PORTFOLIO: VOICE

CREATING VIRTUAL SERVICE ADVANTAGE

A NEW MODEL FOR VOICE WHOLESALE

GAINING ADAPTABILITY, EFFICIENCY AND PROFITABILITY WITH TATA COMMUNICATIONS VIRTUAL SERVICE HUB

October 2018

A NEW MODEL FOR VOICE WHOLESALE

**Gaining Adaptability, Efficiency and Profitability with
Tata Communications Virtual Service Hub**

In a voice wholesale market where communications service providers are being challenged to capture new top line revenue, there needs to be a drive towards operational efficiency. There are opportunities to explore new models in voice that deliver profitability and relieve margin pressure. The challenge for communications service providers is to find a partner that can help them to adopt new technologies and operational models and turn these into a long-term sustainable approach to voice service delivery.

Communications service providers are constantly trying to identify and create new operational efficiencies within their businesses, but these efficiency gains tend to be incremental changes rather than a comprehensive rethink of how to approach the market. Today, the industry has reached a tipping point where small tweaks to operational models can no longer be good enough. Profitability in voice requires new strategies, new technologies and new mindsets. If this does not happen, communications service providers face an accelerated decline in their wholesale businesses as they cling to legacy models, while competitors make bold moves to align their businesses with current market conditions.

It is not all bad news. The emergence of both 'X as a Service' models and network function virtualisation (NFV) create opportunities to move with greater agility while expanding service capabilities. As services are decoupled from physical infrastructure, communications service providers can quickly gain new competitive advantages while growing margins.

In the enterprise market, Unified Communications as a Service (UCaaS) and different flavours of Cloud Communications have shown that CAPEX-light and highly flexible solutions can drive new growth, efficiency and customer loyalty. It is time that the wholesale voice industry recognises the opportunity to drive profitability through embracing the virtual world.

IN A CHANGING MARKET,
CHANGE YOUR MODEL

Across the ICT value chain, the adoption of virtual service models have enabled businesses to accelerate how they deliver for customers while removing unnecessary cost from their operations. Cloud Service Providers like Amazon Web Services have made storage and compute available 24x7, with service accessible with little more than a credit card. The wholesale voice market has tended to lag behind other ICT sectors but now is a good time to change that.

Challenging market conditions, changing user expectations and the need to differentiate offerings are all driving communications service providers to see how they can apply virtual service models in their businesses:

- **Declining Traffic Volumes** – 2015 marked the first time since the Great Depression of the 1930s that international carrier voice traffic declined, according to Telegeography. By 2020, communications service providers will be in their 5th year of declining volumes across the entire market. The decline in traffic in the 1930s was due to macroeconomic issues, but today it is the so-called 'Over-the-Top' competitors that are successfully capturing users and minutes globally

- **CAPEX to OPEX** – As the market decreases in revenue terms, communications service providers are not able to make CAPEX-intensive investments in infrastructure to transform their voice businesses. They prefer OPEX-based models that can be directly tied to their traffic volumes, revenue and profitability, avoiding long investment cycles. The days of big infrastructure investments to support voice are over and communications service providers need a new approach

- **Efficient Provisioning** – Communications service providers want flexibility to grow while only paying for what they use. Their expectations have been set by Cloud-based services where customers pay only for what they use. The legacy approach of over provisioning is inefficient and becoming obsolete. More flexible services that can grow with the businesses without adding unnecessary cost are required

- **Expectations have Changed** – Enterprise customers, retail communications service providers and end users expect their voice services to move as fast as the Cloud. There is no tolerance for long-lead times, so communications service providers are expected to be able to deliver with urgency when new demand appears. communications service providers need to move with greater agility and have the ability to see and then serve demand as it emerges. They need to remove the barriers to delivery in their operations or face losing out to more agile competitors

- **Creating New Competitive Advantages** – Communications service providers need to find ways to differentiate their offerings in a relatively smaller and more competitive market. Differentiation in voice has always been a challenge, but it isn't impossible. communications service providers that can offer a superior customer experience with shorter lead times and value adding capabilities can create new competitive advantages

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DELIVERING LEAN WHOLSESALE

The 'X as a Service' model can be applied in the voice industry. It aligns directly with the changing needs of communications service providers and creates an opportunity to reduce costs while increasing capabilities.

The principals have been proven in Software as a Service (SaaS) and related areas and they can be applied to solutions like managed voice termination services, customer and supplier aggregation, optimal routing or even fraud protection.

Communications service providers can choose a wholesale voice platform provider who presents them with the services they want with an OPEX-based model. In this way they can rapidly turn-up services and shape their offering to meet the needs of their enterprise and retail customers. If the platform provider has global reach, they are able to efficiently extend their operations beyond their home markets and compete for new and larger contracts.

In this model the platform provider manages the back office systems required to support the wholesale business and the communications service provider is free to focus on its core business. This model can extend across a range of applications including voice trading tools and cost analysis applications. Such a model also supports OSS/BSS functions including provisioning, mediation, billing and bi-lateral management.

