

Safeguarding Revenue from A2P Messaging

An in-depth guide to how RCS will help operators remain at the centre of mobile messaging



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Section 1: Executive Findings

Users

- With over 3 billion messaging app unique users globally, and growing, this means that at least 86% of unique smartphone users use messaging apps today.
- At the start of 2021 there will be 773 million RCS users globally, which still positions it as the sixth-largest platform. By the end of 2024 there will be a little over 3 billion RCS users. That represents an unparalleled rate of growth of 294%, and will make RCS the biggest rich messaging platform.
- Rich messaging is on the verge of becoming one of the key platforms connecting brands with consumers, joining the list of mainstream marketing channels alongside TV, the internet, and social media.

Protecting the mobile operator business messaging opportunity

- Mobile operators hold a very dominant position when it comes to business messaging. They need to protect their revenues, whilst ensuring they migrate their subscribers to, and develop a platform that safeguards future revenues.
- A2P SMS remains the only business messaging channel generating sizeable revenue anywhere in the world. Brands spent \$17.9 billion on the channel in 2020, and that will grow to \$18.94 billion in 2021. Typically, mobile operators will keep around 85-87% of the cost per message via a white route, with the remainder being the mark-up from the aggregator partner.
- Brands spend on A2P SMS grew 7% year-on-year, which, given that 2020 was an extremely challenging year with the global pandemic, is impressive growth. This highlighted that brands turned to tried, tested, and trusted mobile operator A2P SMS channels when they really needed to communicate with their customers.

Section 1: Executive Findings continued

- From a mobile operator perspective, it demonstrates the importance of not only the legacy messaging systems, but making sure they are capable of meeting the sustained demand from brands for A2P SMS. It is imperative that mobile operators plan for 5G messaging and avoid a situation where their legacy systems become obsolete and revenue generation is solely reliant on 5G messaging.

Understanding cannibalisation of mobile operator revenues

- Selecting the right RCS partner will be crucial for any mobile operator. The right partner and the right RCS deployment model will change from mobile operator to mobile operator. Get it right and mobile operators can reap the rewards with a significant uplift in revenues, but get it wrong or wait too long, and the mobile operator could be hit hard by cannibalisation, impacting not only their A2P SMS revenues, but potential RCS revenues too.
- A mobile operator deploying an on-premise RCS core platform + MaaP from a third-party provider with a 3-year amortization period based on a revenue share agreement of RCS business messaging revenues (model 1), will experience no A2P SMS cannibalisation and share 2.2% of its revenues with the platform provider partner.
- For a mobile operator intent on a quick launch, a cloud-based RCS core platform + MaaP from a third-party provider with no capital expenditure or operational expenditure costs, but with an on-going revenue share agreement of RCS business messaging revenues (model 2), will experience A2P SMS cannibalisation and share 29.3% of its revenues with the platform provider partner.
- RCS is the way forward: With model 1, the mobile operator will enjoy a 240% revenue uplift over the forecast period to end-2024 compared to if it had just stuck with SMS, and a revenue uplift of 185% in model 2.

Section 1: Executive Findings continued

- Ultimately, RCS will become the fundamental vehicle for the generation of messaging revenues of the future for mobile operators. In delaying their migration to RCS, mobile operators are restricting their messaging revenue generation capability.
- The data reveals that the bigger threat is not acting now, and just relying on SMS revenues. Consumers are already reliant on rich messaging, brands want it, and mobile operators need to deliver it.
- It is imperative that the chosen RCS platform provider is GSMA-accredited with a standards-based platform providing seamless interoperability, scalability, and total interconnectivity on a national, regional and global level. Mobile operators will improve their relevancy and combat OTT messaging cannibalization, and unlock new revenue opportunities with brands, enterprises and IoT as a participant in the commerce driven MaaP ecosystem economy having launched RCS and MaaP.
- Having a robust messaging platform is now seen as a vital component in mobile operator competitiveness, to such an extent that it can improve subscriber quality of experience and also reduce churn. By developing a native RCS offering to subscribers, it ensures that mobile operators remain at the centre of the next major platform, both for consumers and for brands.

