

How to sustainably profit from best in class MVNO enabling products and services.

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ABOUT THE AUTHORS



Peter Nussbaumer
Chief Executive Officer

Peter Nussbaumer has worked successfully in the telecommunications industry for nearly two decades. He was Chief Technology Officer and Member of the Board at INDEO (a Siemens spin-off). Peter has worked in the business development sector in various parts of the world, including Central America, South Africa, the Middle East and Europe. He graduated from the Technical High-School for Material Research. In 2004, he co-founded I-New Unified Mobile Solutions. He lives in Mattersburg, Austria.

peter.nussbaumer@i-new.com



Jacob Barlebo
Head of Global Business Development

Jacob Barlebo joined I-New Unified Mobile Solutions in spring 2016 and is responsible for the company's global business development and marketing activities. The majority of his career he spent developing and running international B2B sales within renowned telco and technology companies. Prior to I-New, Jacob Barlebo has headed and developed global sales at a competitive BSS provider in the MVNO/E business. He lives in Copenhagen, Denmark.

jacob.barlebo@i-new.com

EXECUTIVE SUMMARY

Mobile technology and communication have significantly changed today's private and business life. The extensive use of content and connectivity turned into a naturally mobile lifestyle. Companies and brands across the globe are in the battle for a mobile customer's experience and satisfaction and are facing the need to be part of today's most competitive and dynamic growing mobile business market.

For more and more companies, the mobile virtual network operator (MVNO) model represents a highly valid concept to meet today's end-customer lifestyle habits in order to enter new geographies or adjacent markets, and to grab for revenue-gaining opportunities beyond the horizon of traditional mobile communication services. The biggest market entry challenges are costs, time-to-market, technology know-how and flexibility. This document will show why and how MVNOs can sustainably profit from the fundamental role of MVNO enabling service providers (MVNEs) and introduces a multiple award winning and industry trusted solution. **MVNO has never been that easy.**

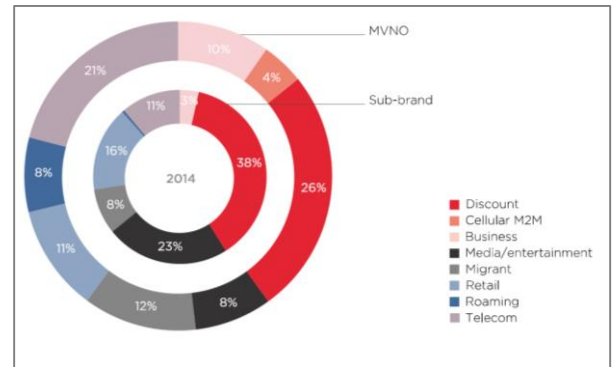
THE GLOBAL MVNO OPPORTUNITY

The invention and development of mobile technology and communication services over the past few decades have significantly changed people's everyday life, whether in a private or in a business context. Today, billions of customers expect that they can get what they want in immediate time and context of their individual needs. Research call it "Mobile Moments" - the battle for customer attention and experience will be waged in such mobile moments more than ever before. Mobile devices, be it a smartphone or tablet - are today's most pervasive life and business management tools. They are pervasive in everyday life and work, so the mobile moment experience could gain a highly pervasive impact on your company or brand as well.

Today's naturally mobile shoppers and buyers are demanding that brands offer more than their primary product or service; they expect it to be integrated in their native mobile culture. More than ever, we are facing the needs of a convergence of business and mobility, the convergence of content and connectivity. The mobile business is no longer just for telco companies. The idea that a mobile device can lead to a customer's wallet and loyalty has a range of companies interested in the opportunity which is clearly beyond the horizon of traditional mobile communication services such as voice/text/data. The mobile virtual network operator (MVNO) opportunity is a crossroads for telecom, entertainment, retail and other industries. MVNOs are more about customers, community and content than they are technology. As a result, their offerings are more focused on specific audiences with a strong customer care and experience component.

