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We have taken it for granted. When we use our smartphone, it is just another icon on the screen but, believe it or not, SMS is more than 35 years old. It was first proposed for the Global System for Mobile Communications (GSM) in 1982, although its most popular time was the late 90s and early 2000s, when entire generations mastered the art of compressing ideas, passions, and conversations into small snippets using the most ingenious abbreviations in order to fit within the 160 characters limit. And its popularity generated a significant amount of revenue for mobile network operators (MNO) worldwide.

Then the mobile internet exploded, data plans became ubiquitous and over-the-top (OTT) applications usurped the throne that SMS had held for more than two decades and the MNO's person-to-person (P2P) messaging revenue was severely diminished. However, SMS continued to live on as the platform of choice for application-to-person (A2P) or business-to-consumer (B2C) interactions. You have been using SMS to receive your two-factor authentication codes, confirmations about flight reservations, links to download mobile boarding passes, discount codes and coupons, or alerts every time your credit card was not present for a transaction. Mobile messaging is a part of our lives, even though we don't pay much attention to it anymore: we have taken it for granted.

But mobile messaging has been going through a complete transformation. Originally embraced by the [GSM Association](#) (GSMA) in 2008, a new messaging protocol was developed with the goal of succeeding SMS as the mobile messaging application of choice: [Rich Communication Services](#) (RCS).

RCS was initially an industry response to the threat of the OTT messaging applications that were eroding their P2P SMS revenue and so it focused on introducing the features that made these applications popular—conversations, images, video, audio, typing notifications, read receipts—while ensuring the global reach that SMS provided.

For many years, RCS struggled to grab interest from MNOs and handset manufacturers because the business case wasn't favorable. The OTT applications had taken over the P2P business almost completely—except on the markets where all-you-can-eat SMS plans were already in place—and it was uncertain that RCS could retake the throne. But recently, RCS introduced the Universal Profile—which enhances its capabilities by laying out the common functionality that needs to be supported by every player—and there has been a sudden interest to use RCS for A2P applications, a scenario that provides a profitable business case. Moreover, there is a push by mobile handset industry giants such as Google and Samsung. All these developments have infused RCS with new life.

A major improvement in A2P messages

The RCS open platform provides developers with everything they require to implement and deploy advanced communication applications. The message richness, combined with its universal reach, make it a very attractive delivery vehicle for brands and offers new revenue opportunities for MNOs.

At Mavenir, we have been deploying our innovative, award-winning RCS solutions in mobile networks for several years and can attest that it provides major improvements in A2P scenarios:

- Sender identified by name, not a short-code or MSISDN
- Integration of graphics and QR codes
- Hot-buttons to websites replacing links

- Executable code embedded in the message, enabling customers to take action immediately without going to a website
- Spam protection and privacy control measures to maintain customer trust

And by combining it with our [Messaging-as-a-Platform](#) (MaaP) solution, RCS provides the basis for up-selling A2P SMS now, and a chatbot platform in the near future, as well as P2P message monetization and data sponsoring opportunities.

With Google pre-installing the new Android Messages app on Android 8.0 Oreo and Samsung adding their own RCS capable messaging application on their smartphones, almost all the Android devices launched in 2018 will be RCS compatible and most major networks have deployed or are deploying Universal Profile compliant RCS solutions in the market - 55 operators and 11 OEMs globally as of January 2018, according to [GSMA](#), with a forecast of 200 operators by Q1 2019.

What about the iPhone?

Even though the iPhone represents a smaller market share - around 20% globally according to [Statista](#) - Apple is the second most popular smartphone vendor after Samsung and their flagship device is still considered one of the trendsetters in the industry. Therefore, it is only natural that key industry decision-makers look at their positioning around RCS.

iOS 11, the latest version of the iPhone operating system, does not support RCS capabilities in their *Messages* application. Apple did not wait for RCS to become popular and invested in their own multimedia messaging solution that was named *iMessage*. The *Messages* application on the device automatically detects if a contact has the *iMessage* service and utilizes it in the conversation—the user knows because the messages are blue. If the destination does not support *iMessage*, the application falls back to utilize MMS or SMS, presenting the user with a green messaging interface.

But this doesn't mean that RCS cannot be used on Apple devices. It is still possible to provide a downloadable application that allows users to benefit from RCS' message richness and universal reach. In some cases, other iOS applications may utilize RCS as a messaging mechanism within a specific user experience. For example, Mavenir's mobile-native unified communications and collaboration (mUCC) solution uses RCS in the mobile network as the instant messaging delivery mechanism. RCS can deliver everything our unified communications solution needs—such as typing and delivery notifications, message store and forward, conversation synchronization, or image, video and audio assets— and more—for example, rich cards and carousels—with the ability to deliver messages to any phone number in the planet by downgrading to an MMS or SMS message when needed, just like *iMessage* does.

And although Apple does not usually advertise their roadmap, past experiences show that they normally adopt technologies once they are mature enough—such has been the case with [WebRTC](#) which makes it likely that iOS will support RCS in the near future.

Conclusion

RCS has already permeated into the networks and is about to take the center stage in the mobile messaging theater.

Unbeknownst to most of the people, MNOs and device manufacturers have been implementing RCS within their solutions. The GSMA claims there were 159 million monthly active users of RCS globally, as of January 2018, forecasting 350 million by the end of 2018, representing a \$74 billion market by 2021.

In the US, for example, [T-Mobile](#) is already claiming that 30 million customers are sending over 250 million RCS messages every day across their network.

With the closure of the Universal Profile 2.0 and the strong push by Android, in the next few months, users will begin to see RCS in every aspect of their daily lives. Although they will not know it as RCS, for them it will be just messaging.