

With the growing consumer demands and evolving habits, the messaging landscape is becoming increasingly complex. Trends influencing the messaging market

- Rising volumes of A2P messages
- A2P messages growing at 5% CAGR and will reach 1.54 Trillion messages by 2022
- Increasing vulnerabilities in messaging
- Increase in administrative regulations
- Network security firewall market to grow to USD 4.80 Billion by 2022, CAGR of 12.5%



- RCS Playing the central role in the future of IP based messaging
- · Google's push for RCS
- RCS market alone \$14 Bn
 by 2021 Increasing the total A2P
 market to \$74 Bn
- Adoption of virtualization and NFV, to address the capacity demand of mobile traffic
- Reduction in CapEx and OpEx burden faced by service providers resulting in the integration of messaging and oice products

Standalone systems are poorly equipped and largely incapable of handling the business challenges that operators needs to address. With the growing volumes and diversity of message types (SMS, USSD, MMS, WAP and RCS) and related voice products (MCA, Notify me, VMS and VVM) the need for effective management and control has never been greater. To drive business forward, Consolidation is a natural step in evolving messaging and voice infrastructure with multiple value added service systems bundled into a cohesive solution.

Comviva's UNO messaging platform takes a unified approach to the provisioning, control, and management of multiple services and channels. UNO messaging platform simplifies the messaging lifecycle in itself, by allowing you to address dynamic market needs by offering end-to-end transaction visibility, just-in-time capacity management, rapid service launches, and increased operational efficiencies.

Offering an intelligent and modular design with scalability and robust architecture as the core of the platform, Uno changes the way operators monetize their offerings, powering a shift from fragmented, disparate architectures into a cohesive, targeted solution.

COMPREHENSIVE MESSAGING & VOICE INFRASTRUCTURE AND MONETIZATION PLATFORM

Integrated Messaging and Voice Platform

- · Bundled offering of the following messaging and related voice products:
- Messaging Channels SMSC, USSD, MMSC and WAP
- Voice Products MCA, Notify me, VMS and VVM

Robust Architecture

- · Built on Comviva's vast messaging and voice product line experience
- Leverages common components to derive operational efficiency
- · Layered architecture with easily pluggable Add-On modules

Floating license across messaging channels

- Single license for all messaging channels
- Dynamically use Floating license across all channels as per traffic requirement
- · Enables capacity planning; eliminating the need to buy individual messaging license







Future Ready

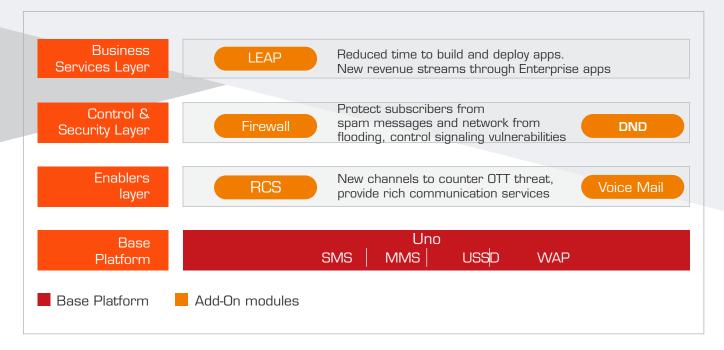
- · LTE ready SMSC and USSD solution with fall back support to legacy 2G/3G networks
- · LTE ready MCA, Notify me and VMS services
- RCS offering Google RCS or RCS Core, RBM platform and RCS client in Android/iOS handsets
- NFV MANO ready messaging platform based on ETSI standards



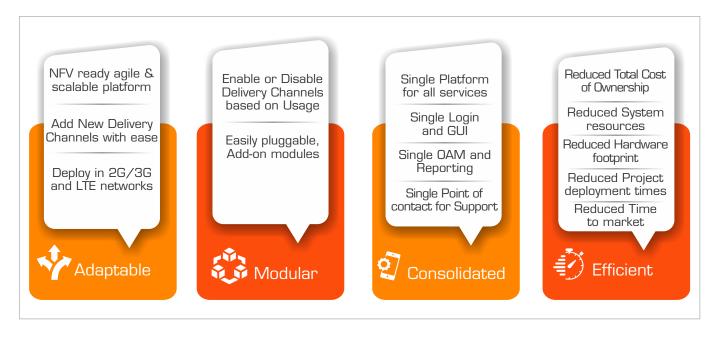
AddOn Security Modules

- Integrated DND to curb UCC messages and adhere to regulatory requirement
- Signalling level Fraud and spam prevention integrated into Uno
- · Easily Add-on content based filtering
- · Ability to create Signal Filters by combining multiple parameters dynamically
- Real-time Analytics and Dashboard

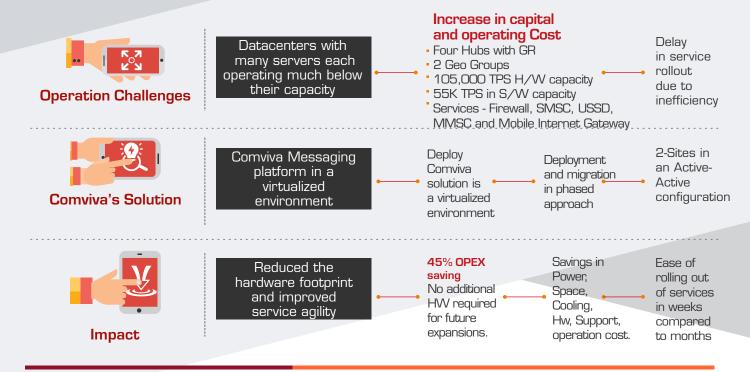




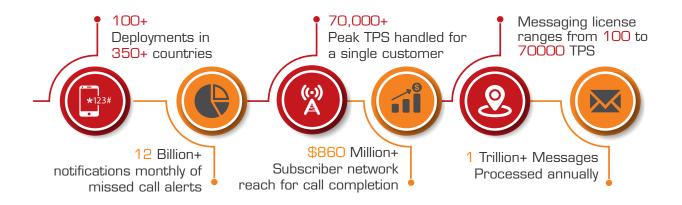
BENEFITS



VIRTUALIZATION CASE STUDY 45% OPEX SAVING FOR A TIER1 OPERATOR IN INDIA



WHY COMVIVA?



Comviva is the global leader of mobility solutions catering to The Business of Tomorrows. The company is a subsidiary of Tech Mahindra and a part of the \$21 billion Mahindra Group. Its extensive portfolio of solutions spans digital financial services, customer value management, messaging and broadband solution and digital lifestyle services and managed VAS services. It enables service providers to enhance customer experience, rationalize costs and accelerate revenue growth. Comviva's solutions are deployed by over 130 mobile service providers and financial institutions in over 95 countries and enrich the lives of over two billion people to deliver a better future.