Protect A2P Messaging Revenue and Open New P2A/Chatbot Opportunities

Mavenir's RCS Business Messaging

The savage competition from over-the-top (OTT) messaging applications, which offered free peer-to-peer (P2P) messaging to consumers with enhanced multimedia features (such as emojis, picture and video sharing, and group chats), has decimated the SMS P2P revenue of most mobile network operators (MNOs) worldwide. However, despite the growth of WhatsApp, WeChat, Snapchat, and Facebook Messenger, among others, application-to-person (A2P) SMS traffic has continued to increase over the last few years.

Brands still see MNO-provided messaging as confidential, reliable, secure, and in compliance with regulatory requirements. In spite of its text-only 160-character limitations, SMS remains the world's largest messaging platform with 4 billion monthly active users (MAU) and 2 trillion messages exchanged in 2017.[i] The SMS-based business to consumer (B2C) market, which includes A2P as well as person-to-application (P2A) messaging, is worth USD $60 billion.[ii] In contrast, WhatsApp and Facebook Messenger have around 1.5 billion MAU[iii] each.

RCS Business Messaging provides an engaging brand to consumer experience preferred over SMS by 60% of consumers and delivering a 10x uplift in click-through rates

Rich Communication Services (RCS), the standardized evolution of SMS, brings conversational and group messaging, picture sharing, audio and video, rich cards, and delivery and read receipts—among other features—that turn the smartphone into the kind of digital billboard that is coveted by brands. At the same time, it provides a seamless evolution—with SMS/MMS fallback—to those 4 billion SMS users, which can now be converted over time by updating the software on their devices or as part of their device renewal cycle. RCS is already live in 65 operators and 45 countries, with 167 million MAU and is forecasted to reach 1.01 billion by the end of 2019.[iv] Market research shows 74% of consumers say they are more likely to communicate with a brand over RCS,[v] and early brand results show a 10x uplift in click through rates[vi] with 60% of consumers preferring RCS over SMS.[vii]

RCS represents an opportunity for MNOs to monetize mobile messaging by providing brands with a secure, clean marketing channel that delivers the privacy and reliability that enterprises have come to expect from mobile operators. But the window of opportunity is limited. OTT messaging applications are already entering the B2C messaging space in an attempt to generate revenue from a customer base grown on top of a free P2P messaging service. Whatsapp for Business (leveraging the WhatsApp consumer base) and Apple Business Chat (leveraging the iMessage installed base) are some examples.

Mavenir RCS Business Messaging enables MNOs with a low-risk, easy to manage solution that connects brands, aggregators, chatbots, and applications to an RCS enabled mobile network, protects their existing A2P revenue and taps into USD $18.04 billion of new RCS opportunities by 2023.[viii]
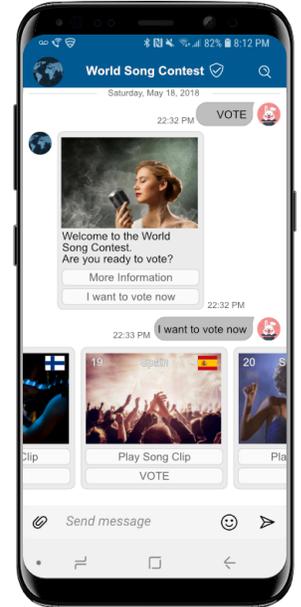
Why RCS Business Messaging

MNOs are looking at RCS Business Messaging (RBM) as a solution to protect A2P messaging revenue and generate new revenue from P2A sources (chatbots, applications, etc).

Protecting A2P Revenue

Brands are using SMS because of its ubiquity and its reputation as a clean (private and direct) and regulated (less spam) channel, but fundamentally because of its performance with regards to open, read and response rates, which are far superior compared to other channels.

However, consumer habits are starting to change, and brands are put off by how SMS technology has lagged behind other messaging channels with its text only nature and 160-character limitation. Brands are demanding a richer user experience that includes images, videos and sounds, conversations, group chats, and, most importantly, key analytics (sent, delivered and read receipts) to monitor the performance of their marketing campaigns.

OTT applications have seen the revenue potential of A2P messaging and are already pushing their own solutions (WhatsApp Business, Apple Business Chat, etc.) to grab a piece of this lucrative pie by filling the gaps in the SMS experience. MNOs need to act now if they want to protect their A2P messaging revenue.

RBM provides the much-needed upgrade to the mobile messaging experience, in the native messaging client within the mobile device, that allows brands to enhance their mobile marketing experiences while still retaining the performance and reliability of SMS that OTT services cannot provide today.

