

Digital Marketplace:

A panacea for digital transformation woes?



Is a digital marketplace the answer to CSPs' digital transformation woes?

Analysing the role of digital marketplace solutions in helping CSPs compete effectively and create true differentiators in a dynamic industry that's being steered by digital transformations

The need for communication service providers (CSPs) to look beyond traditional voice and data services have become more urgent and imminent than ever before. To stay relevant and compete effectively, they would need to diversify and take the plunge into new age digital services and explore relatively under penetrated customer segments, such as the enterprise segment. Rapid evolution of cloud models/platforms, open architectures and most importantly, shift in customer behaviours presents telcos with the right opportunity to venture into new verticals and create an eco-system that helps them build new business models and revenue streams. Partnerships with players from different verticals would be crucial in this journey, to cater to the varied and complex needs of customers. A partnership ecosystem would enable CSPs to launch offerings faster than ever and go from just being cost-efficient to adopting new and innovative revenue streams. This whitepaper examines how platform-based models can help lay the bridge between CSPs, customers and partners paving the way for greater collaboration and shared value.

The emerging enterprise segment

Perhaps because it is easy to navigate, telcos have focused on the retail market segment for quite a while now. However, traditional voice and data offerings are no longer proving profitable for telcos. High spectrum and maintenance costs add to their bag of woes. In addition, factors such as increased market saturation, intensified competition between telecom players and newer breed of digital technology players who are innovating and creating disruptive products for end users. This calls for a re-look at the largely untapped enterprise segment. Why? Because refocusing their strategies will open up unprecedented opportunities and help telcos carve out a distinct identity in this segment. And, a major part of this realignment will be culled from value derivation that happens inorganically. For instance, the diverse needs of enterprises may mean that not one organisation will be able to satisfy all of them, paving way for the need to create a platform and partnership ecosystem that's flexible, robust and supports this kind of collaboration.

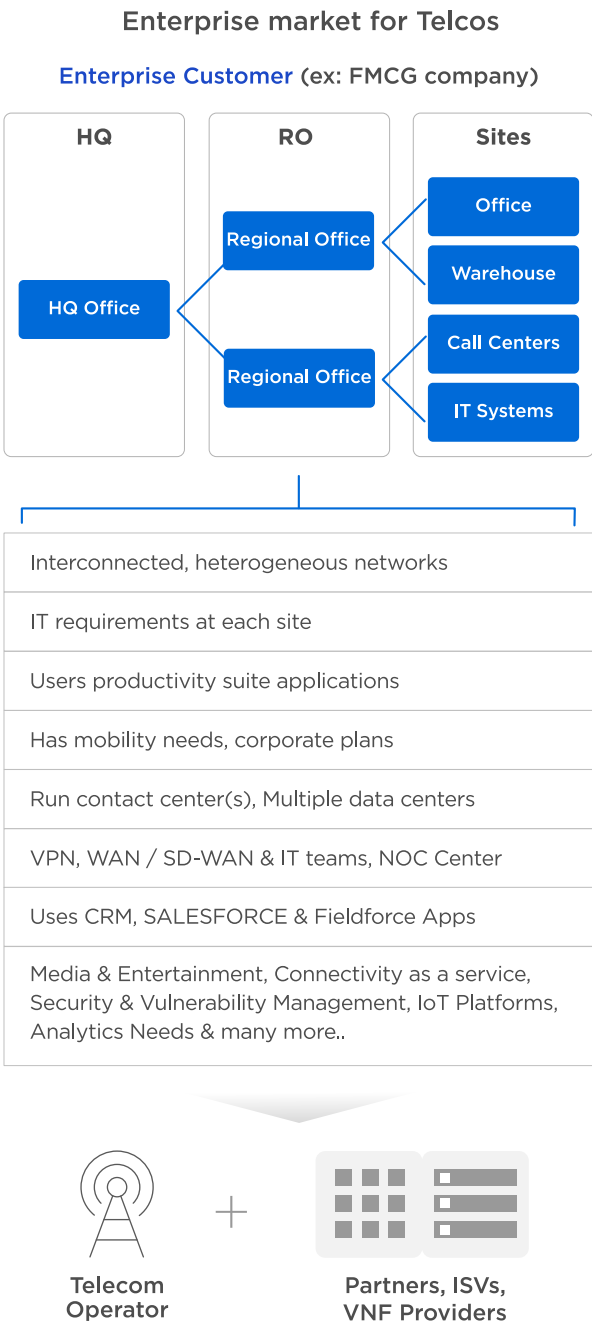


Figure 1: Evolution of the enterprise market

Telcos have been wary of foraying into the enterprise segment, probably due to the complexity involved in executing projects, as well as high dependency on manual activities, complex workflows and lengthy approval processes within business hierarchies. These reasons could be why the enterprise segment remain untapped and unable to generate profitable revenue streams for telcos.

A TM Forum survey reveals that 46% of CSPs are deriving less than 10% of their revenue from B2B services. In the medium to long term, 71.5% of CSPs expect to generate more than 50% of revenue from B2B services.

Today, CSPs realize that they no longer need to focus on technology transformation, rather they need to focus on obtaining business and operational agility that helps them grow. Technology has proven to be an enabler to address CSPs' needs.

Globally, the Everything as a Service (XaaS) market is set to grow by \$400B by 2025¹ and the Network as a Service (NaaS) market will increase by 40% in 2025².

This is a clear indication of the fact that the enterprise segment will grow multi-fold in the coming years and telcos need to accept a new role in the value chain right now to make the most of the opportunities. There are several use cases that are within easy reach of telcos.