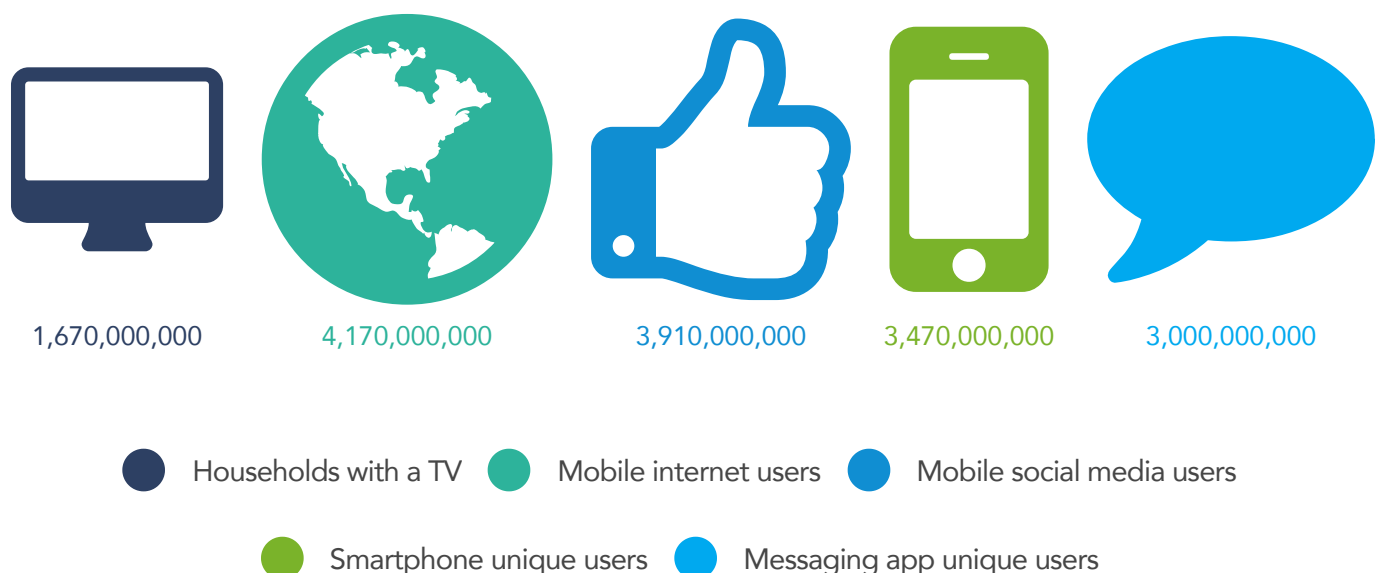
Section 2: A New Messaging Landscape

Digital transformation was a process that could typically be divided into something the bigger companies were undergoing and the smaller companies considering. The COVID-19 pandemic has forced the majority of companies, big and small, to ensure they have a digital presence in the new normal of a distanced society, with less human-to-human contact and an overwhelming reliance on digital connection than ever before. Digital transformation has now become the business necessity of convention and competition.

Savvy companies were already aligned with the digital population, and with very good reason. The number of internet users globally is approaching 5 billion, the number of active social media users is almost 4 billion. Compare this to a “meagre” (comparatively speaking) 1.67 billion households that have at least one TV. In the digital domain is where the majority of the population spend a good proportion of their time.

Now there is another digital channel that is starting to attract the attention of companies. Messaging – rich messaging more accurately – is on the verge of joining that list of mainstream marketing channels, alongside the likes of TV, the internet, and social media, as one of the key platforms connecting brands with consumers.

Fig 1: Key platforms for brands



Obviously, messaging is not new and companies have been using SMS for well over a decade to send primarily unilateral communications to customers. This is a multi-billion-dollar business with a reach of over 5 billion unique users, but while SMS remains the most effective channel, it continues to be viewed by companies as functional and perfunctory.