New P2A Revenue

The RCS solution defined by GSMA goes beyond the much-needed multimedia upgrades to the SMS messaging experience and includes a Messaging-as-a-Platform (MaaP) layer that enables the integration of chatbots and other enterprise applications into their carrier networks.

The standardization of the Universal Profile (UP) guarantees a universal experience across devices and networks, introducing new elements that enrich the brand-to-consumer experience, such as rich

BENEFITS

Mobile Network Operator
- Fast time to market
- Low initial investment
- MNO control of user-brand relationship
- MNO control of end-to-end security
- Fast availability of new features and compliance with the latest Universal Profile Specifications
- Compatibility with native RCS clients (e.g. Android Messages, Samsung Messages)
- White label RCS clients and Client SDKs to offer RCS services on devices that are not natively enabled (i.e.: iPhones, older Android devices)
- MNO customizations and differentiation
- Regulatory Compliance
- Open ecosystem of partners (aggregators, developers and applications) pre-integrated with the MaaP
- Strategic partners for global interconnectivity, financial clearing and settlement, brand and chatbot vetting, ENUM resolution and aggregation capabilities
- Integrated SpamShield revenue assurance solution to minimize fraud and facilitate the pat to a clear and secure channel
- Free P2P messaging for RCS subscribers

Brands and Developers
- Brand-Consumer clean channel
- Translation of the telecom complexities into easy to use REST APIs that IT can understand and implement
- Unified marketplace with a single RCS inventory that minimizes the brand's effort to access mobile consumers
- Standards compliance and adherence to the latest Universal Profile which allows the use of leading native and over-the-top RCS clients (i.e.: Samsung Messages and Android Messages)
- Sandbox to securely test bots and validate user experiences
- Partner ecosystem with access to 3rd party enablers to further enhance the user experience and enable conversational commerce
- Easy management with self-service web portals and APIs.

cards and rich card carousels. However, even though these elements can be used in A2P scenarios, they may not be enough to drive revenue growth for A2P RCS messaging due to a key limitation: A2P is an opt-in model.

When brands convert their A2P campaigns from SMS to RCS, they find that the number of RCS-enabled users in their subscription list represents a very small fraction of their SMS addressable market. As a further complication, they must deal with subscribers connected to different MNO networks, which requires them to launch their RCS A2P campaign in different MaaP implementations. From the practical point of view, instead of adding one RCS channel to their marketing portfolio, they potentially need to add one per MNO operating in the target territory, which is costly and limits their return on investment.
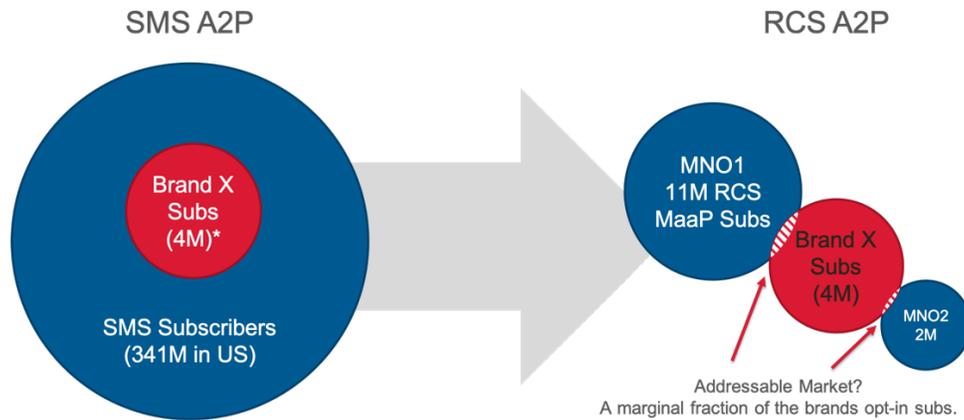
Limitations on RCS A2P reach during the transitional period (US 3Q18 example)

This problem will eventually disappear once RCS is globally deployed, but that will still take several years to achieve. To overcome this limitation, we can change the model to let the consumer reach the brand.

With a P2A approach, the conversation is initiated by the consumer (thus, opt-in is implicit) and the brand marketing campaign is available to the entire MNO's RCS subscriber base. Typical P2A engagements are chatbots or live chats and cover multiple brand use cases (reservations, appointment handling, information requests, etc.).

