RCS Google Response Plan

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Overview

In recent weeks Google has made a dramatic and aggressive shift in strategy which, if allowed to follow its course, will have wide-ranging, adverse implications for the future of operator messaging—and operator revenue derived from P2P and A2P messaging. Google has been informing both the vendor community and the mobile operators that it will no longer support integration of Android Messages with operator-owned messaging infrastructure. Instead, Google will be enabling RCS messaging on all Android Messages clients on its own, Google-controlled backend. This will immediately remove these subscribers from operator control and, over time, allow Google to exercise more and more control over the P2P and A2P revenue stream derived from these subscribers.

While this is certainly a short-term challenge, the mobile operator is not without tools to fight—and more importantly win—the coming battle over subscribers and revenues. The mobile operator has a number of long, medium, and short-term strategies that should be initiated without delay to combat Google's attempt to leverage its dominant position in the mobile OS market, while further undermining the position of the mobile operator in the messaging value chain. This paper will attempt to outline some of the political, regulatory, and market-based steps Interop would recommend to thwart the aggressive and predatory strategies Google is seeking to implement.

Political and Regulatory: Long and Medium Term

While the wheels of government and regulatory bodies move quite slowly, they are a long-term effective tool for maintaining the open and interconnected nature of telecommunication networks globally. Operators must ensure that local and national regulators are aware of the attempt by Google to leverage its OS domination to steal the messaging market, its subscribers, and the bulk of revenue streams mobile operators currently realize today. This same leverage, although not currently as acute, is being applied across the Google Communications Suite to include voice and video services as well.

According to Statcounter (September 2020), Android OS accounts for 74.43% of mobile devices globally. This global number, however, is skewed lower by iOS penetration in Japan (62.79%) and in the U.S. (59.71%) per Statcounter (September 2020). In the majority of nations globally, Android penetration exceeds 80% and, in some countries, approaches 100% (for example, 95.85% in India and 91.84% in Indonesia per Statcounter, September 2020). This is clearly a dominant position, if not an outright monopolistic one. A unilateral move by a globally dominant player to capture an adjacent market through force of monopoly power must be countered. This type of behavior has long been disallowed by governments and regulators and must be stopped.

The argument has been made by some within the industry and media that the strategy Google is currently executing is no different than the strategy Apple took when it launched iMessage in 2011. There are, however, some significant differences that must be recognized. At the time of launch, Apple iOS held only a 3% global market share (Statista May 2010); today, Apple only holds an approximate 24% global share—clearly not a dominant position. Further, iMessage was (and is) only available on devices actually produced by Apple. By contrast, Google has made Android Messages the default client on all platforms using the OS. This is more akin to Microsoft's browser strategy from the mid-to-late 90s during the so-called browser wars than Apple's introduction of iMessage. Microsoft was accused and found to be in violation of U.S. anti-trust laws (https://www.justice.gov/atr/us-v-microsoft-courts-findings-fact) for leveraging its OS dominance to bundle its browser (Internet Explorer) with the OS for distribution to all OEM PC manufacturers. The EU also ruled against Microsoft on the same issue in 2003. The prior Microsoft and current Google strategies are disturbingly similar.

In addition to the threat to free-market economics posed by Google's strategy, there are a number of other concerns regulators should be aware of. Most important to any sovereign nation is their right and ability to protect themselves from both domestic and external threats. The Lawful Intercept functionality incorporated into all mobile operator networks globally is central to exercising this right. At the time of this writing, Google has no capabilities to comply with local, regional, or national legitimate Lawful Intercept requests. Normally, these requests would be processed and fulfilled by the licensed and regulated mobile operators in the region; it could be envisioned that 74.44% of the handsets would be "off the grid" from a messaging perspective.