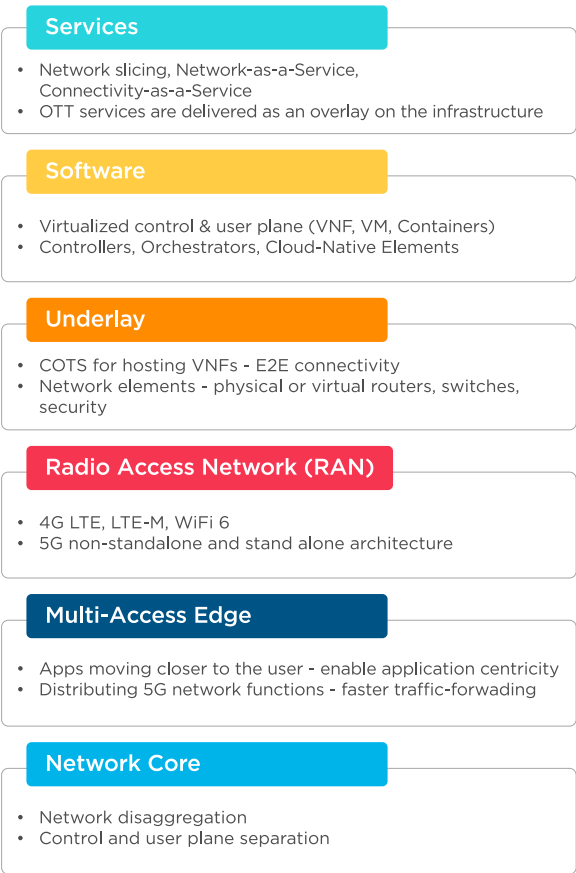


Figure 2 a: Technology Evolution

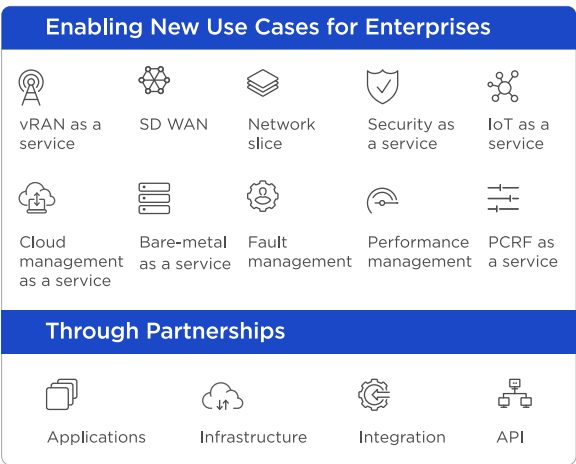


Figure 2 b: Bringing unparalleled control to business

To begin with, telcos can partner with players who can help them provide a variety of services to enterprise customers. This unlocks huge potential for new revenue streams for telcos, across industries.

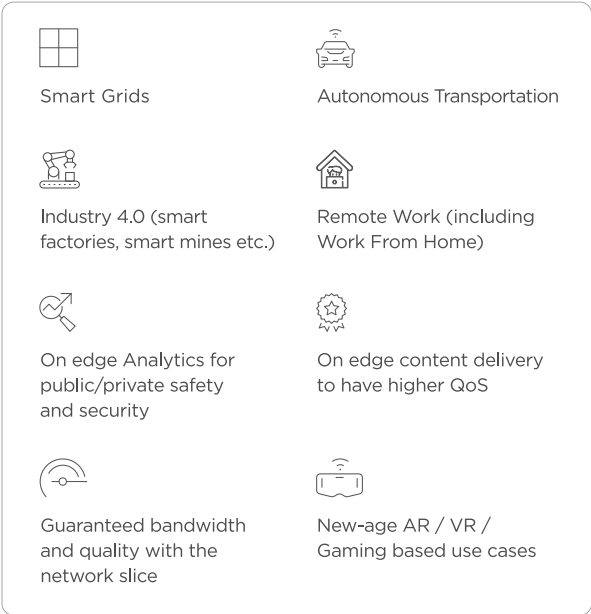


Figure 3: Multiple connectivity-driven emerging tech offers huge potential for a number of use cases

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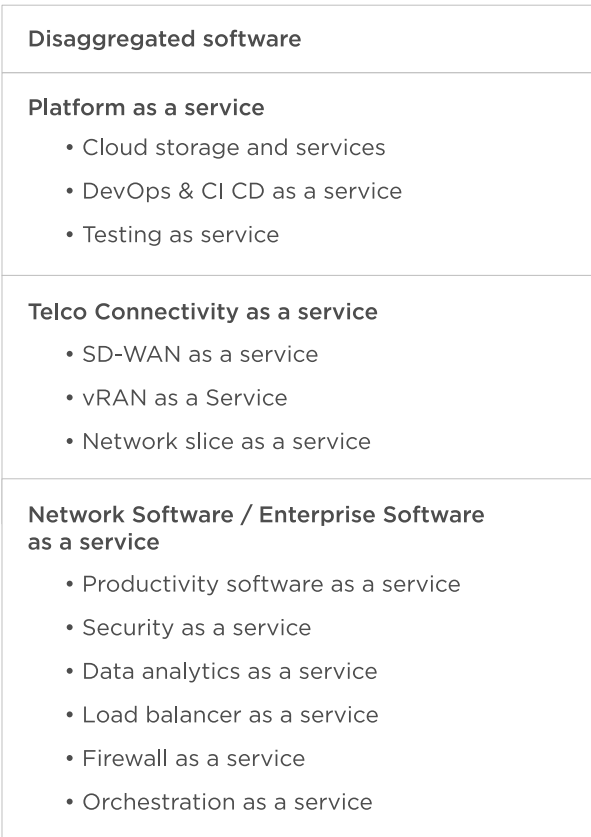


Figure 3 shows that the needs of different enterprise customer segments is different – be it SMB and start-ups, large enterprises having multiple sites across the geographies or Greenfield 4G/5G network providers, MVNOs, IoT or any other advanced digital services providers.

