

Enriching Digital Business with Digital inCloud

Digital transformation is deepening. More and more telcos are striving to become a digital telco which can achieve growth by providing digital services. Huawei launches its Digital inCloud strategy and solution, dedicated to helping telcos to accelerate this process, aggregate more partners, build digital ecosystem and infrastructures, and gradually extend their businesses to other industries.

An age of accelerating digital transformation

We are in an age of an in-depth digital transformation, when digital ecosystem, Industry 4.0, e-Government, smart city, and industrial internet have been promoted and practiced across the ICT industry. More and more telcos are deciding to transform towards a digital telco, achieving growth by way of digital services.

Digital transformation brings about three major changes to:

- Monetization: from network asset monetization to user asset monetization.
- Revenue structure: revenue growth contributor shifted from traditional voice services and access services to the digital ecosystem.
- Operation model: from "single-service, large-scale deployment, consistent service offerings to all consumers" to "digital service production based on the Internet model, user experience centricity, rapid service launches, resource aggregation".

Four elements to build a digital ecosystem

To become a digital service provider, a telco needs to have the capabilities to aggregate worldwide resources and make them accessible to its users. Digital product monetization includes the following elements:



Produce digital products: It involves partners and telcos. Partners create innovative digital products. Telcos participate in the creation and aggregation of these products.

Open telcos capabilities: Openness of telcos' capabilities, such as users, supporting systems, operation systems, and data, to partners will enable business innovation.

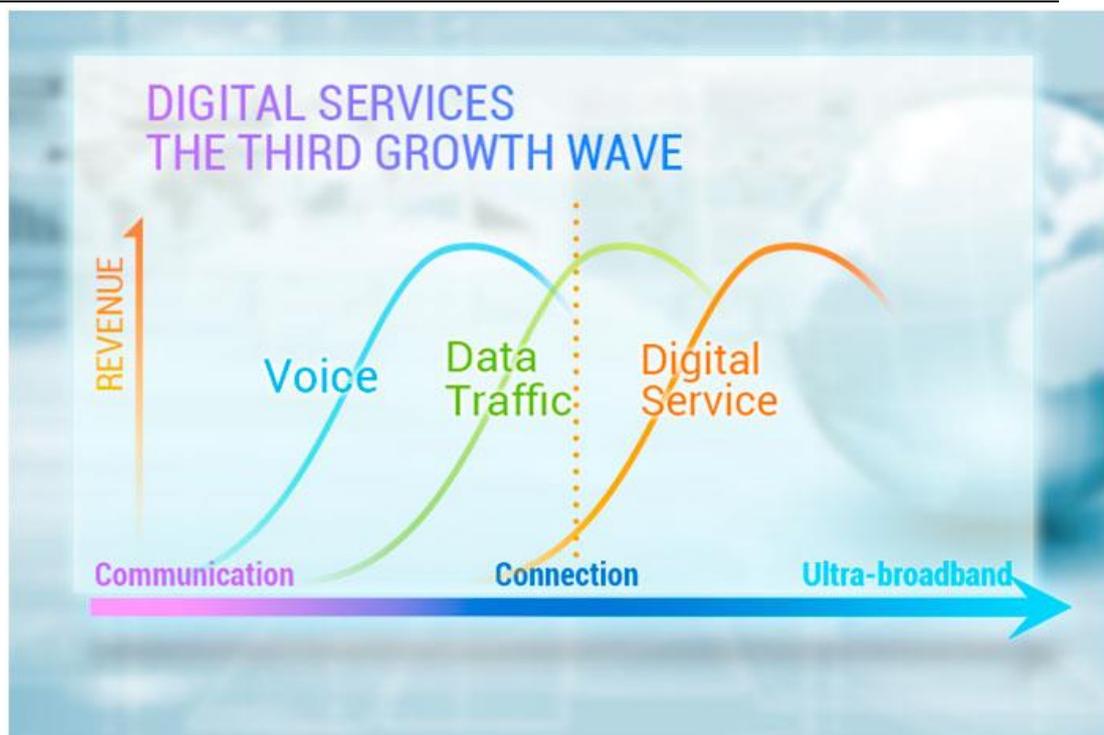
Launch digital products: Telcos can integrate channels to improve efficiency, which will enable quick and easy access to digital products and management of product lifecycles.

Achieve monetization: Monetization of a digital product includes product usage by end users, as well as value allocation among different partners. Both have high requirements in speed and efficiency.

Throughout the whole process of building a digital ecosystem, innovative business models are encouraged to shorten the operation cycle and aggregate discrete values in the industry value chain.

Global telcos' explorations and practices in the digital wave

In this digital wave, telcos are exploring possible ways to capture the third growth wave in the telecom industry and benefit from the growth of digital services.



