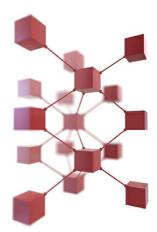
#### 2020 Trends to Watch

By: Sam Barker

Mobile messaging continues to undergo its most significant period of disruption in the form of RCS. Despite the potential of RCS, its future lies in its adoption by both operators and handset manufacturers.

Operators, however, face competition from OTT (Over the Top) messaging applications, which are typically more agile and faster to develop new services. OTTs are also beginning to make moves to provide APIs for enterprises, essentially acting as platforms aimed at those who would typically use white route A2P SMS.



OTT messaging traffic has surpassed P2P SMS, thus operators must now ensure that business messaging traffic stays on their networks or risk losing further messaging revenues to OTT players such as WhatsApp, Viber and Facebook Messenger.

While operators' ARPU (Average Revenue per User) decline in certain regions is exaggerated due to the depreciation of local currency bundles against the dollar (for example, in Latin America and Europe), the implications are clear: operators must urgently find new revenue streams to shore up falling historic core incomes.

Therefore, Juniper Research believes that 2020 will be a key year for messaging technology. Indeed, interest in RCS continues to gather pace among operators. The onus is on them to permit multiple RCS clients on a device, and they must ensure that devices are able to handle multiple clients concurrently. This poses a small challenge to establish the pre-installed RCS client as the default application in use, rather than a third-party application. Given that one of the key use cases for RCS is to act as a centralized means of communication in an business messaging environment, failure to do so could lead to the fragmentation of services, which in turn will diminish the usability of the service.



#### **Pressure from Brands to Launch RCS**

Enterprise validation through brand authentication will be a key differentiator for SMS and OTT messaging platforms. At this stage of the market, ushering in visible identifiers and educating RCS users about their brand authentication procedures will be

key to fostering trust in the technology. With a disparate app ecosystem, Juniper Research believes the ability for all brands to interact with consumers through a single app will be highly sought after in the retail and banking sectors.

Mobile channels will continue to be an important CRM (Customer Relationship Management) channel for brands and enterprises. Declining operator revenues are pressuring operators to adapt their business strategies to capitalize on both emerging technologies and competition. SMS services continue to offer ubiquitous connectivity to all users with a native messaging client.

Operator and handset vendor support will increase over the next four years; however, smartphone update cycles will be the prime limiting factor in users becoming RCS-capable. In the context of P2P traffic, users will often be unaware of the transition from SMS to RCS. A2P RCS traffic will enable new media-rich functionality on SMS but will come at a premium cost to SMS.

Juniper Research anticipates that a number of business messaging use cases will continue to use SMS, due to its cost effectiveness and their familiarity with the protocol. Therefore, Juniper Research postulates that the forecast RCS business messaging traffic will primarily be new traffic created by the technology itself and will not displace any significant amount of forecast SMS traffic over the next five years.

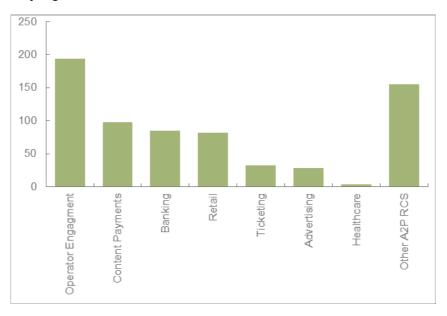


Figure 1: Total Number of RCS Business Messages in 2020 (m) Split by 8 Key Categories

In 2019, the onus is on operators that support RCS to develop solutions that foster confidence among both eCommerce players and RCS users to use a native RCS app to make payments. Juniper Research believes that this must initially be done through smaller payments, such as P2P payments between RCS users or to pay for inexpensive digital items. As RCS develops, brands and enterprises are likely to begin offering capabilities to pay for larger physical goods.

After a disappointing 2019 for RCS, Juniper Research believes that increased support from operators will occur during 2020. By 2023, Juniper Research anticipates that operator-billed revenues from RCS business messaging services will reach \$5 billion. At this stage, we also forecast that the penetration of RCS-enabled devices will reach 30 percent in North America and Europe; thus approaching the 40 percent 'mass market' penetration point. We would then expect a rapid rollout of RCS as operators look to add it to their portfolio to combat user churn to operators that are offering RCS-based services.

### **Google Accelerating RCS Deployments**

Over the last few years, Google has been one of the most vocal advocates for RCS; its provision of a RCS messaging profile for Juniper Research led to the development of rival profiles to increase competition in the space.

The most prominent market hurdle at the moment is the combination of support from handset vendors and network operators. However, Google announced in June 2019 that it would enable smartphone users with RCS-capable devices to bypass operator support and access RCS services. Essentially, this app acts as a third-party RCS application via Android.

If RCS services are launched via any third-party app, operators will be pressured into supporting RCS services. Google's launch of RCS bypasses operators and thus will drive the growth of operator RCS support. Juniper Research anticipates that this acceleration will begin in 2020, driven by the potential loss of future business messaging revenues.

### Will Apple Support RCS in 2020?

Since a vague claim to have engaged in discussions with the GSMA and operators about including RCS in iOS in January 2019, Apple has been relatively silent about RCS. It is still uncertain whether the company will adopt the standard, particularly as iMessage supports similar—and in some cases unique—features. This development will, however, mean that US operators are in a strong position to put pressure on Apple to incorporate RCS in 2020.

Juniper Research anticipates that Apple will incorporate RCS standards into its existing iMessage clients to enable business message capabilities. Given the current interest in RCS business messaging capabilities, we anticipate that a lack of support will damage the consumer value proposition of an iOS device once RCS reaches its mass market point. We expect an announcement of support to occur within 18 months, with rollouts during the next major iOS update. If this were to happen, the addressable user base for RCS would rapidly grow over a short period of time, further increasing the value of RCS business messaging to brands and advertisers.

## Value-added Services Key to RCS Success in 2020

As the market progresses, Juniper Research expects the value of the technology to increase naturally.

Indeed, network operators have mostly failed to capitalize on services that leverage their own networks, such as P2P messaging in losing out to more agile third-party OTT developers. However, the increasing IP-based nature of mobile networks allows operators to efficiently develop and deploy new services on their networks, including RCS, identity services and financial solutions.

When declining ARPUs are considered, operators' efforts to slow the decline must focus on offering value added services that take usage away from third-party apps for areas such as ecommerce, banking and ticketing. In order to maximize these opportunities, Juniper Research believes that early standardization is critical to success and to foster confidence among consumers or risk the technology being associated with failed promise.

The first advanced capabilities that should be included are the ability to make payments through the RCS client, which can be done by integrating mobile wallet services. Google, one of the key driving forces behind the revival of RCS, offers Google Pay as a mobile wallet.

Additionally, Juniper Research views AI-based chatbots as a key service which will add to the value proposition of RCS services. For end users, Juniper Research believes that consumers will become increasingly accustomed to using chatbot functions as a first point of contact between themselves and brands.

# **End-to-end Encryption Key for Consumer Trust?**

At present, RCS does not have end-to-end encryption in a similar fashion to SMS. However, Google has been plagued with anti-trust issues in recent years but media attention has also been focused on security in messaging technology and that has hit Google heavily, too.

Juniper Research believes that this lack of clarity about encryption of content is likely hindering adoption by a number of industry stakeholders. Therefore, we expect assurances from Google about the security of the message in transit through the network, which will likely increase confidence in the technology and accelerate its adoption.