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Are Telcos the Key to Accelerate Mass Web3 Adoption?

By: Ryan Gold

We are nearing the end of a full decade in which the telecommunications community has been talking, experimenting, and failing with digital transformation initiatives. An entire industry that used to be at the forefront of innovation is quickly becoming a commodity, providing basic connectivity services.

The old model of monetizing messaging, minutes, and data has been undermined by Over-the-Top (OTT) applications that provide similar services, but with better experiences at a lower cost and often for free. It's understandable why our industry is struggling to compete. Those OTT service providers are free to operate without the yoke of regulations; we are not. They are able to operate globally at scale, where volumes make up for a low individual price point; we are not. They can exploit alternative business models by selling access to customer data and usage insights; we cannot.



However, there is something new on the horizon that, if adopted at scale, has the potential to disrupt the market while also providing a new leading role for telco operators. Web3 aims to create a more secure, private, and decentralized structure for the internet that will enable a massive shift away from centralized platforms and towards a new norm of communicating, storing information, and making payments by using secure, immutable, and decentralized blockchain technologies. This transformative wave is set to revolutionize how data, identities, property rights, and content are owned and controlled by the end user.

Web3 is still evolving as a concept and adoption is still low. Today, the typical user tends to be a technology enthusiast with a niche focus. The most visible use cases typically involve cryptocurrencies and non-fungible tokens (NFTs), which are often perceived as gimmicks or - in the worst case - as scams. The underlying technologies and concepts, however, are sound. To achieve mainstream Web3 adoption, it is imperative to better define the market value, create real-world use cases, and build trust. This is where Telco operators have a role to play.



We are already seeing the impact of Web3 market disruption happening, but it is other industries that are taking the lead. Forward-thinking governments are defining digital identification standards, popular brands are launching token-based loyalty programs, and new market entrants are providing financial services for under-served communities. In order to not repeat the missed opportunities of the past, telco operators must stake their claim as key enablers of Web3 to the market.

How Will Telcos Help Accelerate the Slow Web3 Adoption?

Telco operators are already uniquely positioned to be the gateway to Web3. They are trusted entities. They function within regulated environments. They provide services on a local basis. They know their customers (KYC). They are bound by data privacy and protection laws. They provide trusted connectivity. In all models of identity management, a digital identity requires identifiers that ensure users are who they say they are. Fulfilling the requirements for regulated onboarding has previously been seen by the Operators as a burden. However, this is exactly the catalyst that elevates us as an industry to take a leading role in the advent of the next generation of web services.

Before providing Web3 functionality, operators must get the telco part right. They need to offer compelling mobile subscriptions through a fully digital interface, they must provide an excellent user experience, as well as deliver fast and painless regulated onboarding. That means users can get started anytime, anywhere, 24/7, in less than five minutes after they download the app and without requiring a physical visit to a retail outlet or store.

After customers are successfully onboarded, the next step is for telcos to provide them with the tools they need to use Web3 services. There are three key aspects related to Self-Sovereign Identity (SIS) that Telco operators need to support to be able to act as the gateway to the world of Web3.

Decentralized Digital Identity (DID) is a system that enables individuals to create and manage their own digital identities on the blockchain without the need for centralized authorities. Because it is decentralized and managed by the users themselves, DIDs provide a greater level of control and security over personal data than traditional identity systems. Users can choose which information to share, and they can choose to revoke access to their data at any time.

Verified Credentials (VC) represent information available from physical identity documents that have been verified as authentic by a trusted entity and digitally signed, making them tamper-resistant. When users share the public key associated with their DID and digitally sign it, they can then share their verified credentials without compromising privacy. For example, if end users need to

prove that they are over 18 years old, they can identify themselves and then share their verified credentials, not their actual birthdates. VCs allow selective disclosure; you can share specific aspects of your identity, but only as needed. This ensures that users only reveal information that is pertinent to a particular transaction or interaction, minimizing unnecessary exposure of sensitive details.

Digital (or Non-custodial) Wallets are applications used to securely store keys for blockchain transactions. They empower users to securely store, manage, and transfer digital assets such as their digital IDs, their verified credentials, cryptocurrencies, and tokens. The digital wallet also enables digital payments, loyalty programs, and various other finance and identity-related services.

As a trusted entity, a telco operator - at least one with a clear and well-implemented digital strategy - would be able to issue a digital wallet, digital identity, and verified credentials to every customer that passes their regulated KYC procedures.

Consumer education will also be critical in helping to move from having the ability to access Web3 services to using Web3 as part of their digital lives. Although the scope of Web3 is still constantly evolving, there are many immediate benefits and opportunities.

For example, customers will quickly see improvement in their security and privacy as they regain complete control over how their personal information is kept and used in websites, services, and applications across the web. Tokenized loyalty programs for customers can reward engagement and spending with redeemable tokens for media, financial services, merchant discounts, and more.

Then as Web3 continues to evolve and adoption increases, additional monetization opportunities, consumer services, and benefits will become standard with Web3 marketplaces, communities, loyalty reward programs, gaming, user-generated content ownership, and more.

The possibilities are limitless, but it starts with telco operators taking the lead to make entry to Web3 as simple to get started as using Netflix or WhatsApp. Telcos can leverage their trusted position as connectivity providers to combat revenue declines and drive the reinvention of the telecom business model to become the gateway to Web3 opportunities. And if telcos don't fill the role of trusted entities and facilitators of the Web3 world, other regulated industries like governments and banks will.