Enterprise Marketplace

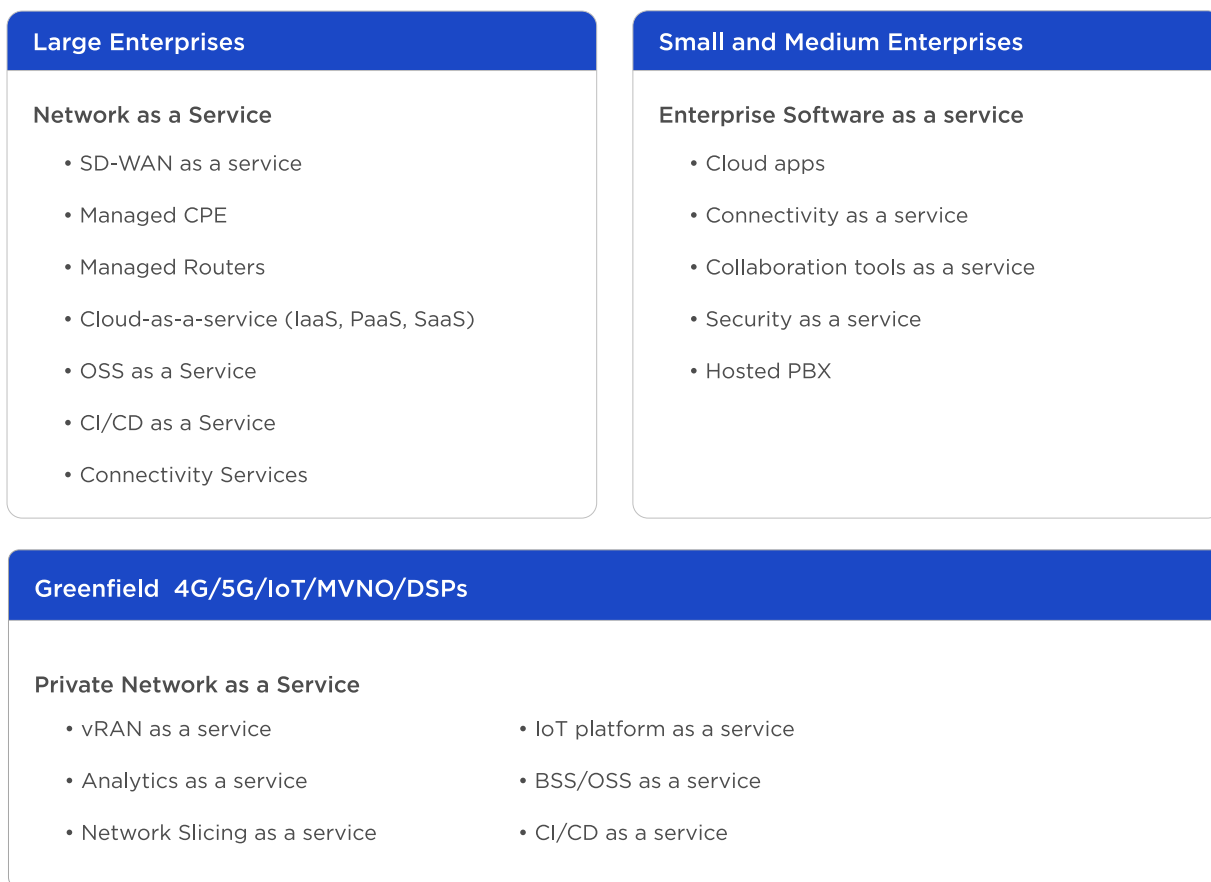


Figure 3: Needs of enterprise segment vary

The industry is at cross roads

The age of digital is driving every industry towards transformation. CSPs also started this transformation while back but latest Digital Transformation Tracker of TMForum reveals that 42% of CSPs are still at their initial stage of the Digital Transformation, while only 22% of CSPs have started enjoying some benefits of the transformation. The industry is in the midst of rapid, dynamic and transformational changes in response to changing customer needs and expectations, competition from disruptive technology companies and digitally-empowered OTT players. Thus, telcos have the tough job of balancing continued spending on digital transformation with pressures to increase their bottom-line.

With 4G LTE, 5G, Wi-Fi 6, cloud technologies, XaaS, open source technologies and standards such as 3GPP 16 enabling innovative use cases and simplicity, there is a need for telcos to shift from being just connectivity providers to become either lifestyle providers to address increasing digital demand of retail customers or become platform provider to address emerging business needs and un addressed needs of the enterprise customers.

Figure 4 shows how dynamics have changed in very short span. If telcos believe that the market has become stagnant, there is a good chance that they have not been able to innovate enough to create new revenue streams.

Changing Dynamics..Before and After

| Era of Disruption is over | Era of Collaboration is on the rise |
|--|--|
| Focus on Technology Transformation | Focus on Business Transformation that's powered by technology..Technology is the enabler |
| Focus on creating products & services and then create the needed market | Partner with players of different verticals and launch bundled offerings, faster TTM is the key to win !! |
| Invest in 4G LTE and 5G network rollout | Monetize the 4G LTE or 5G investment that's already done !! Building new revenue streams is essential !! |
| Multi-play was the best CSPs could think as part of their Digitization journey | Life style provider (for consumer segment) and platform provider (for enterprise segment) is the new goal |
| Basic connectivity was the focus | Going beyond basic connectivity & be wholesale connectivity provider or going far beyond connectivity & be platform provider |
| Market was considered as stagnant | New market exploration by partnership and collaboration is the vision |
| There is a fundamental shift in the way CSPs need to behave: from being a CSP to a platform provider and the choice they need to make: be wholesale connectivity provider or go far beyond connectivity & be platform provider | |

Figure 4: Changing dynamics – Era of disruption vs. collaboration

CSPs can piggy back on platform based models/marketplace based models in order to explore these umpteen use cases and prime for growth.

