What is a Virtual SIM

TELCO BIG DATA: What and why?

Big data is no longer new. Actually, it's not even as new as it might appear. While the term itself might have gained a foothold only in recent years driven by the emergence of technologies either designed to harness it or reliant on it to be impactful, the existence of such data itself, albeit theretofore unused, has been a constant in the telecoms industry almost from the start.

A Virtual SIM is a cloud-based approach whereby a virtual phone number is created online via an application provided by the user's CSP of choice. It can be used anywhere in the world and, clearly, obviates the need for an operator to maintain a physical SIM inventory, thereby reducing costs.

Virtual SIM requires the end-user customer to download and install the CSPs application which then handles authentication via the service provider to create a virtual phone number. This number then acts in the "normal way".

Among other advantages, this means virtual SIMs allow users to escape the restrictions of their physical counterparts. There is no binding to any country or region. The user can travel and communicate at the rates of the home operator, with anonymity and security, because Virtual SIM works as a VPN. The service is provided free of charge and is available in any place with Internet connection. If there is no connection, calls are diverted to mobile or voice mail.

Furthermore, unlike a SIM card, virtual SIMs are not attached to a specific mobile device. Virtual SIM apps allow users to communicate via any device as long as the app is installed. The app also allows users to link multiple numbers via a single account.

To summarise, virtual SIM is an application-enabled service. There are a number of such available apps offering virtual SIMs for both Android and iOS users. The number is linked to social networking sites like WhatsApp, Facebook, Telegram or Twitter. The verification code generated by these networking sites is received on the smartphone and the user is ready.

Disadvantages? At present, there is no end to end encryption, hence privacy is an issue. There is also no proper verification of the user as it is only an app that allows VoIP and the maximum verification these apps need is that the user should possess social media account. As a result, virtual SIM could be used for malicious activities.

Virtual SIM technology remains nascent, but it's likely a key part of the operator's future infrastructure so CSPs should be prompt in understanding and evaluating the opportunities and risks on offer.

Virtual SIM

https://www.evolving.com/resources/blog/activating-sims-the-standard-1-1-1