Agility and Efficiency:

Harnessing Xpress BSS for xVNO Growth

Current VNO Landscape

Virtual Network Operators (VNOs) are becoming integral to the telecommunications market worldwide. VNOs do not own their own wireless network infrastructure; instead, they lease network access from major operators to provide services in a flexible and competitively priced manner that meets consumer demands.

The VNO market is segmented into two main categories: Mobile Virtual Network Operators (MVNOs) and Fixed Virtual Network Operators (FVNOs). As of 2023, MVNOs held over 80% of the market share.

VNOs can be categorized into several major types based on their market positioning and target customers, including

Branded VNOs

These VNOs establish their own brands and provide services through partnerships with major network operators. They typically have clear brand positioning and market strategies, such as offering specific service packages or targeting specific consumer groups.

Operator VNOs

Operator VNOs are usually established as secondary digital brands by telecom service providers or enterprises. They lease network access from primary operators to provide mobile services to their existing customers or employees. The aim of this type of VNOs is often to offer value-added services to their core clientele.

Retail VNOs

Retail VNOs focus on directly serving end-users. They may collaborate with major network operators to attract consumers with lower prices or specific market strategies. Retail VNOs typically promote and sell services through their own brands and distribution channels.

Vertical Market VNOs

Vertical Market VNOs concentrate on specific vertical markets or industries such as automotive, healthcare, or IoT. They offer customized mobile communication solutions tailored to meet industry-specific needs, often partnering with key players within the industry.

M2M/IoT VNOs

M2M/IoT VNOs cater specifically to Machine-to-Machine (M2M) communication or Internet of Things (IoT) devices. Their services typically cover device connectivity, data transfer, and management, providing connectivity solutions for various smart devices and sensors.

VNOs play a vital role in reshaping the telecommunications segmentation, driving service innovation, and providing tailored offerings. According to analysis of publicly available data, Virtual Network Operator Market size was valued at USD 92.2 billion in 2023 and is estimated to register a Compound Annual Growth Rate (CAGR) of over 7% between 2024 & 2032.

Driving Forces of VNOs

What has driven the development of VNOs, leading to the diverse competitive landscape of "xVNOs"? The main driving forces are as follows:

Technological Innovation and Service Expansion

With the deployment of 5G technology, VNOs are exploring ways to leverage high-speed, low-latency networks to enhance service quality. Some advanced VNOs have already begun offering 5G services to meet the growing demand for high-speed mobile data. Additionally, VNOs are expanding into new service areas such as IoT and enterprise solutions.

Partnerships and Market Strategies

Collaboration with major operators is key to the success of VNOs. By partnering with mainstream operators, VNOs gain broader network coverage and more stable service quality. Moreover, VNOs collaborate with device manufacturers and content providers to enhance competitiveness through bundled sales and value-added services.

Consumer Behavior and Demand

Consumer demand for competitive pricing and service quality is driving the growth of the VNO market. More users are opting for VNOs because they typically offer cheaper service plans than traditional operators and allow for more customization according to individual needs. There is also an increasing demand for international roaming, data package discounts and contract-free services, prompting VNOs to innovate and adjust their service models accordingly.

Regulations and Market Environment

VNOs face various regulatory challenges and opportunities in different countries and regions. Government policy changes, spectrum allocation, and shifts in market competition dynamics can significantly impact the VNO industry. Therefore, VNOs need to closely monitor and adapt to regulatory changes and market environments in different regions.

In summary, the global VNO market is experiencing rapid growth and transformation. Looking ahead, more VNOs are expected to enter the market, offering a wider range of services and providing consumers with more choices and better user experiences. They will maintain quick responsiveness and differentiated competitiveness, achieving business growth in their respective segments.

The Essence for VNO Success
Overcoming Scale Limitations and Enhancing Customer Experience

- In terms of scale, VNOs do not have the inherent advantages of traditional operators with long-established networks. Therefore, it is crucial for VNOs to prioritize enhancing customer experience and designing services that precisely meet the digital needs of their customers.

