



FUTURES

COMMUNICATION

APIs in Telco World

How **APIs** are Revolutionizing the Telcom Industry

digital **API**
CRAFT

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Introduction

The telecom industry has seen a massive shift from hardware to software in the last few years. When we talk about software, we usually mean APIs and how tech companies have transformed the old-school heavy-lifting telco days into simple API calls. There are companies that are focusing on the API-First, hoping to profit from the solution's development by assisting telecoms in getting ready because everyone knows they will anyway.

The best example is the Cloud communication platforms that have started leading the way in telecom APIs, providing voice, SMS, video, chat, and more. There has recently been a surge in demand for mobile top-up APIs and other telecom APIs. As a result, many companies are now providing their own APIs to allow developers to integrate their own services into their applications and programs.



How APIs are changing the Telco Landscape?

According to market research, the Telecom API Market Size is estimated to be worth USD 1,113 billion by 2030 at a CAGR of 20.2% (Source: GlobeNewswire)

Telecommunications, like banking and healthcare, is an industry that is heavily regulated. Communication improves because there are numerous standards, such as 3GPP and TMF, that govern network operations.

With the latest standards and 3GPP specifications coming from 5G and 5G advanced, the industry has started documenting how APIs would be exposed for any network persona. This seems a good sign from both networks and operations API standpoint.

Many CTOs, CIOs, and service providers, both large and small, are wondering what will be different this time for Telcos.

It will be vastly different because the telecom industry is rebuilding the networks in a cloud-native approach for the first time. Everyone is moving from on-premise to public and hybrid clouds, and now the industry is talking about private cloud adoptions or pieces of it, and because of the cloud-native nature of the aspects.

The Telco industry is now talking about how to define the right set of APIs that can use extreme bandwidth and low latency capabilities. This shows that this industry will witness a massive transformation with APIs.



The Advancing Need for Telco APIs

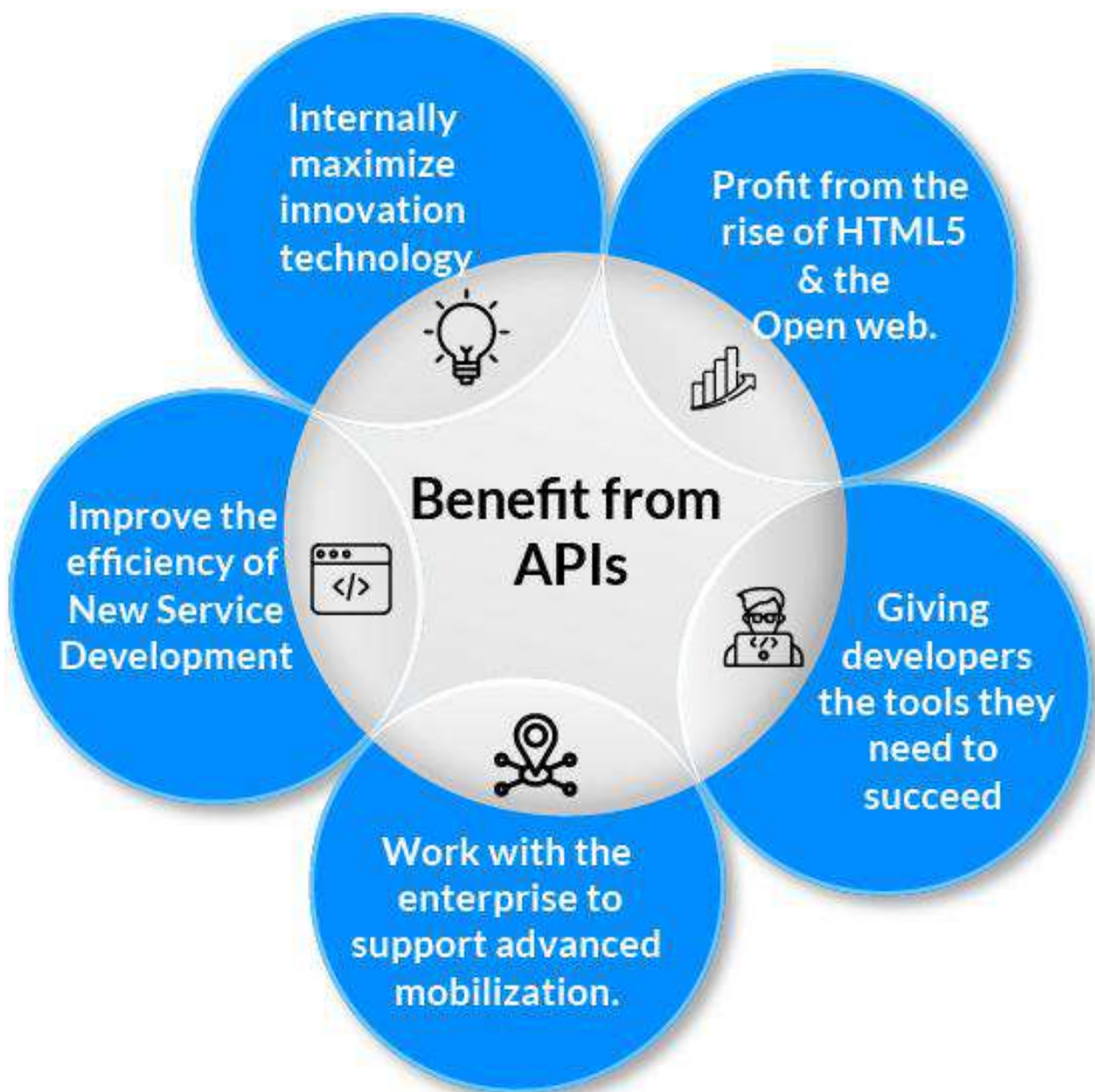
To remain competitive in the current environment, telcos must use APIs to improve their agility and efficiency in adapting to technological change. APIs greatly simplifies the process of delivering services via mobile networks and the Web by allowing services to be reused across multiple ecosystems. In response to these developments, many telcos have attempted to court the long tail of third-party app developers. These attempts have mostly failed as direct revenue generators.