Using such an approach communications service providers emerge with a lean wholesale model that enables them to focus on developing and offering solutions to customers without the expense of maintaining the functional aspects of a voice business.

The model reduces costs, but it also frees the voice service provider to become more customer-centric. It opens the door to a business model that is oriented around customer experience and differentiated service offerings, through a more consultative sales approach. It changes how they think about voice and the role they play in the value chain.

VIRTUAL SERVICE HUB

The challenge for communications service providers is to transform their operational model and adopt virtual services for cost advantage. What is needed is a platform partner that can be trusted and who understands the business transformation journey in the context of voice.

Tata Communications has created a virtual service hub, to bring 'X as Service' to wholesale voice and enable communications service providers to efficiently transform and grow their voice business. The Tata Communications virtual service hub enables a communications service provider to leverage its global network infrastructure and wholesale voice solutions within a new and efficient platform based model.
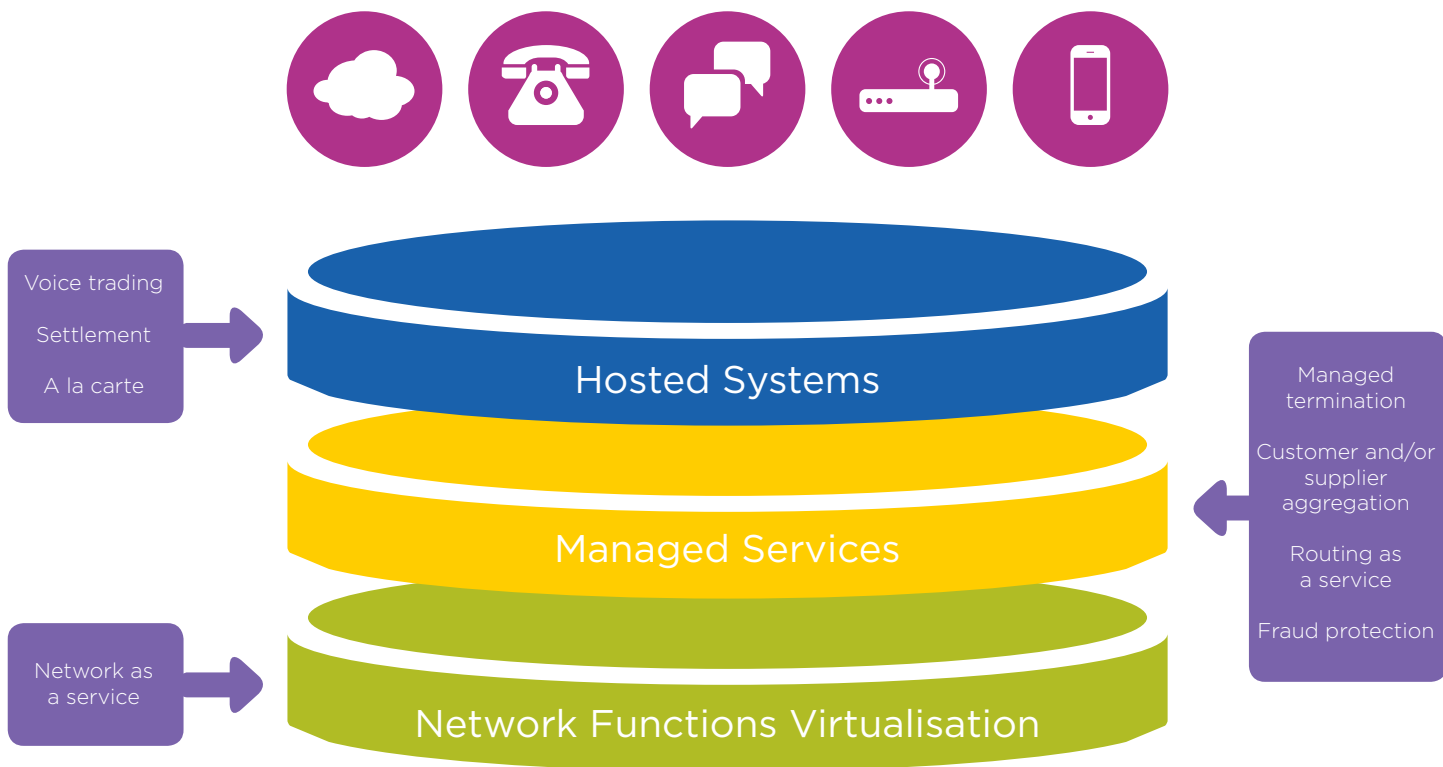
The virtual service hub makes next generation network infrastructure, tools and solutions accessible to communications service providers of all sizes with little to no barrier to entry. In this way communications service providers gain access to a suite of services designed to connect, protect and optimise their voice businesses without the complexity or cost of legacy voice service. It brings wholesale voice into the future and streamlines how communications service providers expand their capabilities and efficiently grow their profitability.