RCS clients include a dedicated interface (usually a tab) to search for chatbots or brands using names or categories (e.g. taxi, food, dance lessons, etc.), making the RCS P2A experience superior to SMS P2A experience from the brand discovery point of view. With SMS based P2A messaging, it is not possible to find a brand. Consumers need to know the short code (or the long code) of the brand to be able to initiate a conversation. With RCS, the users just need to start a search from the messaging application tab to find relevant brands in their location that can match their needs.
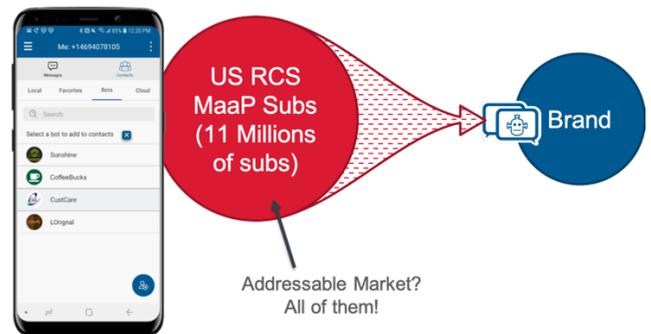

Total reach with RCS P2A (US 3Q18 example)

Finally, considering the top 3 A2P monetization issues are all fraud related (SIM farms, grey routes, and spam) and cost an estimated $1.5 billion per annum globally,[ix] investing in developing a P2A messaging strategy that relies on brand and bot vetting to guarantee a secure and clean communication between the consumer and the brand makes a lot of sense.

Solution Description

Mavenir's RCS Business Messaging Solution allows MNOs to rapidly offer RCS services to brands, developers, and aggregators in their markets by eliminating the complexity of enabling the RCS channel.

Mavenir's solution connects to the operator's core network, integrating with their IMS, SMS, and MMS components, as well as the provisioning, OSS, lawful interception, and billing systems. It provides standards-based Northbound and Southbound interfaces to connect to chatbots and other MaaP providers and complies with the latest UP specifications. It also provides connectivity with other MNOs by means of industry leading RCS hubs as well as IMS-compliant network-to-network interconnection (NNI).
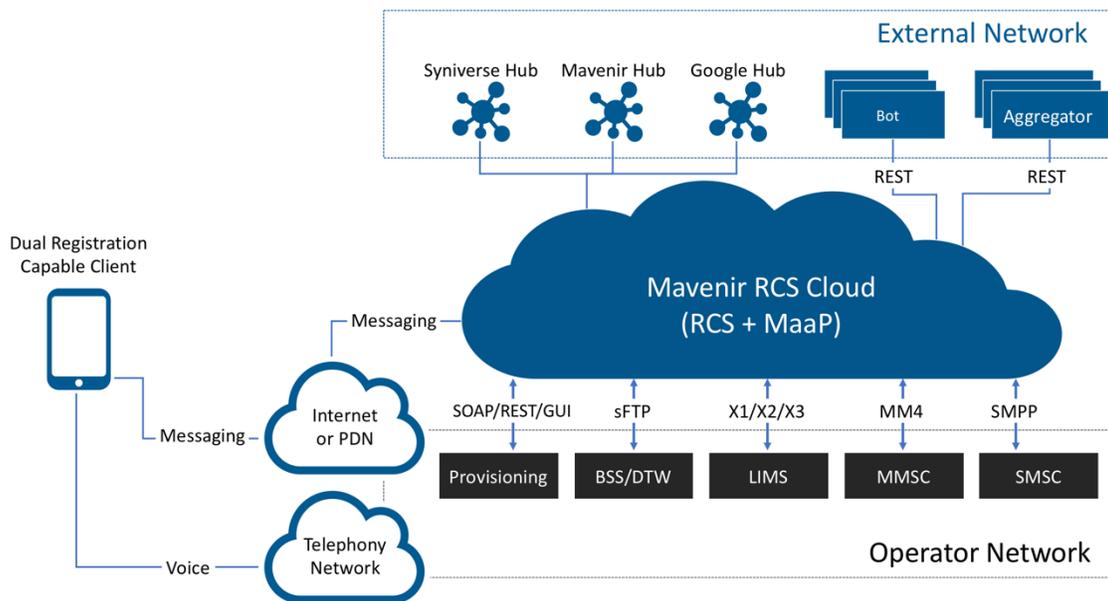
Mavenir MaaP as a service integrated into MNO network

Mavenir's solution can be delivered as-a-service from Mavenir's RCS Cloud or deployed in-network. In both cases, it integrates into the MNO network with minimal effort. When deployed in-network, Mavenir's RCS Business Messaging solution can include Mavenir's RCS application server for P2P messaging or leverage the MNO's existing RCS P2P infrastructure (whether in-network or cloud-based).

