progress and enabling models to deliver sustained success.

Learn more about what we believe the future of value transfer will be at

www.deloitte.com/futureofvaluetransfer ➤

Endnotes

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Contacts

Authors

Tim Pagett

Senior Advisor
Asia Pacific Financial Services
tpagett@deloitte.com.hk

Siddharth Rao

Strategy Leader
Asia Pacific Academy
sidrao@deloitte.com

Vincent Schwaner

Future of Value Transfer
Asia Pacific Academy
vschwaner@deloitte.com

Contributors

Michael Tang

Chief Ecosystem Officer
Global Financial Services
mtang@deloitte.ca

Marc Bender

Partner, Monitor Deloitte
Australia
marbender@deloitte.com.au

Janice Tan

Strategy & Solutions Manager
Asia Pacific Academy
janictan@deloitte.com

Ryota Fukui

Asia Pacific Leader
Financial Services
ryota.fukui@tohatsu.co.jp

Duleesha Kulasooriya

Executive Director
Deloitte Centre for the Edge, Singapore
duleeshak@deloitte.com

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