Platformisation is the future

“As-a-Service” models are firmly established in the digital economy. This is underlined by the fact that since 2015, many organisations in the digital economy, especially those with over USD 1 billion valuation, have created platforms rather than sold products. Over 40% of the world's top 30 brands are now platform businesses. Adopting platform-based models is an integral part of journey towards becoming a DSP.

And there is no reason why telcos that have built very strong relationships and gained the trust of millions of customers should be left behind. They can capitalize on what they have built so far, over the years. They certainly have advantage over others in new age digital services powered by connectivity, provided they also focus on building a platform that gives them required business agility.

For telcos, a fully digitized platform that's built on open, disaggregated (including microservices, serverless and APIs) and cloud-native architecture helps:

- Simplify customer and partner journeys to deliver seamless customer engagement
- Launch services and products faster without the challenges of complex backend legacy integration challenges
- Tap into under penetrated customer segments with complex partner enabled services (e.g. SD-WAN as a Service, IoT as a Service, & many more..)
- Drive growth by accelerating intent-to-purchase to conversion and automating key processes (e.g. Contractual agreements, digitize payments, near-real-time settlements)

And all of the above can be delivered with inherent platform advantages of high availability and scalability.

Among the several steps involved in the journey of becoming a DSP, the most important one is that of becoming a platform provider – one that will encourage the incubation of a variety of disruptive new services and revenue models in response to how the technology landscape evolves.

** According to the TMForm Digital Transformation Tracker for 2020, 1 out of every 4 Service Providers wants to become Platform Provider*

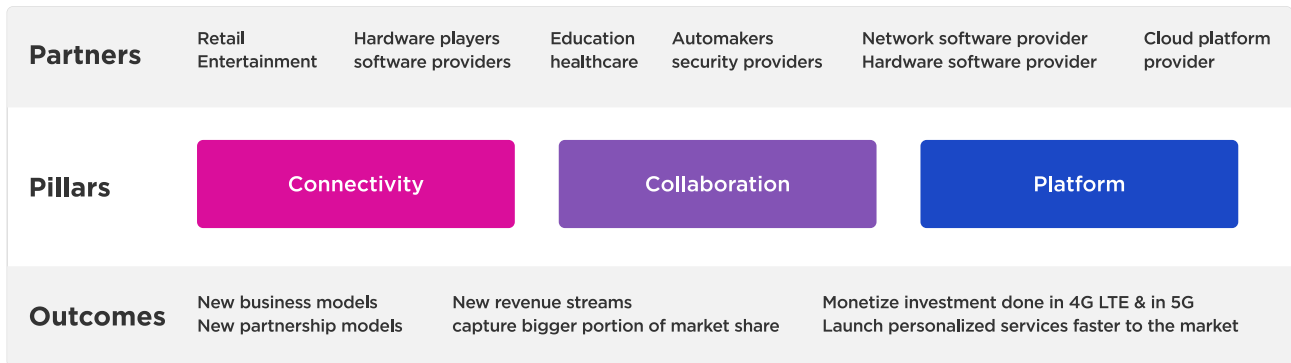


Figure 5: Three Pillars of the platformization – Connectivity, Collaboration & Platform

However, platformization should not be viewed in isolation – the model has to be evolved keeping in mind changing customer needs, demand for digital and data-driven services with digital infrastructure forming its backbone. Platformization can thus be key for telcos to diversify and make the most of opportunities to support enterprises. Through platforms, CSPs can venture into multiple industries that were largely untapped before.

The Marketplace Model

What really is a marketplace model? A digital marketplace builds on platformisation principles to curate a meeting ground where service providers across diverse industries can seamlessly integrate their products and services and become part of a unified product catalogue. A convergence of products and services that ultimately complement each other, with the freedom to bundle and package services innovatively for enterprises. Thus unlocking hitherto unexplored values for customers.