Global MVNO Market Segmentation

(by category of independent MVNOs & MNO sub-brands)



Source: GSMA Intelligence

Research is forecasting the MVNO market to reach up to 300 million subscriptions by the end of 2018 and will be serving over 3% of the world's subscriptions. Today, there are more than 1.000 MVNOs, another +250 MNOs (Mobile Network Operator) sub-brands with business models varying from brand licensing, brand reselling, full MVNOs or light MVNOs to name a few. In parallel, there are many market segments being addressed by MVNOs. According to GSMA Intelligence, there are eight major opportunities exploited by MVNOs: Discount, Telecom, Media/Entertainment, Ethnic/Migrant, Retail, Business, Roaming and M2M (Machine to Machine). But virtually every market has the potential to benefit from MVNOs and in parallel, every mobile network operator (MNO) can derive significant advantage from MVNOs as well.

MVNO BUSINESS DEVELOPMENTS AND CHALLENGES

Although there are huge MVNO players with multimillion-subscriber businesses, there are also many small and micro-sized virtual operators. Some very different companies are increasingly showing an interest in launching an MVNO: Football clubs, social-media networks, cable-

operators, multi-level-marketing groups, financial services operations, digital-entertainment providers, non-profit-organizations or consumer-electronics manufacturers are all evaluating business development opportunities which include MVNO-based mobile strategies. Alongside the traditional customer proposition of providing basic communication based services, potential MVNOs are looking for business diversification options in adjacent markets such as entertainment, education, travel services, financial services, advertising and loyalty and are evaluating the potentials of entering new geographies, addressing new market segments, adding product innovations and service bundles.

While there's no true secret business model for a healthy and successful MVNO, proven market participants show some certain key characteristics and stipulations for MVNOs to be successful.

Key Characteristics of successful MVNOS

BRAND
Exiting strong brands that have the potential of expanding their brands into the mobile business.
LEAN COST BASE
The vast majority of MVNOs have lean-cost operations (both capex and opex).
FLEXIBILITY
Ability to change business agreements and IT/network related adjustments both commercially and technically.
DIFFERENTIATION
Pricing and CEM represent the most successful ways for MVNOs to innovatively differentiate themselves.
DISTRIBUTION POWER
Most common feature of large and successful MVNOs (using existing distribution touchpoints, e.g. Retail-MVNOs).
EXISTING CUSTOMER BASE
Taking advantage of an existing customer base and relationship quality.
MANAGEMENT COMMITMENT
MVNOs often belong to larger non-telco organizations; management buy-in is indispensable given that MVNO is often a smaller/non-core activity.
ACCESS TO FUNDING
Financial agility is one of the least discussed but most important requirements to be able to launch and remain in operation.

Source: Informa Telecoms & Media.

THE FUNDAMENTAL ROLE OF MVNES

Historically, the bottlenecks for MVNOs have always been the timing and the cost (both capex and opex) of connecting to a mobile network and implementing the specifications needed to address a specific market segment. Today, managing and understanding technology remains to be one of the fundamental challenges for both existing and MVNOs who wants to enter the market (especially for those who do not have a telecom background). Therefore, some of the most important business challenges for MVNOs are related to network and IT integration capabilities between the operator and the MVNO and the commercial negotiations between MNO and MVNO, even when main elements of an agreement could already be established.

Issues related to technology complexity and costs could largely be addressed by a mobile virtual network enabler (MVNE). A company that provides network infrastructure and related services, such as provisioning, administration and BSS/OSS, to enable mobile virtual network operators (MVNOs) to offer services to their own customers without having a direct commercial relationship to its subscribers. The MVNE business is rapidly expanding in order to meet the companies' and organizations' growing interest in entering the mobile moments business. MVNEs are either established internally by the MNO as a business alongside main infrastructure or contracted externally to companies that are tasked to manage all technology- and regulatory-related aspects of integrating and operating the MVNO.

MVNEs are effectively outsourcing specialists and network-management companies focusing on the MVNO business and facing enormous technology- and business-related challenges. If the MVNOs need to understand and respond rapidly to changes in their markets, it is equally important

that MVNEs can also implement related changes rapidly. Thus, the ability to meet the individual demands related to business planning support including wholesale agreements, technological expertise, integration superiority, IT-environment security, ability for business-upscaling, flexibility in meeting demands for change requests and most important time-to-market and cost efficiency are the most critical business- and technology-related issues to be considered in selecting a potential MVNE solution provider.