Finally, we should consider data privacy issues. Google's primary business model has been and continues to be centrally focused on gathering user data and selling customer profiles to advertisers. Google uses user tracking, location tracking, Web site histories, browsing habits, e-mail, and many other points of data to understand an individual's behavior and attitudes and sell these to the highest bidder. It should, therefore, be recognized that Google's seizure of the operator messaging channel is simply another tool for them to gather personal and private consumer data, profile that data, and then sell that data. The operator messaging channel (SMS and MMS) has long been viewed as a secure and trusted service. The expectation of the consumer is that none of the messages they send or receive are—nor will be—read, profiled, or sold to third parties. This will be a large change in the behavior of their normal operator-controlled messaging inbox; at a minimum, both regulators and operators must ensure that consumers are aware of the ramifications of the change being forced upon them by Google.

Industry Bodies: Medium Term

In response to the emerging threat from Google, the industry has not sat idle. In recent weeks, Interop, along with several vendors, operators, and ecosystem partners, has scheduled and held numerous meetings to formulate an industry-wide response to this threat. As most are aware, RCS was conceived and developed via the industry standardization process to be an open, interoperable, multi-vendor, operator messaging platform. Our vision, and that of the ecosystem, was to evolve and enhance the existing operator technologies (primarily SMS and MMS), and to do so in a way that provided equal opportunity for all players in the existing marketplace, as well as new entrants over time. The use of standard interfaces for ingress, egress, and routing provides access to all and interoperability between all. In 2019, the GSMA ratified RCS as the messaging standard and technology for all 5G networks—an open standard for an open market.

While Google initially publicly embraced this ethos, over time its actions have betrayed its public protestations. Indeed, although Google has been an active and productive participant in the industry-wide RCS specification process, they have actually never implemented those standards. Instead, they have focused on a proprietary set of interfaces and functionalities. As of this writing, the Google client and the Jibe Hub (Google's messaging backend) do not conform with Universal Profile 1.0 or the subsequent 2.0 or 2.2 specifications. Simply put, what Google is forcing on the marketplace is not RCS and they should—at a minimum—clarify this point. In contrast to the open, interoperable Universal Profile Standards, Google has produced a closed, proprietary platform that cannot interoperate with RCS without significant content and protocol adaptation. Google's rejection of the industry standards they helped promulgate is now laid bare to see by the outright dismissal of openness, interoperability, and even operator messaging itself.

Interop believes that the industry trade associates can be effective in helping combat this threat. Raising awareness in the public and global forum, influencing the political decision makers, and enforcing standards-based approaches are all areas where the industry bodies can be constructive. To this end, Interop would welcome the participation of all mobile operators, our competitors, and all industry participants to join us in supporting strong action against this assault on the operator community. Pressure should be applied from every possible angle in one united industry voice. One operator or vendor cannot expect to counter the market power of Google, but together, all operators and vendors can.

Recommended Market Actions: Short Term

While the above-mentioned initiatives are critical and will, we believe, be efficacious over time, the current state of play within the RCS market offers some tactical opportunities that need to be seized upon immediately to avoid long-term damage to operator revenues. These tactical opportunities unto themselves have the potential to mitigate any moves announced or contemplated by Google and maintain the operators' control over both messaging in general, as well as the P2P and A2P revenue stream.

While it is true that Google has announced it will be going "over the top" with RCS and not allowing the default Android Messages client to function with operator-controlled backends, Google has also indicated it will no longer be "investing" in RBM (RCS Business Messaging) at this time. While there is little reason to believe Google's assertion is their long-term play based on its history, its current position—along with the steps outlined below—opens a window of opportunity for the operator to step through.

Google has developed an entirely new interface to allow for operator-controlled MaaP (Messaging as a Platform) to deliver A2P traffic to Google subscribers. Google's current position is that the operators can and should deliver traffic to the newly captured Google subscribers through this A2P interface. Although the economic terms of the arrangement have yet to be defined, we believe that operators should immediately implement this capability, almost regardless of the ultimate terms. It is absolutely essential that the mobile operator remains in the critical path of A2P business messaging. Currently, the mobile operator acts as the gateway for enterprise access to subscribers, allowing the operator both control and the ability to monetize traffic flows. Operators must maintain this role as the gatekeeper to the subscriber as it will allow the operator to choose the appropriate path to the consumer. This capability will be crucial as the operator offloads traffic from Google to their own controlled RCS infrastructure.

