

eSIM and SIM Number Management

Maximizing SIM Sales, Utilization and Compliance

The Number Management Challenge

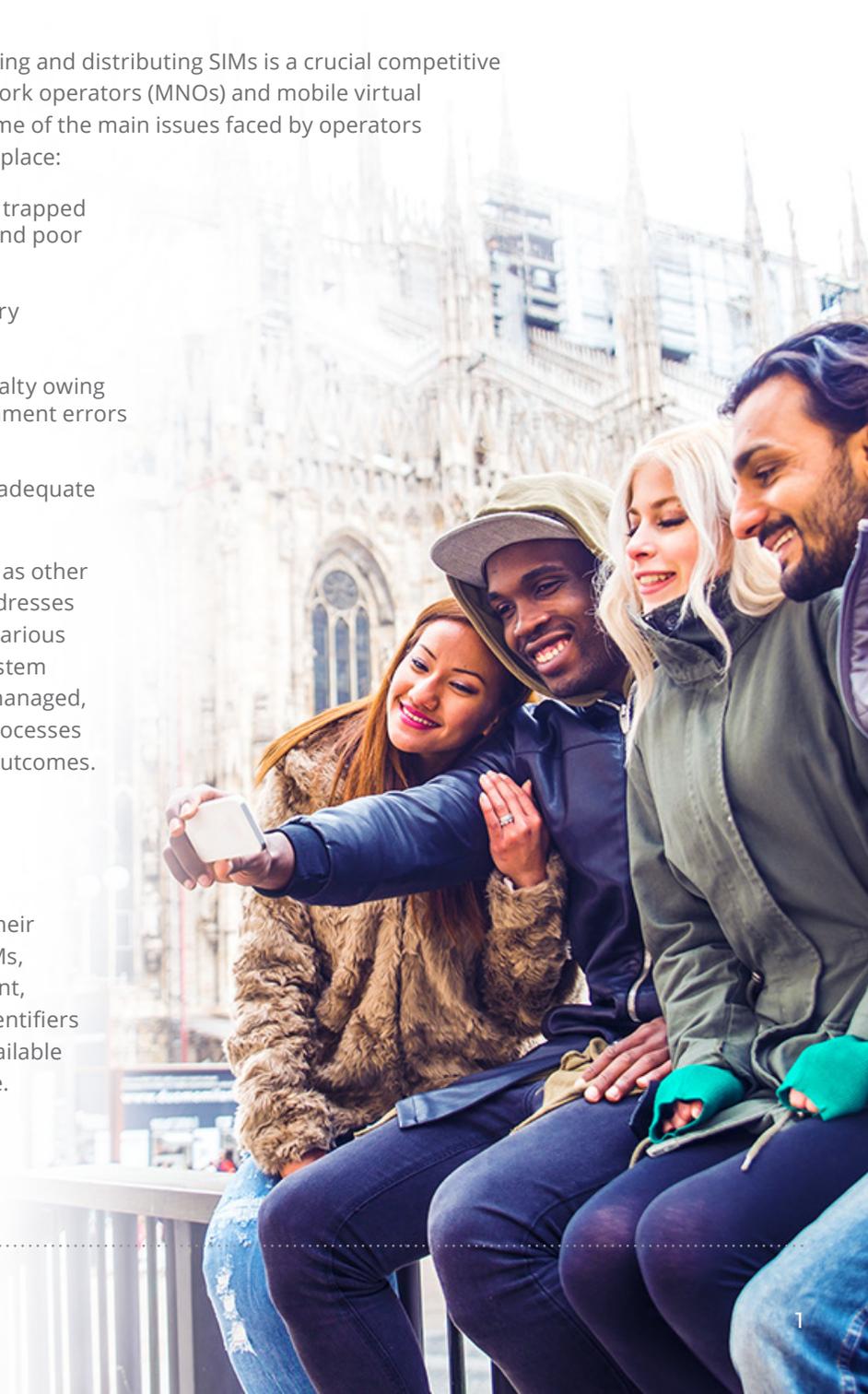
Mobile number management which begins with ordering and distributing SIMs is a crucial competitive and regulatory business requirement for mobile network operators (MNOs) and mobile virtual network operators (MVNOs). Here is a snapshot of some of the main issues faced by operators without a dedicated number management solution in place:

- ✓ Revenue loss from underutilized number ranges, trapped numbers (including premium numbers) for sale and poor forecasting and reporting
- ✓ Financial and non-financial penalties for regulatory non-compliance
- ✓ Poor user experience and loss of brand value/loyalty owing to limited number choices, search options, assignment errors and inability to effectively mine user data
- ✓ Low workforce morale and fatigue from use of inadequate ad-hoc products

Managing eSIMs, SIMs, MSISDNs, IMSIs, ICCIDs as well as other communication identifiers such as URLs and email addresses entails a long list of tasks that must be performed at various stages of the SIM lifecycle. This requires a modern system that addresses different data points that need to be managed, reported on and optimized. It also requires defined processes to ensure adherence to best practices for successful outcomes.

Evolving Systems Can Help

Evolving Systems' Total Number Management™ (TNM) solution is a scalable and fully automated system that enables operators to reliably and efficiently manage their telephone numbers and associated resources i.e. eSIMs, SIMs, MSISDNs, IMSIs, ICCIDs, I.P. addresses, equipment, account identifiers as well as other communication identifiers such as URLs and email addresses. The platform is available for either on-premise deployment or as a SaaS service.



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TNM provides full lifecycle SIM management to include a standardized SIM card profile as well as support for eSIM with either SM-DP or SM-DP+ profiles and templates. It has an automated interface to the SIM manufacturer's system which reduces cumbersome processes starting with sending SIM orders and all the way through to delivery, tracking inventory and recycling. An included API ensures easy integration with

existing finance, billing, CRM and network IT systems and enables real-time search, reserve and assign options at PoS. Advanced forecasting using historical trends results in optimal ordering that maximize profitability. Inventory monitoring and alerts ensures reliable and timely alerts that help avoid overstocking and meet demand surges.

TNM Impact Analysis

Problem Addressed by TNM™	Revenue Streams & Savings	Regulatory Compliance	User Experience	Other
Revenue leak from under-utilization of expensive allocated number ranges	▣▣		▣	
Failure to port and recycle all released numbers	▣	▣▣▣	▣	
Unavailability or localization of premium numbers for Sales	▣▣▣		▣▣▣	
Inability to obtain new number ranges because of poor utilization and reporting	▣▣	▣▣▣	▣	
Limit the introduction of new services	▣▣▣		▣▣	
Poor forecasting without accurate utilization visibility	▣▣		▣▣	
Cost to resolve accidental assignment of disconnected or ported numbers to customers	▣		▣▣▣	
Damage to user experience, loyalty and NPS scores from errors	▣▣		▣▣▣	
Data integrity errors as millions of records are improperly managed result in resources not being assigned or multiple assignments of the same number	▣▣	▣▣▣	▣▣▣	
Inability to effectively mine user data	▣▣		▣▣▣	
Poor workforce morale and fatigue from using ad-hoc solutions to manage	▣	▣	▣	▣▣▣

About Evolving Systems

Evolving Systems, Inc. (NASDAQ: EVOL) is a provider of real-time digital engagement solutions and services to more than 100 customers in over 65 countries worldwide. The Company's portfolio includes SIM and IoT / M2M sales

and management solutions, as well real-time analytics, customer acquisition, customer value management and loyalty solutions for Mobile Network Operators (MNOs) and Mobile Virtual Network Operators (MVNOs).

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