As a cloud-hosted service, Mavenir provides a multitenant solution where each MNO perceives the solution as their own, but all MNOs hosted in the solution have the same level of UP compliance, capabilities, and functionality. Additionally, subscribers of the MNO's tenants can exchange P2P RCS messages for free.

Mavenir's cloud solution provides global reach with data centers in different continents and can facilitate the simultaneous launch of RCS Business Messaging within a country by multiple MNOs, providing a unified marketplace, delivering the consumer reach that brands are demanding, and greatly increasing the revenue potential for the MNOs. In this case, Mavenir's cloud solution consolidates the multiple RCS networks into an RCS Communications Platform-as-a-Service (CPaaS) that offers a single point of entry for chatbot developers and leverages the Mavenir MaaP SDK, which reduces the complexity of using the GSMA Northbound API and allows developers to create a common RCS channel connector to connect bots developed in leading chatbot platforms (e.g. IBM Watson, Amazon Lex, Dialogflow, Microsoft Bot Framework, Botsify, etc.).

Mavenir's RCS Business Messaging solution also uses the GSMA Southbound API to connect with other MaaP platforms, making their chatbots visible to the each MaaP's respective RCS users and includes a full ecosystem of partners that provide additional messaging enablers by means of their own APIs.

Business Models

Mavenir's RCS Business Messaging solution supports flexible business models for cloud-based and in-network deployments, such as a low risk usage-based revenue share model with minimal upfront costs, and subscription (OpEx) models based on user reach. Additionally, in-network deployments can be offered in a perpetual license purchase (CapEx) model (RTU + maintenance).

Mavenir's RCS Business Messaging allows MNOs to remain competitive in messaging with the level of investment they have today.

Summary

SMS has addressed the brands' needs to extend their digital reach by delivering better security, privacy, effectiveness, and confidentiality than email and social networks with a clean channel with minimal spam, but the short-text limitations makes SMS insufficient to drive customer engagement programs further.

RCS Business Messaging, as a seamless evolution of mobile messaging, delivers the multimedia and analytics capabilities already delivered by other OTT ecosystems while enabling new P2A engagement models (e.g. chatbots) that allow brands to be discoverable and reachable by any RCS enabled user, enriching the experience with rich cards and rich card carousels that are already providing results, with significant uplift in engagement and click-through rates.

With RCS Business Messaging, for the first time, MNOs can offer the same capabilities that enterprises are leveraging on their websites (chatbot store, bot discovery, search capabilities) with the global reach of their mobile networks and the security and reliability that is expected in mobile messaging. Mavenir's focus and business is MNO enablement, ensuring the privacy and confidentiality of messages, conversations and metadata and providing brands with a clean channel where usage patterns will not be sold to potential competitors.

Mavenir, the global leader in mobile messaging, brings deep expertise and knowledge of mobile networks, enabling more than 50 million active RCS users and processing more than 250 million RCS messages per day in just one of our customers' networks. We are ready to enable RCS as a channel for chatbots and meet the omni-channel needs of enterprise customers worldwide.

About Mavenir

Mavenir is the industry's only 100% software-based, end-to-end, Cloud Native Network Software Provider, redefining network economics for Communication Service Providers (CSPs).

Our innovative solutions pave the way to 5G with 100% software-based, end-to-end, Cloud Native network solutions. Leveraging industry-leading firsts in VoLTE, VoWiFi, Advanced Messaging (RCS), Multi-ID, vEPC and vRAN, Mavenir accelerates network transformation for more than 250+ CSP customers in over 130 countries, serving over 50% of the world's subscribers.

We embrace disruptive, innovative technology architectures and business models that drive service agility, flexibility, and velocity. With solutions that propel NFV evolution to achieve web-scale economics, Mavenir offers solutions to CSPs for revenue generation, cost reduction and revenue protection.

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[i] Source: GSMA
[ii] Source: GSMA
[iii] Source: GSMA
[iv] Mobilesquared; Jan. 2019
[v] Source: GSMA RCS Business Messaging Research Study; Feb. 2018
[vi] Source: Subway; Oct. 2018
[vii] Source: Express; Oct. 2018
[viii] Mobilesquared; Jan. 2019
[ix] Mobile Ecosystem Forum: What MNOs think about A2P messaging: Growth, Fraud and RCS, 4Q 2018