It is reasonable at this point to ask the question, "How will I transition subscribers to my infrastructure if Google owns all the clients?" The short answer: Google does *not* own all of them. While Android messages is the client available in default builds of Android OS, many of the leading global OEMs have built and maintain fully standards-compliant RCS clients. Samsung and LG are prime examples of leading OEMs that have native RCS-capable clients today. These OEM devices support a native, operator-controlled RCS experience out-of-the-box without Google's Android Messaging client. This enables operators to remain in control of both the P2P and A2P messaging experience exactly as they do today. Obviously, the game is not over.

While it is fairly straightforward to control the client in markets where the mobile operator is the primary distributer of mobile devices, such as the United States market, it is somewhat more complicated in regions that rely on the use of open-market handsets. Recently, however, we have seen a willingness by the OEMs to ship devices with standards-based clients exclusively into geographies, based on the collective desires of the operators in the region. This would require a consistent requirement and a unified message across all operators in the region. We have seen this approach taken in other geographies and strongly believe there is no reason that it cannot be successful elsewhere.

In order to leverage the availability of standards-based OEM clients, the operator will also need to launch standards-based RCS Application Servers (AS) or an RCS core network. This, in conjunction with the previously discussed MaaP component, will need to serve the operator-controlled standard OEM clients and interoperate seamlessly with the Google-controlled clients. This will be particularly crucial in the early stages of deployment. Google has stated its intentions and has the ability to move quickly—likely before any regulatory or industry actions can be taken. As the operators install their own infrastructure and clients and begin to "claw back" their subscriber base, there will be a critical period where interoperability is paramount. Both the MaaP platform and the RCS-AS/core network MUST be able to interoperate between multiple protocols, route seamlessly between disparate systems, and accurately account and settle all transactions.

As of this writing Interop—in conjunction with our partner, Syniverse—uniquely has these capabilities. Both the MaaP and RCS core platforms have the innate abilities to interconnect and interoperate with all currently available platforms and protocols (Google, Vodafone, and all GSMA interfaces), presenting the enterprise with a single, GSMA standard Northbound interface. In addition, Syniverse is the only global RCS hub provider with contractual access to the Google subscriber for peer-to-peer messaging. This is a powerful and necessary combination of capabilities that cannot be duplicated. When deployed, these capabilities allow the mobile operator to remain relevant as a gatekeeper to the enterprise; build their own messaging capabilities and subscriber base; and utilize interoperability to keep that base unified during the transition period. Absent these capabilities, operator-controlled RCS subscribers and Google-controlled RCS subscribers will be islands, unable to communicate with each other.

Summary

The unprecedented move by Google to leverage their OS dominance to capture the operator messaging business is a clear and present danger. Operators must make moves to defend their position and protect future revenue flows related to their messaging portfolio. Interop has suggested a course of action which, if executed, will turn back the assault and position operators in their traditional role of messaging providers and gateways for enterprise traffic.

Specifically, we suggest operators do the following:

1. Immediately deploy MaaP capabilities in the network to maintain the traditional relationship with the enterprise.

2. Initiate discussions now with OEMs to ensure the availability of already existing standard RCS clients.

3. Deploy a standards-based, operator-controlled RCS-AS (core) to service the OEM clients.

4. Use platforms and technologies in operator deployments to ensure interoperability between all RCS users (on-net, off-net, and Google-controlled).

5. Leverage national regulatory authorities to mitigate Google's market dominance.

6. Engage with the global RCS community via industry groups to raise awareness and apply industry-wide pressure.

Clearly the RCS marketplace is at a crossroads forced on us by Google. With history as our guide, we can see the effects of doing nothing in the face of this threat. When the OTT players first entered the market, the operator community largely sat by idly and the peer-to-peer market evaporated in most regions globally. Now the A2P revenue stream is under threat. We, as a community, need to learn the lessons of the past and fight vigorously for our subscribers, our revenue streams, and our future.