- Currently, many VNOs face limitations due to the lack of an efficient and flexible offer configuration tool. This shortfall restricts their ability to quickly launch new services in response to market demand and hampers the creation of compelling offers by integrating digital service products such as live streaming and gaming.

- Moreover, VNOs often struggle to leverage real-time customer behavior data to develop personalized promotional campaigns, resulting in a noticeable decline in recommendations. Common issues such as slow customer service response times and low processing efficiency further diminish customer interest in the brand, leading to decreased loyalty. Addressing these significant challenges and mitigating these risks are imperative for VNOs to succeed in today's competitive landscape.

ADVANTAGES WORTH HAVING

- Utilize a variety of pre-configured charging templates to customize pricing plans and enhance consumers' DIY experience. Additionally, reusing a single pricing plan across multiple products can reduce configuration efforts, streamline pricing for enterprise users, and accelerate time-to-market.

- Leverage a self-care consumer app and web portal to simplify, personalize, and digitize the customer experience, ensuring best practices for the digital customer journey, including joining, using, switching, engaging, renewing, and leaving.

- Implement a comprehensive agent portal to improve service and response times. This portal should offer a 360-degree customer view, incorporate embedded eKYC functionality for customer onboarding, order capture, case registration, NBA/NBO recommendations, and various quick query capabilities to enhance brand responsiveness.

Addressing Gaps in Expertise, Strategy, and Operational Capability

- As VNOs transition into the telecom sector, they encounter significant operational challenges due to their lack of prior experience in the industry. These companies often lack in-depth telecom expertise, making it difficult to respond swiftly to user behavior and achieve meaningful business transformation.

- Moreover, VNOs may face shortcomings in their pricing and service strategies, resulting in ineffective market segmentation. This limitation hinders their ability to adapt to the needs of specific customer segments, making it challenging to differentiate themselves in a highly competitive and homogeneous market.

- Additionally, as their business continues to grow, VNOs confront ongoing challenges in sustaining operational capability. Their difficulties in retaining customers through agile approaches can significantly impact both customer loyalty and market competitiveness.

ADVANTAGES WORTH HAVING

- Choose a telecom-experienced partner offering a cloud-native BSS SaaS suite to digitalize your business and accelerate transformation with ready-to-use playbooks, ensuring competitiveness.

- Engage a professional consulting team to develop and implement service strategies aligned with market demand, leveraging industry expertise and local insights to achieve rapid growth and success.

- Utilize flexible loyalty programs, gamification, personalized features, and data analytics to enhance customer engagement and satisfaction, driving ongoing participation and sustained operational success.

Precise Positioning and Open Collaboration in Technology

- In today's rapidly evolving tech landscape, emerging technologies like cloud computing, eSIM, digital tools, 5G, and AI present challenges for VNOs due to their smaller scale and limited budgets. These companies often struggle to find suitable solutions and keep up with technological advancements.

- Additionally, VNOs without telecom experience face difficulties managing complex BSS/OSS systems, leading to operational inefficiencies and halted operations.

- To overcome these challenges, VNOs should focus on integrating more partners into their ecosystem, fostering open collaboration, and co-creating services with personalized partner and customer interactions.

ADVANTAGES WORTH HAVING

- Choose a SaaS provider with a subscription-based model to leverage the latest technology, reduce start-up costs, and pay as your business grows. Utilize ready-made plugins and modular components to meet current and future needs, focusing on core competencies and exceptional customer experiences.

- Use a TM Forum-compliant product catalog for digital, telecom, and ecosystem products. Integrate catalogs and apply rules for cardinality, eligibility, contracts, pricing, benefits, and provisioning to speed up time-to-market configurations.

Get Started Today!

Click HERE to fill out our quick questionnaire to share your concerns. We'll provide you with a complimentary consultation tailored to your needs in 5 working days.