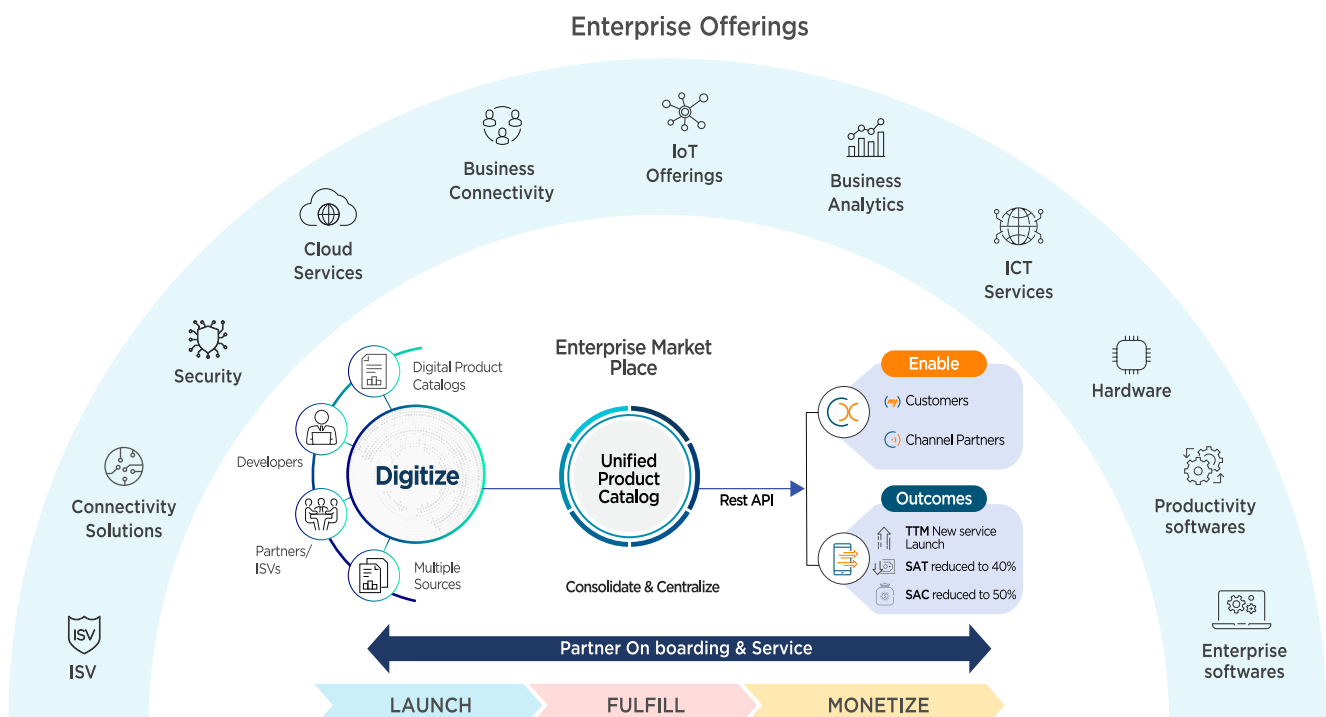


Figure 6 - The Enterprise Market Place Universe

*SAT - Subscriber Acquisition Time, SAC - Subscriber Acquisition Cost

Many telcos already have strong relationships with various ecosystem players that they have built over the years. A marketplace model provides an opportunity to strengthen and monetize these relationships and convert them into mutually beneficial strategic alliances.



Figure 7: A marketplace platform significantly simplifies partnership journeys

With this model, CSPs can effectively digitize all the journeys – enterprise customers, partners and provides a great degree of ease in on-boarding, managing and monitoring the relationships - between the CSPs, enterprise customers and the partners.

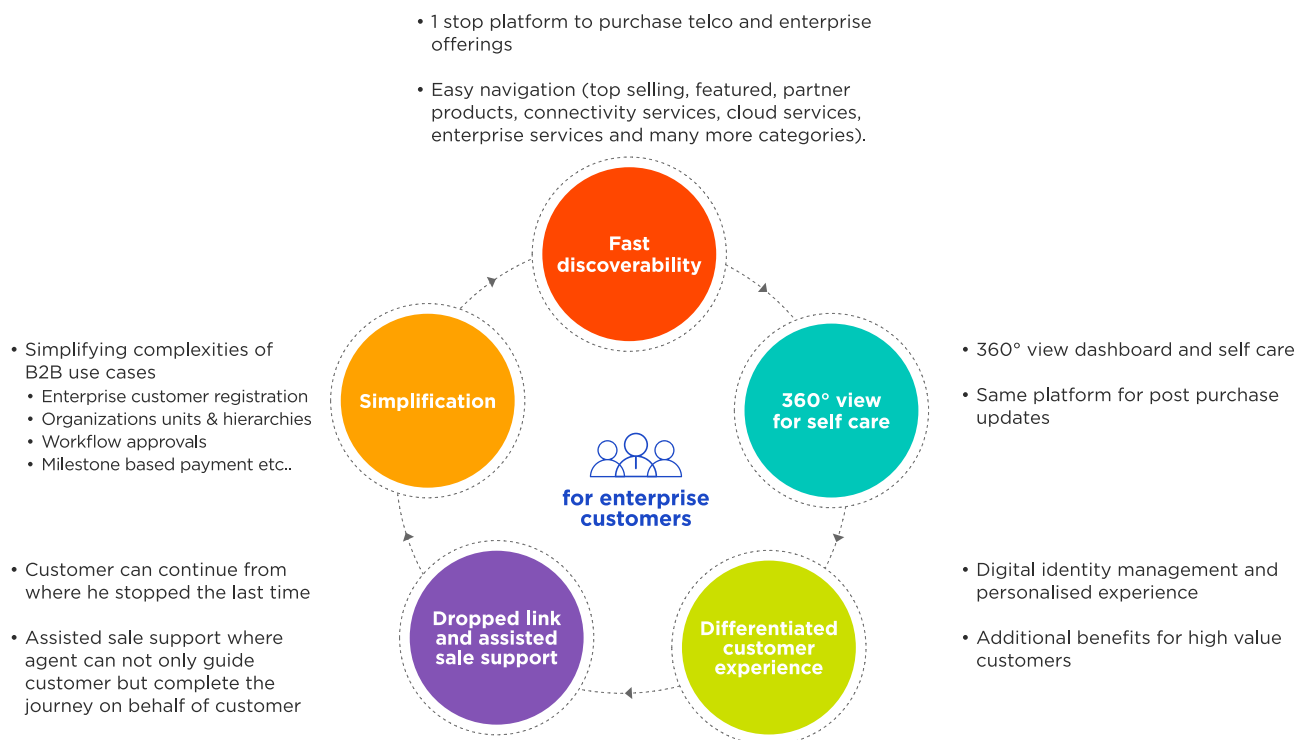


Figure 8 – Radically simplified enterprise customer journeys

The digital marketplace must provide great degree of ease for on-boarding partners to supporting enterprise customers. It synergizes the strength of multiple partners and brings them together on a common platform, which forms the foundation for a virtual marketplace.