The long tail, however, continues to provide some value to telcos, and there are numerous other ways carriers can benefit from opening APIs to partners and internal developers.

Although the telecommunications industry was one of the first to take a keen interest in APIs, carriers are yet to fully capitalize on the business opportunities presented by APIs. However, as Web and mobile technologies evolve, every telco carrier must develop a serious API publishing program.

Below are the five key ways telecommunications carriers can leverage APIs to stay competitive in a rapidly changing technological environment.

5 Ways Telco Enterprises Can Benefit from APIs





How does 5G Create Value for Telco Ecosystems for **APIs**?

The Power of 5G

5G Promises Gigabit Data Rates, Low Latency, Reliability, and Availability- This creates enormous opportunities for collaboration across industries for digital telecom companies and ecosystem partners. It offers customers an excellent experience whether they are indoors or on the move, with no limitations.

With Augmented Reality (AR) / Virtual Reality (VR) technologies and 8K video streaming, new and immersive experiences are becoming a reality. With a strong network as its backbone, IoT has become more reliable. Customers are enjoying these experiences both inside and outside the home, from the comforts of a digitally connected smart home to a 360-degree fan experience in a connected stadium.

Enterprises are experimenting with new services such as remote maintenance guidance, smart offices, drones for a variety of services such as surveillance, and new business models that support B2B and B2B2X. All of these new services are causing digital bundles of new offerings to emerge.

With the advent of 5G, the existing 3 vectors of telecommunications will be superseded by a 16-vector ecosystem and telcos need to adapt to these changes quickly