Questions		Rating				
		1 Strongly Disagree	2 Disagree	3 Neither Agree Nor Disagree	4 Agree	5 Strongly Agree
Part 1						
Q1	Do you think VNOs place more emphasis on customer experience than traditional CSPs?					
Q2	Do you believe that an unfriendly user interface and cumbersome operations are the main reasons affecting users' positive ratings of your brand?					
Q3	Do you think marketing campaigns are the main reasons affecting users' positive ratings of your brand?					
Q4	Do you believe that slow customer service, sluggish responses, or lack of customer support are the main reasons affecting users' positive ratings of your brand?					
Part 2						
Q5	Do you feel that your team lacks professional telecom operations knowledge?					
Q6	Do you think your offer pricing and services do not have a significant advantage compared to traditional CSPs?					
Q7	Is your product struggling due to a lack of market segmentation?					
Q8	Are your offers unattractive and lacking partnerships with digital service providers such as streaming platforms, gaming companies, or online storage companies?					
Q9	Does your brand lack eSIM capabilities?					
Q10	Does your brand currently not offer 5G services?					
Part 3						
Q11	Do you believe your brand lacks automation capabilities?					
Q12	Do you feel your brand lacks the ability to create personalized promotional campaigns based on customer behavior?					
Q13	Do you think your brand lacks the capability to quickly configure offers?					
Q14	Do you find managing the VNO BOSS system complicated?					
Q15	Do you feel frustrated that your brand cannot keep up with technological trends (cloud computing/eSIM/digital tools/5G/personalization/AI)?					
Q16	As your user base grows, are you struggling to scale operations in an agile manner?					

Success Stories

W's Transformation Journey into a Dual Provider of MVNO and FNO

W is a major telecommunications and internet service provider in the Gulf Cooperation Council (GCC) region, offering broadband internet, fixed-line telephone, television, and other telecommunication services. This makes W one of the competitive operators in the region. They are committed to providing high-quality network connectivity and services, offering a variety of solutions for both individual users and corporate clients. Awarded an MVNO license, W aims to transform from a Fixed-network Operator (FNO) to a dual provider of MVNO and FNO by leveraging state-of-the-art technology and innovation to deliver superb customer experiences.

Whale Cloud Xpress BSS solution has been selected by W to set up the Greenfield MVNO and subsequently replace the legacy FNO BSS. Moving away from traditional heavy-weighted BSS operations, Xpress BSS introduces a modernized architecture as a comprehensive BSS-as-a-Service solution. This caters to the needs of emerging digital MVNOs seeking innovative strategies to expedite their digital transformation journey.

The solution aims to enable W to create a seamless and highly efficient intelligent service ecosystem. It achieves this by offering a cloud-native architecture that ensures rapid time-to-service and cost-effective integration. The suite includes AI-enhanced solutions and collaborates with diverse business partners and industries as ecosystem allies. Its scalable service catalog is driven by demand, ultimately replacing fragmented services within BSS.

With Whale Cloud Xpress solution, W embraces a customer-centric business model, innovation-driven company culture, loosely-coupled capability centers, and off-loaded cloud infrastructure to keep the transformation on the right track.

Highlights

Unified Product Catalog

The Xpress suite manages a single, unified product catalogue enabling the flexible combination of services, tariffs, benefits and discounts. This capability facilitates the easy creation of attractive offers and bundles, enabling W to keep winning in the fierce market.

Improved Customer Experience

To ensure long-term success in the digital market, W prioritizes customer retention and positive future experiences. The Xpress suite enhances customer satisfaction through personalized pricing options, diverse business notifications (like balance updates and usage alerts), and multiple recharging channels.

Flexible Price Model

The Xpress suite boosts W's marketing strategy with diverse and flexible pricing plans, including basic, additional, and discount options. It supports multi-dimensional pricing based on customer profiles, usage patterns, and service quality, allowing W to quickly offer tailored packages using parameterized tariff templates, accelerating time-to-market for new offerings.