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TATA COMMUNICATIONS

TATA COMMUNICATIONS:
VIRTUAL SERVICE HUB

Tata Communications

Virtual Service Hub

Voice trading

Settlement

A la carte

Hosted Systems

Managed termination

Customer and/or supplier aggregation

Routing as a service

Fraud protection

Managed Services

Network as a service

Network Functions Virtualisation

Network-as-a-Service

Network-as-a-Service enables communications service providers to migrate to next-generation IP based communications services without upfront capital expenditures. With the virtual service hub communications service providers can route traffic between customers and suppliers using Tata Communications' own next generation IP voice architecture.

Benefits:

• Consolidate and standardise systems and interconnections, eliminating legacy IP or TDM infrastructure

• Offload provisioning, management and monitoring functions

• Take advantage of modular, add-on services including: VoLTE, VoIPX, Managed Termination

Managed Services - Managed Termination Services

The managed termination service enables communications service providers to tap into Tata Communications' proven knowledge and consult with its team of 600+ specialists. In this way Tata Communications becomes the communications service providers' preferred supplier with the majority of its voice traffic for multiple destinations.

Benefits:

• A pricing structure that is stable, transparent, and always competitive

• Service and application performance, including SLAs with constant QoS monitoring

• Access to Tata Communications own next generation portal, including advanced reporting capabilities

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Managed Services - Customer and Supplier Aggregation

Tata Communications supports all customer and supplier management processes, acting as the communications service providers primary manager of its international voice business.

Benefits:

- Leverage Tata Communications market scale to reduce costs and increase efficiency

- Gain access to the same pricing, billing and reporting tools that Tata Communications' uses for its own international wholesale voice business

- Focus wholesale efforts on customer service and revenue generation

Managed Services – Routing-as-a-Service

Tata Communications applies a combination of techniques, including predictive analytics, linear programming, capacity allocation, quality targets and fraud control techniques to this process.

Benefits:

- Ensures traffic is handled in the most efficient way possible

- Maximise margin while meeting quality objectives

- Remain in full control of policy (LCR load, Bilateral swop, costing, pricing, overrides)

Managed Services – Fraud Protection

All voice traffic to and through Tata Communications network is monitored with patented real-time fraud management techniques, to ensure traffic is protected. communications service providers benefit from subscriber monitoring and blocking, enterprise call monitoring, Wangiri alarms and nuisance call alarming and blocking.

Benefits:

- Efficient access to fraud expertise

- 24x7 fraud protection

- Proactive and real-time approach

- Protected profits

Hosted Systems – Voice Trading

Tata Communications hosted voice trading platform enables communications service providers to manage their voice business to maximise margins and increase efficiencies. The system is a structured and flexible software-based solution.

Benefits:

- Optimal cost-based routing

- Origination/A-number based costing, pricing & routing

- Bilateral agreements

- Monitoring and alerting in real-time

- Easy integration with 3rd party BSS/OSS

- Billing, reporting & automated reconciliation

Hosted Systems – A La Carte

Tata Communications provides options to customise solutions for voice traffic management, based on specific requirements. There is no need to replace existing systems, so communications service providers can choose what is complementary with their existing systems. Tata Communications extensive API portfolio facilitates 3rd party system integration.

Options:

- Costing

- Billing

- Reporting

- Pricing

- Provisioning

- Mediation

- Service Assurance

- Bilateral Management

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A GROWING ECOSYSTEM

Each of these solutions is delivered with a usage-based commercial model, aligning costs to consumption. It eliminates the need for capital investment, while aggregating maintenance and upgrade costs as part of a service contract. Communications service providers pay for what they use without the burden of maintaining the services themselves. They can monetise services without needing to continually invest. This maximises profit, presenting a significant improvement over legacy models.

Communications service providers can move quickly to deploy solutions from Tata Communications' virtual service hub when demand grows or new needs arise. They can quickly move to an IP-based infrastructure or deploy virtual PoPs in new locations. It is a model that removes the friction from changing and adapting to new market conditions. Communications service providers have the flexibility to mix and match complementary solutions to better meet customer needs.

An example of this is where voice services can be matched with fraud protection as well as routing optimisation. Reporting and analytics can be harnessed to add an extra dimension to network efficiency. With 3rd party KPIs being applied to monitor performance, a more predictable approach to performance also becomes possible.

Taking the virtual service path removes the traditional limits on the scope of a wholesale voice business, and enables smooth borderless growth. If a communications service providers sees an opportunity to grow in a new market, they can access the infrastructure and services they need from a single supplier.

With Virtual Service Hub, communications service providers have the freedom to compete in new ways while also experimenting in different markets. New services, applications and tools can be accessed and used to capture new revenue in new places with significantly reduced risk. There is no need for 'rip and replace' legacy infrastructure, but new functions can be built on existing investments, to develop new capabilities that also offer predictable cost outcomes.

Tata Communications Virtual Service Hub creates a dynamic approach to wholesale voice, helping to address a market that is changing rapidly. While existing services have been described in this paper, the virtual service hub is a dynamic ecosystem, which is evolving to solve new challenges and enable communications service providers to capture new revenue opportunities. It is enabling adaptability, efficiency and profitability for a new era of wholesale voice.

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