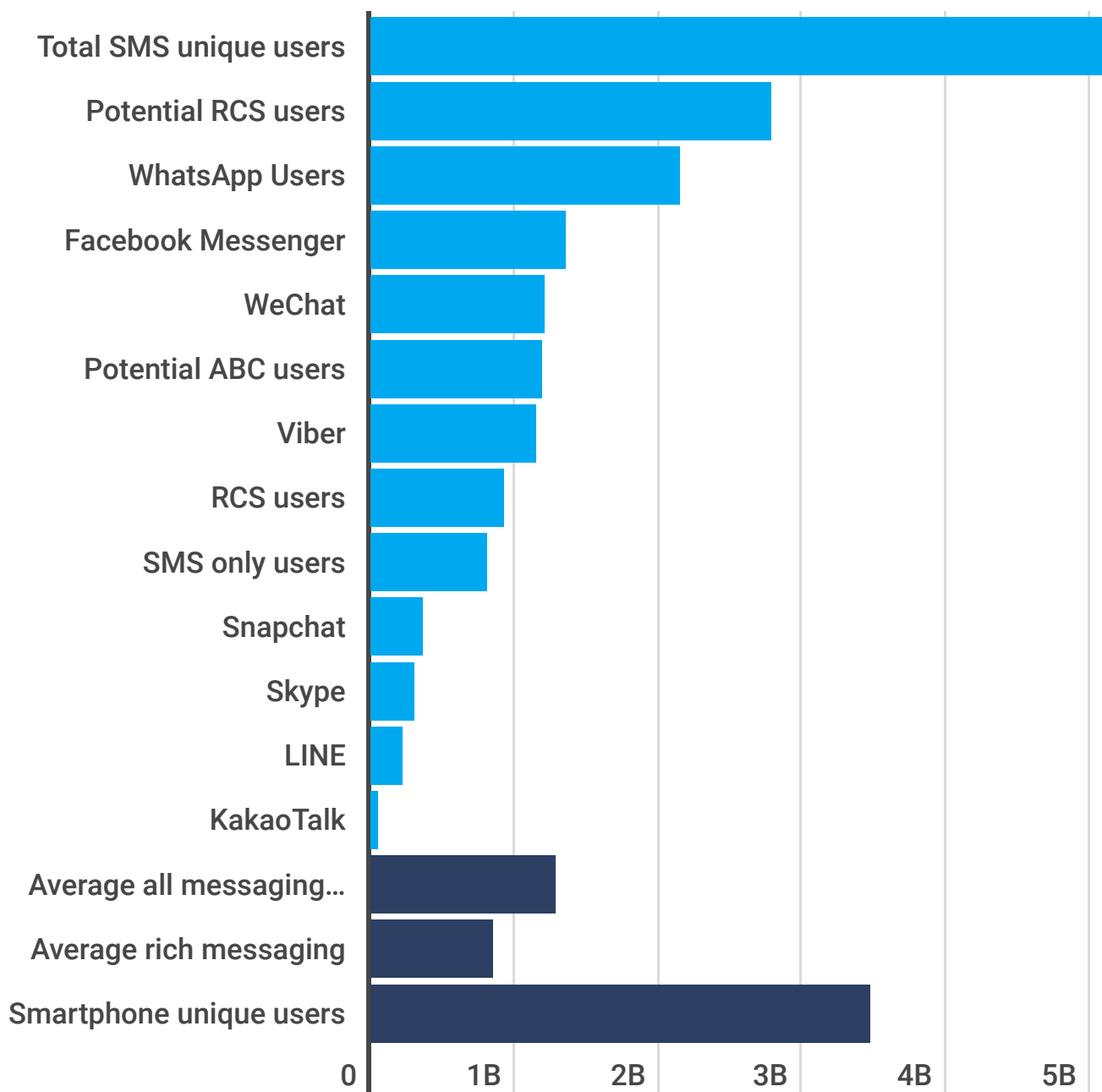
To create engaging content that will drive interactions with consumers, brands turned to richer channels like apps and social media, but as over-the-top (OTT) messaging apps emerged offering rich functionality, companies are starting to take note and develop a more immersive messaging strategy based on the potential of a personalised 1-2-1 basis.

This is where rich messaging is different to SMS. It offers chat to individuals or groups, it shows when someone is actively engaging, it can send rich content and delivers an extremely interactive experience to an ever-increasing user base. As a platform it already has several billion users.

“ There are over 3 billion rich messaging unique users globally - that is 86% of smartphone users ”

Broken down by app, WhatsApp has 2.15 billion users, Facebook Messenger has 1.36 billion users, WeChat 1.2 billion users, and Viber 1.15 billion users. Mobilesquared calculates that there are well over 3 billion unique messaging app users globally. Given that WhatsApp has over 2 billion users globally (and officially zero in China), and WeChat has over 1.2 billion users globally, with around 1 billion of those in China, it is safe to assume that there are over 3 billion messaging app unique users globally just on those two platforms. This means that at least 86% of unique smartphone users use messaging apps.