MVNEs top business & technology challenges
(number of respondents/relevance in %)

Meeting demand for new requests quickly (e.g. bundles, services, pricing plans)	69,5 %
Ability to scale up the business	46,0 %
Provide secure environment to multiple MVNO customers	45,5 %
Guarantee security levels to hosting operator	30,2 %
Others	8,8 %

Source: Informa Telecoms & Media.

THE I-NEW MVNO/E SERVICE SOLUTION

I-New Unified Mobile Solutions is one of the fastest growing MVNO/E technology solutions provider in the global mobile communication industry. The company is specialized in the domain beyond the mobile universe, finding its translation mainly with Virtual Mobile Networks. To conveniently open the telecom world and to naturally link it with the various daily habits of a service subscribers' life has become I-New's enterprise mission and equally clients' success. From offices all across the globe, the company is capable of providing, implementing and running highly competitive products and services with a maximum of smart convenience for a converged mobile ecosystem empowered by their multiple

The MVNO Collection

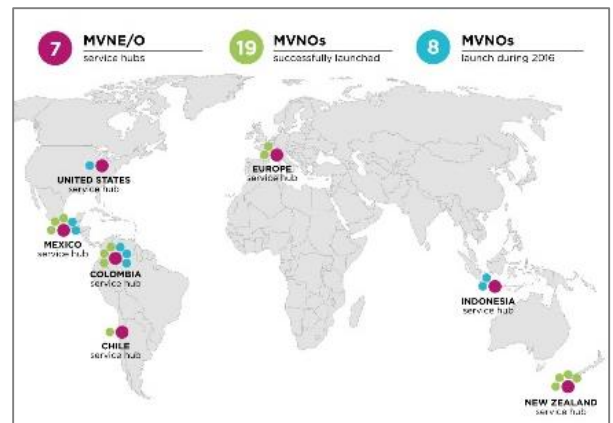
awarded product and services suite *The MVNO Collection*.

I-New is a trusted and proven partner by most demanding and industry leading clients around the globe and was named 'Best MVNO Solution Provider' in 2014 and 2015. I-New also operates MVNO enabling service hubs (MVNEs) in Europe, Latin America, United States and the APAC region enabling small to large MVNOs with a shortest time to market and with minimum investments. Based on the company's global MVNO enabling track record, I-New was also awarded as 'Best MVNE - Enabler of MVNOs' at the 2016 Global MVNOs Industry Awards.

MVNO/E Service History

I-New's MVNE-Services were originally selected as MVNO supplier for New Zealand's leading MNO Spark Telecoms youth brand Skinny in 2013. The platform has been upgraded to MVNE during 2015 with the launch of 3 additional MVNOs to service their end-customers in New Zealand, Australia and Pacific Islands. Now, Spark Telecom even migrated their retail subs to I-New's MVNE platform as it is "the better system in combination with its services".

I-New Global MVNE Service Map



Source: I-New Unified Mobile Solutions AG.

In parallel, I-New launched their MVNE services with 6 more MVNO Service Hubs successfully between FY 2014 and ongoing 2016. In Europe with 2 MVNOs in Austria, in Latin America with 1 MVNO in Chile, 3 MVNOs in Mexico with 2 more to come during 2016 and another 3 MVNOs in

Colombia with 3 more to come in 2016. In addition, the currently largest legacy Colombian MVNO will migrate to I-New's MVNE Service Hub as well. During 2016, I-New will become the first MVNE service provider in Indonesia and the first throughout real time MVNE in the US, enabling application based charging, having been invited by Sprint Telecom without minimum purchase commitment. And finally, I-New's MVNE proposition enables the digitalization of the mobile economy. First time ever in reality and not just paper!

How does the service work?

I-New's MVNO/E services are marketed under the I-New corporate brand in most of the markets. Except Austria, where the service is offered under the name of I-New's local subsidiary 'smartspace'. The MVNO/E service is empowered by I-New's multiple award winning product and service suite *The MVNO Collection*.