A marketplace driven platform

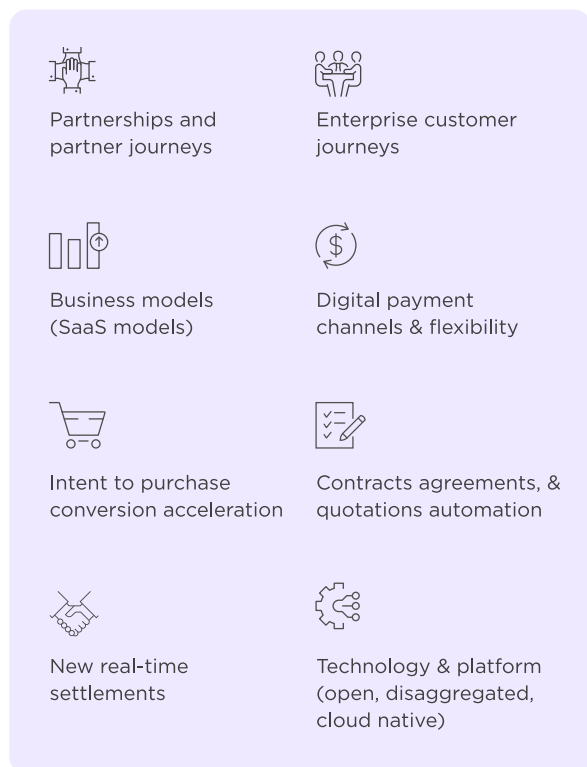


Figure 9 – The Marketplace Platforms – Key Benefits

Marketplace use cases for enterprises

With most organisations moving away from making large investments in hardware, cloud and virtualisation will take centre stage now and well into the future. We deep dive into several use cases to better illustrate how marketplace platform can make a difference to enterprise customers.

Use case 1: IoT as a service use case

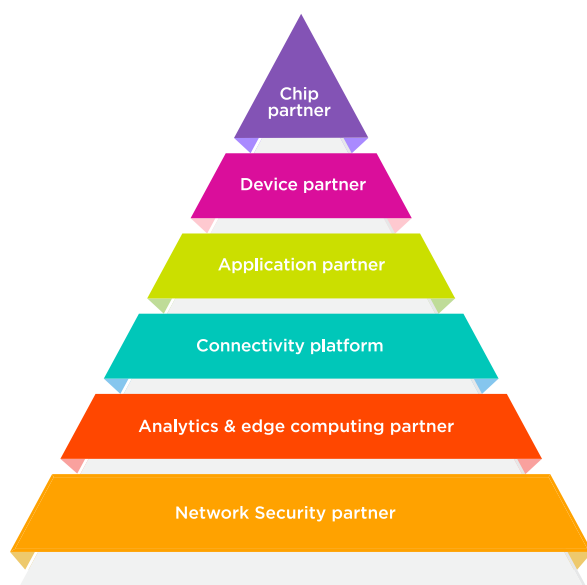


Figure 9 – The Marketplace Partnership Triangle

Sunshine City, Pune (which offers IT and other commercial towers, office as well as residential area, a mall, a fitness centre and a shopping centre) wants to purchase IoT as a service (for surveillance). This would cover all the areas in the city under CCTV Camera surveillance. The telco operating in that area has already built partnership with device players (Camera provider), Storage provider (Public cloud providers in this case), Analytics on the Edge service providers (to report any suspicious activity) and has created bundled IoT as a service and has made it available on the marketplace for Pune city.

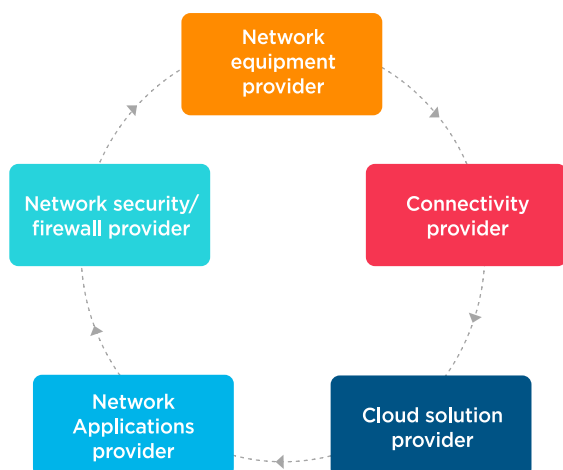
The network engineer of the infrastructure unit visits the marketplace to purchase IoT as a service for surveillance basic plan, indicating areas that need to be covered under surveillance on the Google map. She submits the request and after it's approved by the authorities, telco starts provisioning the same.

It would take a month to set up, post which service would be available for this enterprise organization. With monthly subscription and no initial set up fee involved, enterprise organization would be able to enjoy the benefits of purchasing IoT as a service from the Marketplace platform.

Enterprise customer gets frequent updates of newly available services, additional services that can be purchased and realizes that Analytics as a Service is also available on the Marketplace. This service would enable surveillance system to send alerts to the security whenever suspicious activities occur. Such video analytics is performed at the edge to have quick insights and alerts generated whenever something goes wrong. Enterprise customer decides to purchase the service, does some notification settings to get alerts on email, WhatsApp and on Security Applications and is ready to enjoy benefits of the service.

It would have been very difficult for the enterprise customer to bring all these players together and build such a use case, however the telco was already providing this service, which made life easier for the enterprise customer.

Use case 2: SD-WAN as a Service



Milan Software Enterprise Ltd., is an enterprise customer with multiple offices across different geographies in Italy – 1 each in Rome, Venice, Florence and Milan. Currently all these sites have specific WAN. The customer is sparing no efforts to maintain site-specific WAN. However, there are many complaints about network performance not being good in some of the sites at times. Hence, customer wants to build SD-WAN that covers all these sites, in order to centralize network management operations and do intelligent traffic management for all of its sites, from 1 place.