Fig 2: Global messaging users by channel



Given the multitude of messaging platforms available, based on existing numbers (SMS, RCS, WhatsApp, Facebook Messenger, WeChat, Viber, Snapchat, Skype, LINE, and KakaoTalk), the average messaging platform has 1.3 billion users. If we remove SMS, and just include the rich messaging platforms, the average users is 849 million. This figure is expected to grow dramatically in the coming years, driven by RCS (Rich Communication Services).

It's the sheer magnitude of users that is putting rich messaging on brand's roadmap.

But the transition from a consumer-to-consumer proposition to a business-to-consumer proposition is not as straightforward as it might first appear.

Brands are naturally attracted to prospect of marketing to over 2 billion people – as WhatsApp Partners promoting the service often state ("Connect to over 2 billion users"). But that isn't the case. For every medium and large enterprise using the WhatsApp Business API they must get each individual user to opt-in to receiving a communication from that brand. Typically that will be part of the customer care process when the consumer reaches out to the brand with a query or enquiry.

Messenger is the messaging platform of Facebook. But data breaches and privacy issues relating to Facebook have prompted brands to question their association with the channel.

So while RCS is a little later to the party, it's safe to say that the party hasn't really started. At the start of 2021 there will be 773 million RCS users globally, which still positions it as the sixth-largest platform. By the end of 2024 there will be a little over 3 billion RCS users. That represents an unparalleled rate of growth of 294%, and will make RCS the biggest rich messaging platform.