The MVNO Collection is a comprehensive system of highly competitive products and services empowering the creation of compelling MVNO business offerings. Including State-of-the-Art MVNE-Services, bundled in MVNO/E Service Hubs all over the globe. Individual MVNO demands can be conveniently satisfied with the trusted and multiple award winning 4-Step-Service offering:

STEP 1: Business Planning

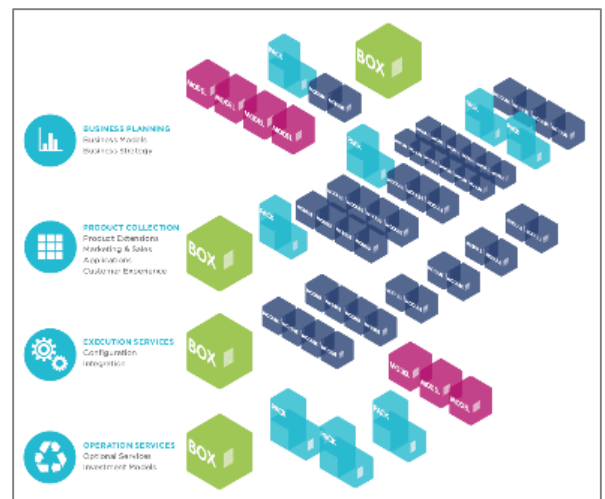
Covers the analysis of the most influential mobile business project factors incl. market opportunities, local regulatory requirements, wholesale planning and procurement, product and cost planning, business plan setting, project planning and Go-to-Market. In addition, the design of essential business support system as well as the detailed analysis and clarification of technical environment.

STEP 2: Product Collection

Enables to perfectly mix and match with converged mobile businesses as well as today's end-customers' needs and expectations. The Product Collection step includes to choose from ready-to-run packs, modules and add-ons in order to provide significant market differentiation and sustainable revenue stimulation. It enables fully customization of all end-customer facing modules out-of-the-box and comes with an integrated range of value adding Apps to enhance end-customer experience on demand. Additionally, the Product Collection provides application based charging only (first mover in MVNO market) as well.

The MVNO Collection

(incl. 4-step-Service offering & Value Propositions)



Source: I-New Unified Mobile Solutions AG.

STEP 3: Service Execution

The service execution enables MVNO launches within the shortest possible time to market and ensures a maximum of independence, flexibility and freedom to serve end-customers uniquely. It provides the complete service delivery fully independent from the chosen MNO partner and allows rapid integration to local MNO host with dedicated onsite professionals swift best-practice methodology securing MVNO customers'

investments. This includes Project Management, Installation, Network and Infrastructure Integration, Regulation Integration, System Configuration, Testing and Handover.

STEP 4: Operation Services

Provides optimization and simplification of end-to-end operations, improvement of customer satisfaction and reduction of costs. Includes a multi-level Service portfolio from Technical Operations, to Managed Operations or 360° Operations Pack.

In a nutshell: *The MVNO Collection* enables full service and the creation of powerful value propositions alongside the complete customer journey – from the initial first idea to a successful MVNO operation.

- Upfront platform investments are already made by I-New which enables an extremely budget friendly realization of individual MVNO services.
- Shared services enable MVNOs in addition to profit from latest innovations and improvements simultaneously.
- Social Media Advertising, Monitoring, Customer Care and Management are fully integrated parts of the I-New MVNO Collection, even Facebook private conversation, content exchange, browser replication is possible - all first time ever features from the pioneering solution.
- Full 360° view and CRM across all channels are handled in Real-time!

I-New's MVNO/E services offers significant value for its MVNO customers and helped a series of brands across the globe to enter the mobile moments market successfully.

MVNO HAS NEVER BEEN THAT EASY

The unique success factors of I-New's MVNO Service Hubs are based in the comprehensive module system of highly competitive products and services:

- The turnkey product and service suite provide easy market entry and shortest time to market.
- Highly professional capabilities enable the track recorded 4-step Service offering including onsite service execution and operation.
- The efficient one-stop-shopping solution covers the complete (MVNO-) Customer Journey - from the initial idea to a successful MVNO operation (including Core, BSS, OSS, E-Commerce, M-Commerce, M-Marketing, Payment, Web, OTT, App & Self-Care).