Some telcos are opening their own capabilities or integrating third-party capability resources to monetize their network/user assets and expand into new markets. America Movil built the AM hub to integrate and open its operation capabilities in 17 countries to its global partners. Orange and AT&T, both multi-national telecom groups, have launched capability openness platforms, Orange Partner and AT&T Developer, to extend sales from services to capabilities. MTN Group evolved existing services and enabled the openness platform to launch over 3,000 digital services, enriching MTN's content offerings. China Unicom launched the WO+ platform, opening its capabilities and resources to individual developers, institutional developers, and third-party capability providers. By mid 2014, China Unicom had launched 15 types of APIs, generating new service revenues.

Others are leveraging self-run businesses to aggregate partners and build an industry service mall, for example, offering applications in fields such as digital media, video, smart home, finance, and health care. AT&T Digital Life offers personalized home security and automation packages, allowing end users to manage their front door locks, monitor their homes, and control household utilities. China Mobile has established Migu, a culture and



technology service arm of China Mobile, to improve the running of its content business by integrating music, video, reading, gaming and comic sections. China Mobile aggregate industry partners within one platform and achieves profitability through revenue sharing. Docomo, a Japanese telco, rolled out D-market, through which users can find content and applications sorted into 14 categories. D-market has attracted over 7 million users. A proportion of revenues generated from digital services also increased from 14.19% in 2013 to 18% (forecast) in 2014.

Digital inCloud: enriching digital business

Huawei Software is strategically positioned as "Best partner for managing and monetizing user assets", aiming to help telcos to achieve business success in digital transformation and enrich operator's digital business. To achieve this goal, Huawei launches the Digital inCloud strategy and solution.

Digital inCloud covers the service openness platform and operation support services constructed to help telcos to achieve digital transformation, including an openness platform, a partnership alliance, and operation support services.

The openness platform allows telcos to design business scenarios for their assets (such as network assets and user assets) and make their assets available in digital malls. Industry partners can easily shop for telcos' capabilities, just like shopping in a supermarket, for example,

Big data openness service: Open information analyzed based on big data analysis, such as location tags, interest tags, and credit tags to partners. Advertisers are interested in this data, since it can help them to target individuals for their ads and monitor whether their ads are effective. Applications of this kind are now widely used among Internet advertisers and finance vendors.

Business support service: Telcos open customer relationship management and billing capabilities and provide user authentication and charging capabilities to third-party partners. The charging capabilities are well received among gaming vendors and online



retailers that require a quick payment function, since telcos have high credibility and they can provide reliable network facilities.

IoT service: Telcos open SIM card capabilities, which have been used by Internet of Vehicles (IoV) vendors such as VW and BMW.

Global partnership alliance bridges telcos and partners to facilitate telcos' business development in the digital business ecosystem. The program provides services ranging from partner recruitment, service launching, service promotion, to operation support, driving telcos' business development in digital music, traffic monetization, TV and video, open APIs, enterprises, and vertical industries. So far, the inTouch® partnership program has aggregated over 2000 partners and 146,000 applications including over 9000 games, 200,000 songs, and 100 enterprise applications. This program helps telcos to build a solid foundation for additional content and partners.

Tailored solutions targeting different markets:

In mature markets, where telcos have built their own ecosystems, Huawei provides an end-to-end technical platform and operation consulting services. Huawei's partnership program can serve as a supplement to telcos' digital ecosystems.

In emerging markets where the digital ecosystem has not taken shape, Huawei provides a one-stop solution including a technical platform, partner aggregation program, and operation services.

Benefits of Digital inCloud

Highlighting openness, bridge, and efficiency, Huawei Digital inCloud:

Provides an open platform to help telcos to transform towards a digital service provider. A unified and open platform makes telcos' assets available to partners and leads telcos from a closed business environment towards an open digital ecosystem, so that the market landscape is expanded and more value created.

Bridges telcos and partners to enrich service offerings. Global partnership program connects more partners and resources. So far, the program has contributed to over 2,000



partners and 250,000 content items.

Helps telcos to improve operation efficiency by streamlining digital business processes, which will generate more revenue sources from digital business operations. To respond to changing customer requirements in the digital ecosystem, Huawei assists telcos in the streamlining of digital business operation processes, external integration processes, and new business launch processes to reduce the time to market and shorten time to respond to market requirements.

Huawei is dedicated to helping telcos to explore and create new business models, ecosystems, and organizational structures. With Huawei Digital inCloud, telcos can fully leverage their core advantages in networking and customer base, aggregate partners, build ecosystems and digital infrastructures, and gradually expand their business landscape.