Their network architect visits telco marketplace and purchases SD-WAN as a service. To do this, he chooses a preferred cloud solution provider, firewall provider and other required options and services. He then does the required configurations and builds SLA agreement terms based on the options available. He then submits the request. Within the process, the telco also shares the network design and available options so that detailed aspects can be closed. Once the network design is agreed, the network architect submits the request, the Chief Network Officer and Finance Manager approve the request so that purchase can be initiated. Here, telco has partnered with different solution providers to offer SD-WAN as a Service bundled offering to the enterprise customer, and the telco starts provisioning once request is received.

After purchase, while visiting self-care portal, customer understands that productivity applications like G-suite, Video editor and Prototype builder are also available on the marketplace, that too at the discounted rate. Customer selects the needed enterprise softwares available as a service on the marketplace and enjoys the benefits of making all purchases at 1 place.

Use case 3: vRAN as a Service

Lexisco Enterprise, a private enterprise, who owns few acres of land in San Jose, California, US, wants to create private network that covers all offices in that area and wants to provide connectivity to not just its employees, but also to residential areas nearby over virtualized network. The network architect of this enterprise would visit the telco marketplace to purchase vRAN as a service. Considering the large number of offices and areas nearby that they want to cover and also because mmWave can only cover limited area, 70 sites would be required to be set up to provide connectivity to nearby areas. The network architect first builds configuration for a sample site (By selecting first hardware provider, then the software provider and then Network Applications) which would be replicated across all the sites. Network architect submits the request and based on business approval workflow, the financial team approves it.

eNodeB Hardware

Hardware providers that provides hardware components for eNodeB setup:

- Remote Radio Head
- GPS
- Radio Interface Unit
- HUB Switch
- Rectifier
- Antenna
- And more...

Software

Software providers for the software needs:

- Remote Radio Head Software
- Radio Interface Unit Software
- Switch Configuration Software
- Virtualized Central / Distributed Unit
- And more...

Network Applications

Network Applications providers:

- Centralized Monitoring Applications
- Performance Management Applications
- Inventory & Incident Management Applications
- And more...

The partnership ecosystem for vRAN as a Service

There are a large number of use cases such as the above that can be explored, making enterprise customers' life easier. The highlight for the customer is getting all the complex enterprise services on the marketplace and the ability to gain seamlessly provisioned services by platform providers.

The road ahead for the enterprise telco

While it's clear that this platformization is the way for CSPs to stay relevant few years from now, it's important to also consider the primary challenges that they will face, and which a marketplace solution will address.

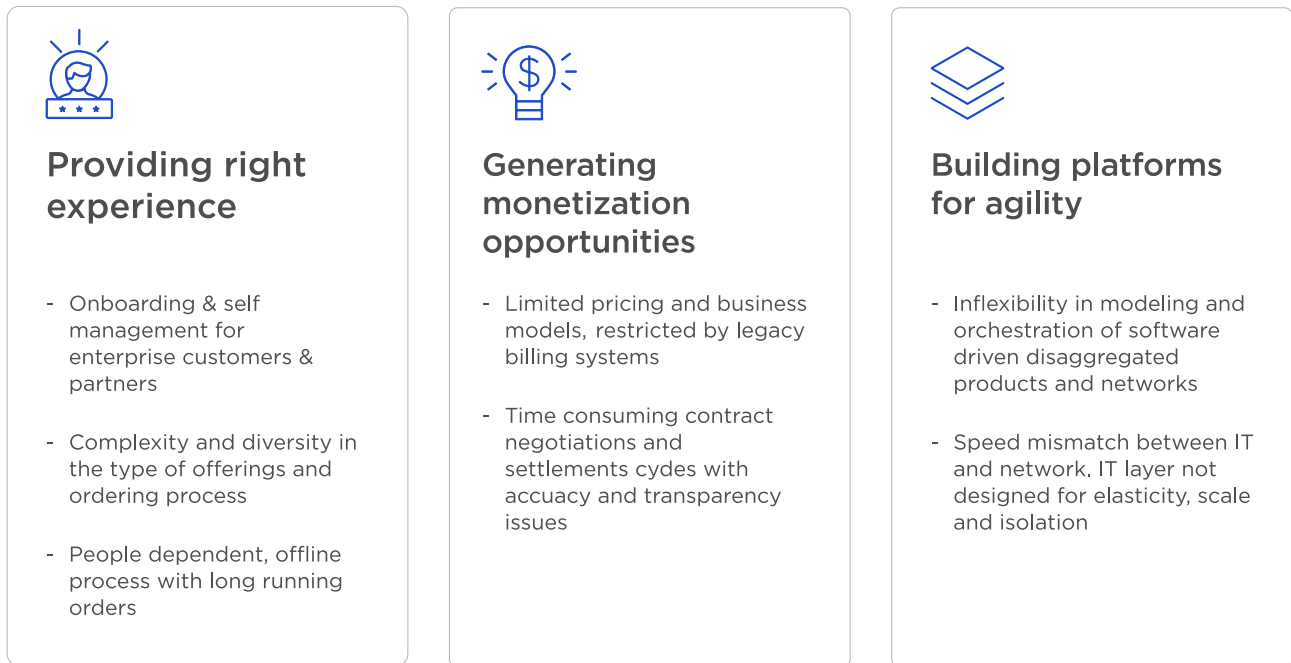


Figure 10: Challenges in setting up XaaS

Among the several challenges in setting up XaaS based marketplace platform, the first is that of having an ecosystem with hundreds of partners and not having the right platform to address all partner needs – starting from partner on-boarding to revenue sharing settlements, from partner products onboarding to bundling, from settlements to availability of dashboard. Not providing right experience to partners and also enterprise customers can prove detrimental. Limited pricing and business models and time-consuming contract negotiations can come in the way of generating monetisation opportunities. In the absence of a strong platform, many enterprise customers today face challenges with purchased service upgrades or purchasing new services from the same vendor. Launching a product / service for a new vertical is a cumbersome experience today for many service providers and is highly time-consuming.