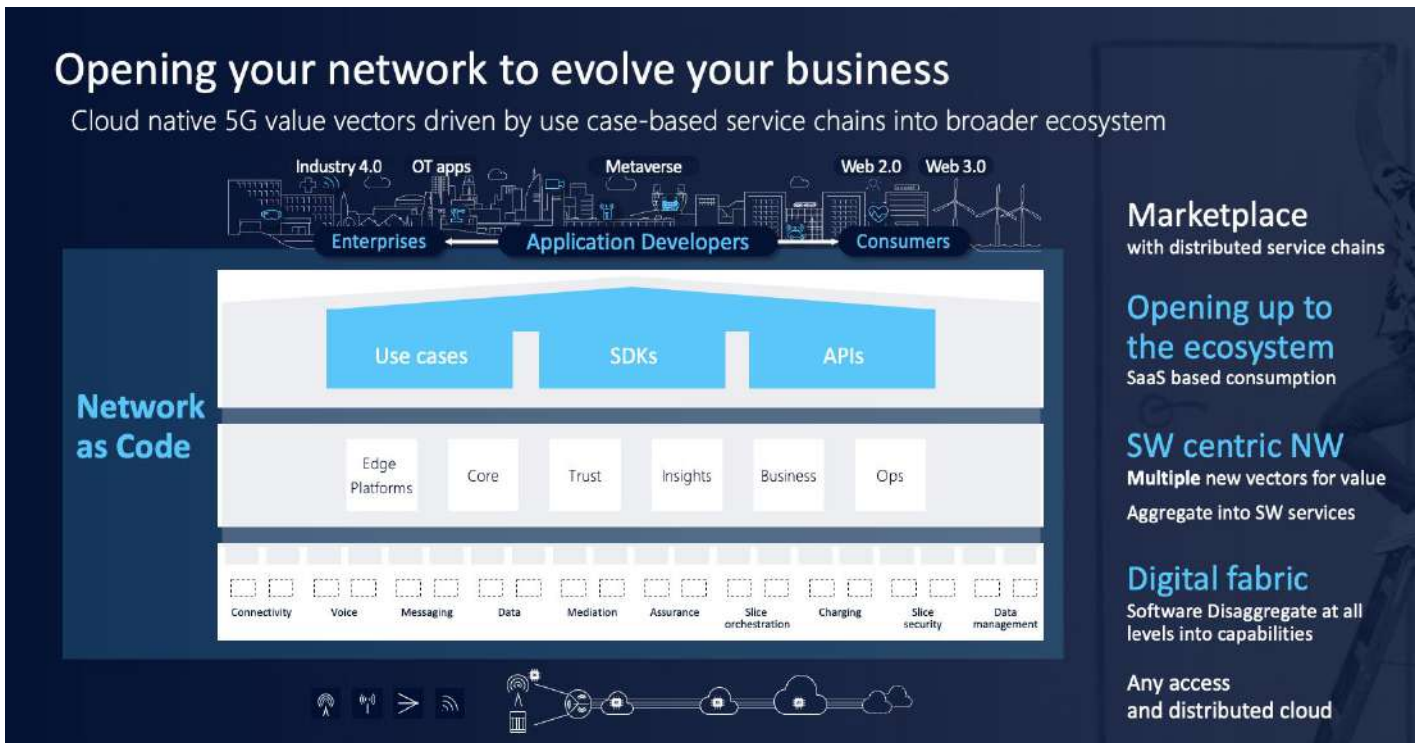
5G, an important vector in leveraging API-based Strategy

5G puts telcos at the center of next-gen services. Now, with 5G and competition from digital natives emerging, telcos are scaling up with an API-based ecosystem to create new revenue streams.

Telcos also have started to see new competitors and competition in the form of SaaS providers and CPaaS services, such as OTT providers and technology providers such as networks as a code that affects the value chain.

Twilio has changed the C-PaaS industry as a whole in the last ten years, having recently introduced programmable three vectors of voice, video, and messaging. Because of those three vectors and the programmable persona, a 35 billion-dollar market for what we call C-PaaS emerged.

Similarly, doing active business heavily in growth 5G is of enormous value, and you can look at it as building blocks from radios to data or packet core pieces of it to voice pieces of air to operations analytics, and every single building block of 5G is now cloud native and software-centric, and it's designed on Open API-First and cloud-native design principles. The below visual chart shows the state of the affairs of the networks is going on.