High Performance

The online charging engine in Xpress suite employs shared memory and memory database technologies for optimal real-time performance. Enhanced caching and concurrent transaction algorithms further boost data processing speed, surpassing traditional databases for real-time online charging capabilities.

Open Architecture for Future Evolution

The Xpress BSS suite adheres to industry standards like 3GPP, TM Forum eTOM & SID frameworks, ensuring seamless integration with other compliant products. Built on an ODA architecture, it facilitates rapid, reliable system construction and flexible configuration for evolving business needs.

Friendly User Interface

A user-friendly GUI interface tailors for ease of operation, supporting multiple languages for user preference. A unified privilege management component ensures proper system functionality, encompassing privilege, user, staff, job, organization, and log management accessible via a comprehensive GUI.

Success Stories

M's Strategy for Achieving Market Leadership

M is a leading MVNO in Asia, providing a range of mobile, broadband, and cloud services to consumers and businesses. As a challenger brand in the highly competitive local telecom market, M has gained remarkable market share through innovation, attractive pricing, and superior customer experience in domestic and across the Asia-Pacific region. With a strong emphasis on digitalization and the widespread availability of tech infrastructure, local citizens have witnessed high technology adoption and literacy levels.

To cater to the needs of its growing tech-savvy population, M seeks to enhance its digital platform, simplify and differentiate its offerings, and deliver fast and seamless connectivity to provide a superior customer experience. Hosted on Alibaba Cloud's Infrastructure-as-a-Service platform, Whale Cloud Xpress BSS optimizes M's total cost of ownership and increases its return on investments through flexibility and scalability. This is made possible with the out-of-the-box features that include remote deployment and maintenance capabilities, the system aims to create simplified and differentiated offerings that promise a much shorter time-to-market process.

Whale Cloud Xpress is a cloud-native end-to-end solution that supports public, private, hybrid cloud, covering direct sales, customer onboarding, customer service, charging and billing, and marketing campaigns, while complying with relevant 3GPP and TMF Framework specifications. It serves prepaid/postpaid/hybrid individual customers and business customers, including end-to-end leads management, product & offering, and order management.

Whale Cloud Xpress BSS drives advanced analytics, enhancing customer experience seamlessly. The platform also integrates non-telecom products and offers to CSPs by connecting with numerous third-party systems, building an ecosystem that empowers CSPs to excel in the digital marketplace.

Highlights

Platform Ready for Service in 4 Months

The rich OOTB features of the Xpress BSS saves the effort of customization which often happens in IT transformation projects. M takes full control during a two-month User Acceptance Testing (UAT) period without the vendor's involvement before officially launching the solution.