Market proven Value Propositions

I-New's customer value propositions are constantly proven on one of the most dynamic and competitive markets ever:

Trusted security for turnkey mobile business planning.

Customers profit from a detailed business planning process covering the critical phase of defining the business models, analyzing technological, regulatory and commercial requirements and the evaluation of the most important insights to streamline go-to-market strategies.

- Successful launch of 11 MVNOs on 3 continents within 12 months.
- Recommended even by MVNE competitors (i.e. Telefonica).
- Selected by leading MNOs as preferred BSS/OSS solution.
- Scalable solution with highest affordability for SMB-MVNOs (on from 10k subscribers).
- Integrated wholesale planning and procurement.

Versatile flexibility in creating unique mobile offerings.

Customers profit from a complete collection of pre-configured, pre-integrated and contemporary product modules empowering the creation of most unique mobile offerings.

- Enabling broad variety of different MVNO offerings (Ethnic-, Youth-, Retail-, Financial-, Multi-Play-MVNOs).
- Covering fully convergent Pre-paid and Post-paid MVNO models.
- Enabling charging and subscription management of non-Telco products and services all out of one stack!
- Broad Set of OTT products and open interface to any 3rd party service-, content and financial services.
- Enabling Application Based Charging as an industry changing market offering.
- Amplifying MNO competitiveness enabling their own MVNE business models.

Independent control in securing business investments.

Customers can rely on rapid integration capabilities to the host mobile network operator while ensuring maximum control and independence.

Latin America:

- Deployment in most complex regulatory environments.
- Migration of existing MVNOs to I-New MVNE platform (Mexico and Colombia - initiated by host MNO, preferring I-New over its own solution!).

Asia Pacific:

- Transition from single to multi-MVNO hosting platform.
- Migration from retail subscriber systems to I-New MVNE platform.

MVNO Service Hubs:

- Successful and parallel service execution of 11 different MVNOs on 3 continents and 5 countries.

Outstanding assurance in securing business services and customer satisfaction.

Customers profit from a simplified and scalable operation services program which assures a maximum level of end-customers satisfaction.

CONCLUSIONS AND RECOMMENDATIONS

The MVNO business is expanding rapidly across the globe. Market research is forecasting the MVNO market to reach up to 300 million subscriptions by the end of 2018 representing over 3% of the world's subscriptions. But here are still plenty of markets to look for: Only approximately 30% of the worldwide active mobile markets are hosting MVNOs today and there are profitable opportunities available in many segments, such as ethnic market, youth-oriented, cable-providers, fixed-line-operators, retailers etc., just to name a view.

MVNOs need to look for new ways to differentiate services by entering adjacent markets or new geographical regions. Also network operators can't ignore the global MVNO momentum in order to meet regulatory requirements or market growth needs. In any case, serving the MVNO sector mostly means working with organizations that are inexperienced in mobile and related technologies. So the role of MVNEs is becoming virtually indispensable, especially when it comes to professionally meet critical cost, technology and flexibility factors market entering MVNOs are faced with.

I-New's multiple awarded and industry trusted MVNE services supports individual MVNOs around the world to professionally plan, create, implement and successfully run a MVNO with minimum investments and shortest possible time to market. Empowered with their unique module system of highly competitive products and service, I-New enables service variety and freedom of choice to local end-customers in order to satisfy individual demands for today's mobile driven lifestyles. In addition, working with I-New's MVNE services allow local MNOs to fulfil regulatory needs and necessary market environment initiatives, enable them to gain additional market shares by conveniently launching and operating MVNOs with a industry trusted and globally track recorded technology partner.

WORKING WITH I-NEW

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For more information about I-New Unified Mobile Solutions and how we can help your company entering the mobile business successfully, please contact the Global I-New Sales Team at sales@i-new.com or +43 (2626) 20720-0.

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© I-NEW UNIFIED MOBILE SOLUTIONS AG - Am Anger 1 - 7210 Mattersburg - Austria - Europe
Tel.: +43 2626 20720-0 - Fax: +43 2626 20720-1 - office@i-new.com - www.i-new.com.