As the telecommunications industry evolves, the siloed, monolithic IT solutions that have emerged over the last few decades make new 5G use cases difficult to adopt. To remain competitive, operators require a more flexible, composable, and BSS-agnostic IT architecture

5G enhancing developer experience

5G is all about crossing that B2B bridge and creating a more monetizable network that gets to the point of creating a more programmable persona and making the abstract ability of this network simple and effective enough to the developer ecosystem that latches onto this metaverse versus the web 3.0 ecosystem or the industrial metaverse and the consumer metaverse, it's all about how you participate in the distributed service chain.

From the standpoint of 5G, which caters not only to the consumer side of things but also to the industrial metaverse, IoT applications, and web 3.0 applications, the developer pool will be massive. There is a lot of programmability coming out of the transition from traditional networks to the future.

The developer experience is critical because enterprises create a new set of services for developers. Developers are becoming your new customers, and 5G, powered by the Internet of Things (IoT) and augmented reality technology, opens the door to a plethora of network monetization options.

API Monetization In Telco

Let's understand API Monetization in Telco with a Use case-

5G is a game-changing technology that opens up a slew of new opportunities in a variety of industries. When combined with technologies such as the Internet of Things (IoT) and augmented reality, it opens up a plethora of network monetization possibilities. A few examples of such applications are provided below.



Video surveillance and analytics



V2X, autonomous driving, vehicle maintenance, enterprise (B2B, B2B2X business models), consumer services



Immersive entertainment (live streaming, AR / VR solutions)



Connected stadium (fan experience)



Industrial automation, remote monitoring, IOT platforms, streaming with AR / VR for remote assistance and guidance



Smart health, smart cities, smart homes



Drones As a Service (Surveillance, 5G signal QoS assessment)





Telco benefiting Other Industries

Telcos play an important role in digital health by providing connectivity, providing end-to-end services, and assisting healthcare providers with the implementation and management of [new digital solutions](#). There are numerous opportunities for digitization in the healthcare market. To improve efficiency, telco operators can consider introducing a slew of new technologies, applications, and potential services. There has been a lot of hype surrounding new network technologies like 5G, edge computing, and the Internet of Things, as well as the new revenues they could bring to the telecoms industry.

Even with these new technologies, however, providing connectivity alone will not drive long-term growth for operators. As a result, we encourage operators to look beyond their core connectivity offerings and move up the value chain, exploring vertical opportunities in application enablement, solutions, and applications.

In both rural and urban areas, adequate and high-quality healthcare services are lacking. This problem is exacerbated in developing countries, where facilities and personnel are frequently in short supply. Healthcare providers and telecommunications providers are collaborating and innovating to fill this gap by utilizing a digital health ecosystem to provide quality primary healthcare to all.

Reliance Jio, for example, provides the connectivity backbone. [Since its launch in India in 2015](#), Jio has amassed over 300 million users and operates the country's largest 4G network. Jio is focused on providing digital services in addition to traditional telco operations. JioHealthHub, a platform that provides "a complete primary healthcare solution in the palm of your hand," has been launched to enable healthcare-related digital services.

TELUS Health, which began its journey in healthcare over a decade ago, serves as a model for what operators can achieve.

TELUS Health has built a practice that now accounts for 8% of TELUS' total revenues by continuously building expertise, following a clear and patient strategy, and with strong buy-in from the C-level down to the field force. It has established a permanent place in Canada's healthcare system, and its 8% share will only grow in the future.

Accelerate the Digital Journey of Telecom Companies With Digital**API**Craft



DAC understands the significance of developing a robust and innovative API ecosystem. Adapting to a powerful mechanism known as Application Programming Interface is critical for generating good ROI and revolutionizing businesses in the current digital age in order to outbid competitors.

With our suite of products and solutions, our in-house team has solved all of the complex issues of telecom and financial businesses across the UK and the US, allowing them to accelerate their API ecosystem.

How DAC products are shaping the Telco industry?

01 Our marketplace provides numerous opportunities to develop new business models that allow partners and developers to monetize or extend your services through apps.

02 Provides incredible flexibility in designing rate plans and monetization packages

03 Payment gateway integration is seamless

04 Assisting developers and partners in entering the global market.

05 Application and API innovation.

06 Allow developers to extend telecommunications services and create applications.

07 Assist developers in entering the global market and providing maximum value to customers

08 Learn about the agile techniques used by Internet companies.