Considering these challenges, a marketplace model is the right way forward for telcos, to cater to the emerging enterprise segment.

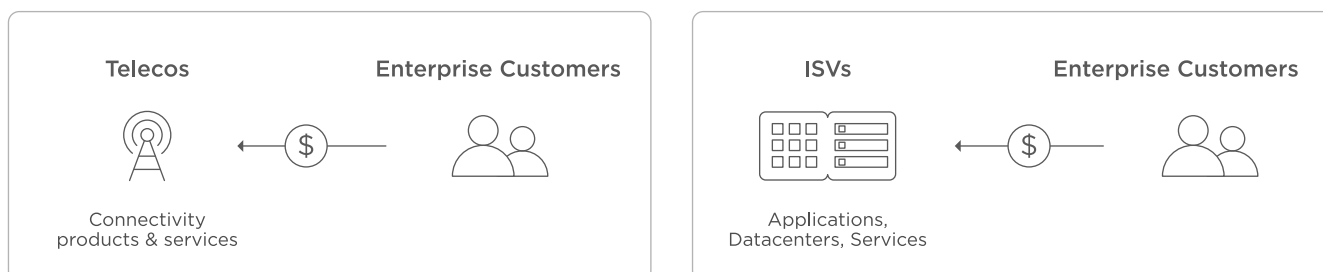
With the right marketplace platform, it becomes easier for the telcos to increase time to market and for enterprise customers, it all becomes very seamless to fulfil all their requirements from one place. Partners too enjoy benefits of getting all insights from one place.

However, it's important to have the right approach in adopting a marketplace model. From platform to partnerships, digitized journeys to innovative revenue models, we will be discussing some key recommendations for a successful marketplace adoption – covering the three important aspects – platforms, processes and people – to give you a holistic view of how marketplace platform should be built, in the second part of the white paper.

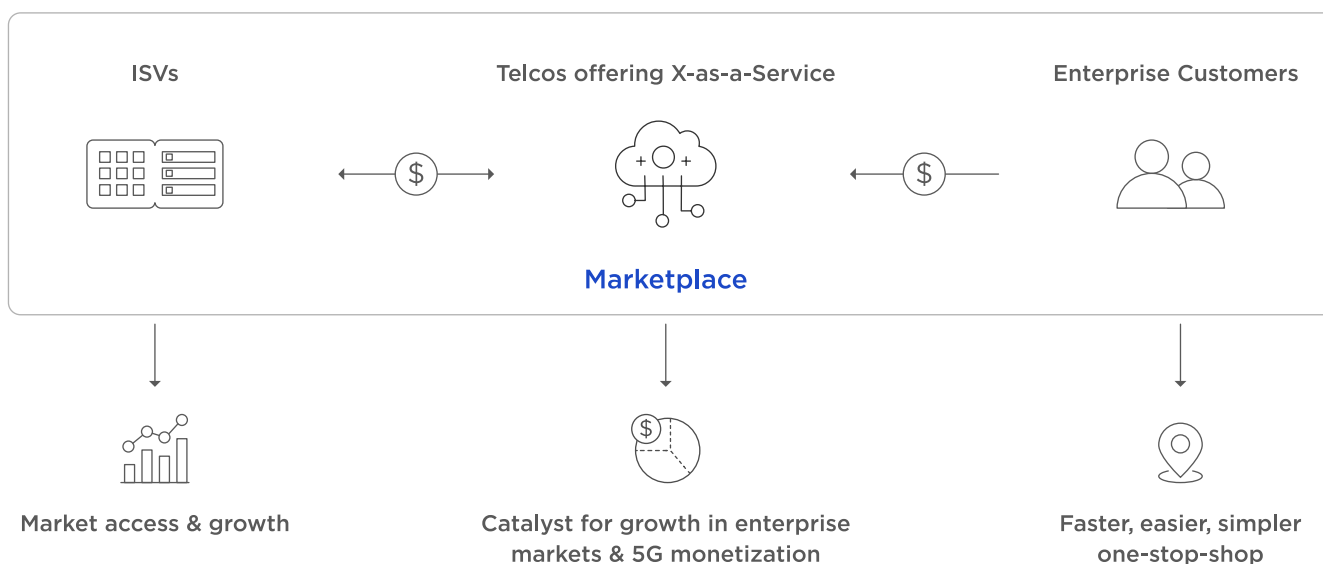
Marketplace platform - A catalyst for growth for enterprise market segment

There are many players in the market today who want to increase their customer base and telcos have a large customer base that can be leveraged to offer connectivity solutions. If both get what they want, i.e., telcos get a chance to go beyond connectivity and partners get a large customer base, mutual growth opportunities are created. Additionally, enterprise customers also benefit because they get connectivity, bundled with many innovative offerings, all on the same platform.

Current Market Scenario



New Model



About the author



Mayur Madhawani is a passionate learner and an innovator, with over 14 years of experience in telecommunications industry. As a Product Manager at STL, Mayur oversees STL's digital engagement platform, Unified Product Catalog and Enterprise solutions. Doing research about use cases enabled by latest technology enhancements in domains like 5G, Cloud Management, Enterprise Solutions & XaaS remains his interest areas. He is closely working with different customers to help them enable new revenue streams with these technology enhancements.



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