Rapid Growth of Subscriber Base

The reliability and flexibility of the solution contribute to trustworthy and superior experiences to end customers. M launches 5G plans, and quickly develops new subscriber base. Four months after the launch, there was approximately a 9% increase in mobile subscribers.
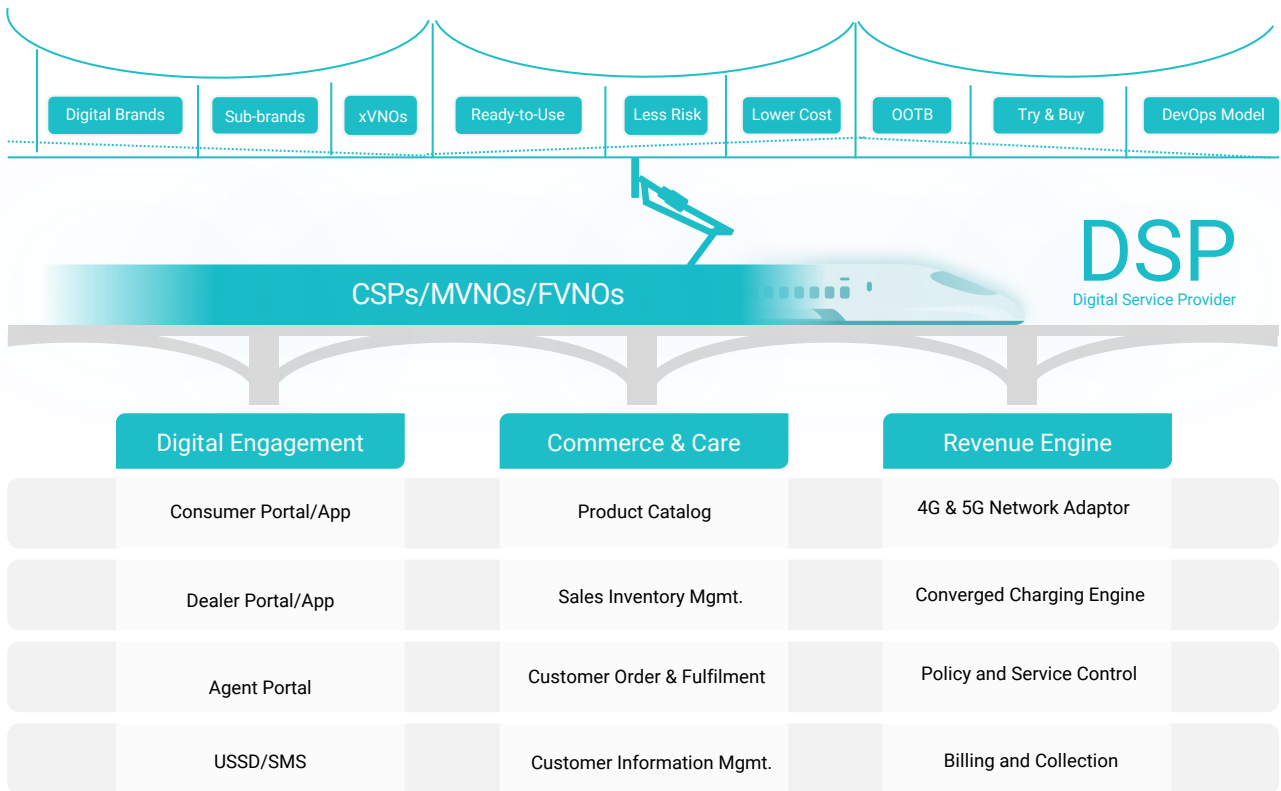
Optimization of TCO

Total Cost of Ownership (TCO) savings achieved through the transformation by deploying a convergent solution that supports 3G, 4G, and 5G services on Alibaba's public cloud. Meanwhile, the SaaS business model greatly reduces the CAPEX.

Increase ROI in Returns

New revenue stream is generated by offering new features and services to the end customer. In the meantime, as an MVNO/MVNE-enabled platform, Whale Cloud Xpress BSS also offers the possibility to generate additional revenue streams in the future.

Whale Cloud Xpress Solution

Whale Cloud Xpress BSS is a BSS as a Service solution that emphasizes ready-to-use business packages, rapid and cost-effective delivery, and a subscription-based business model.

Digital Brands	Sub-brands	xVNOs	Ready-to-Use	Less Risk	Lower Cost	OOTB	Try & Buy	DevOps Model

CSPs/MVNOs/FVNOs

DSP
Digital Service Provider

Digital Engagement	Commerce & Care	Revenue Engine
Consumer Portal/App	Product Catalog	4G & 5G Network Adaptor
Dealer Portal/App	Sales Inventory Mgmt.	Converged Charging Engine
Agent Portal	Customer Order & Fulfilment	Policy and Service Control
USSD/SMS	Customer Information Mgmt.	Billing and Collection

[Explore More about Whale Cloud Xpress >>](#)

Ready to Get Started?

More than 700 Telcos and enterprise customers are using Whale Cloud solutions to accelerate digital transformations. Join us for the secret ingredients to business success.

Visit our website for more information:
https://online.iwhalecloud.com/