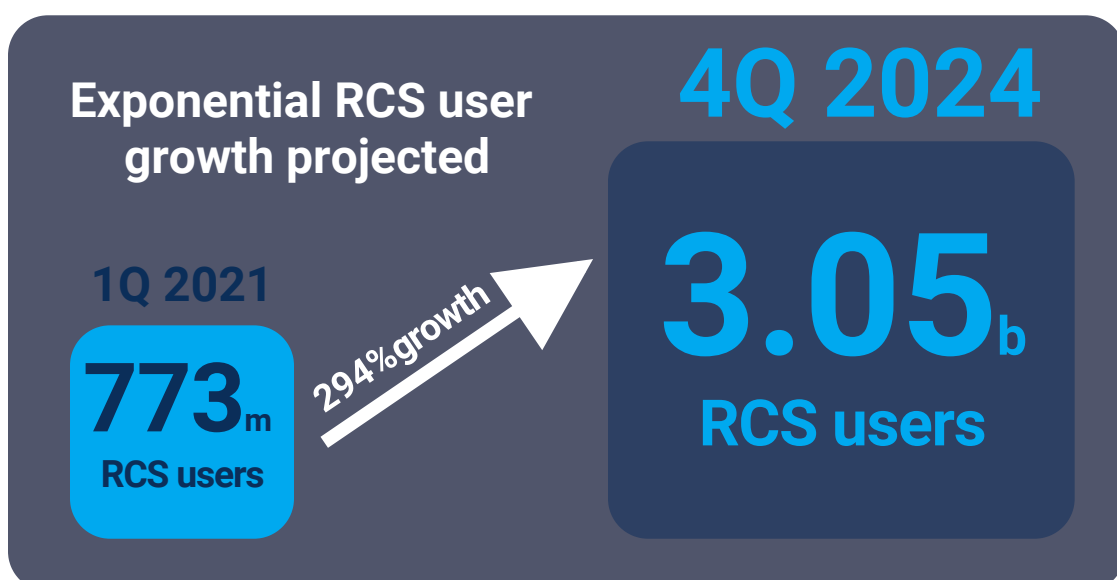
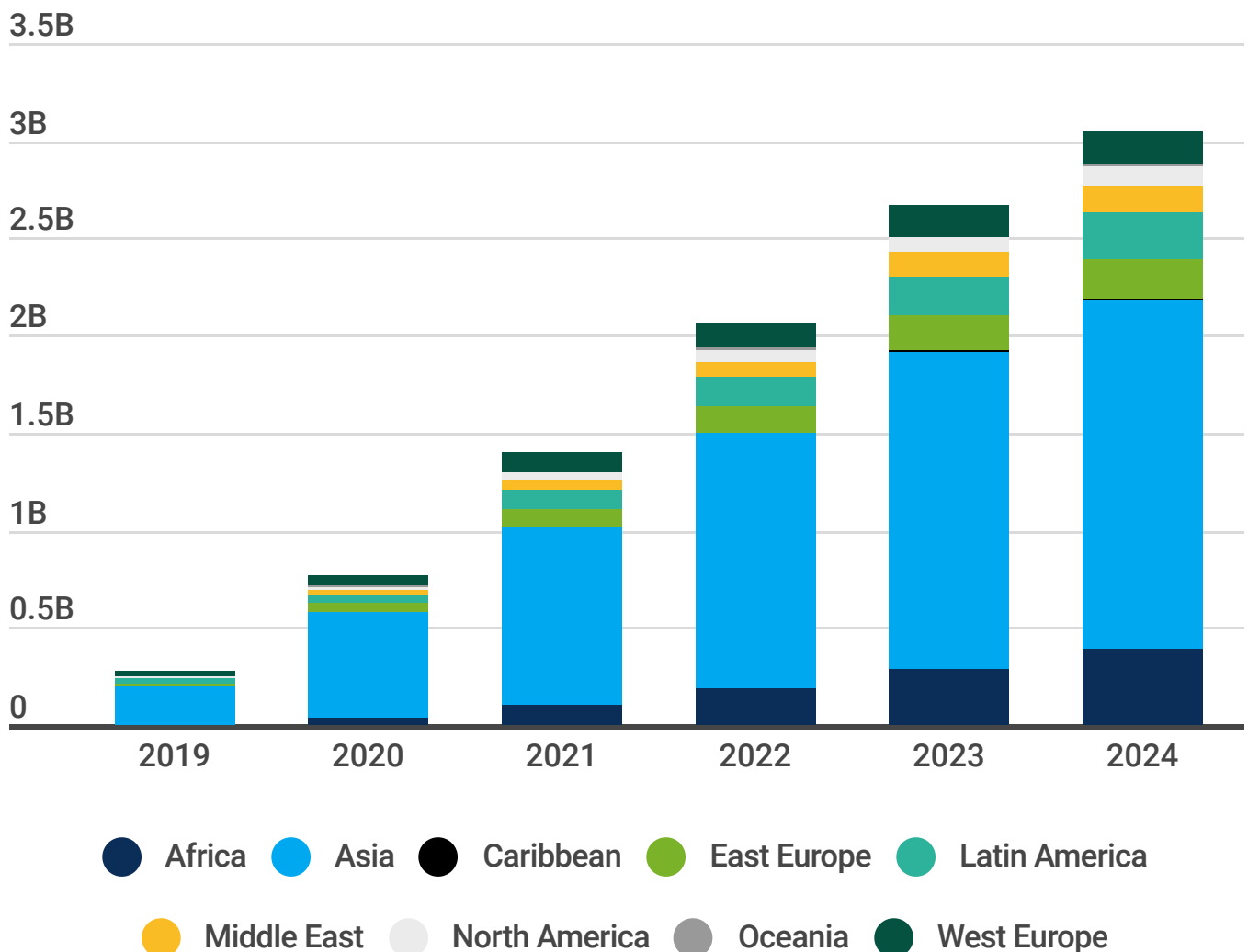


Fig 3: Global RCS user forecasts



But the scale of RCS should not prevent brands from using the platform today. If we look at Twitter, it shows that you don't need a massive audience to use the channel. Globally, Twitter has around 330 million users. According to Socialbakers.com, the average number of followers for the top 10 UK profiles is 1.25 million. In the US, that figure is 9.1 million. And if we break out the average US followers by sector it reveals that the top 10 retailers have an average following of 1.6 million, the top 10 airlines have 1 million, clothing firms have 0.55 million.

Given the number of RCS users in the US, for example, if brands were to start developing a Twitter-based approach, they could easily match – if not surpass - those follower numbers.

The simple message from the RCS industry to the brands now has to be that if RCS is there, and available to you, use it.

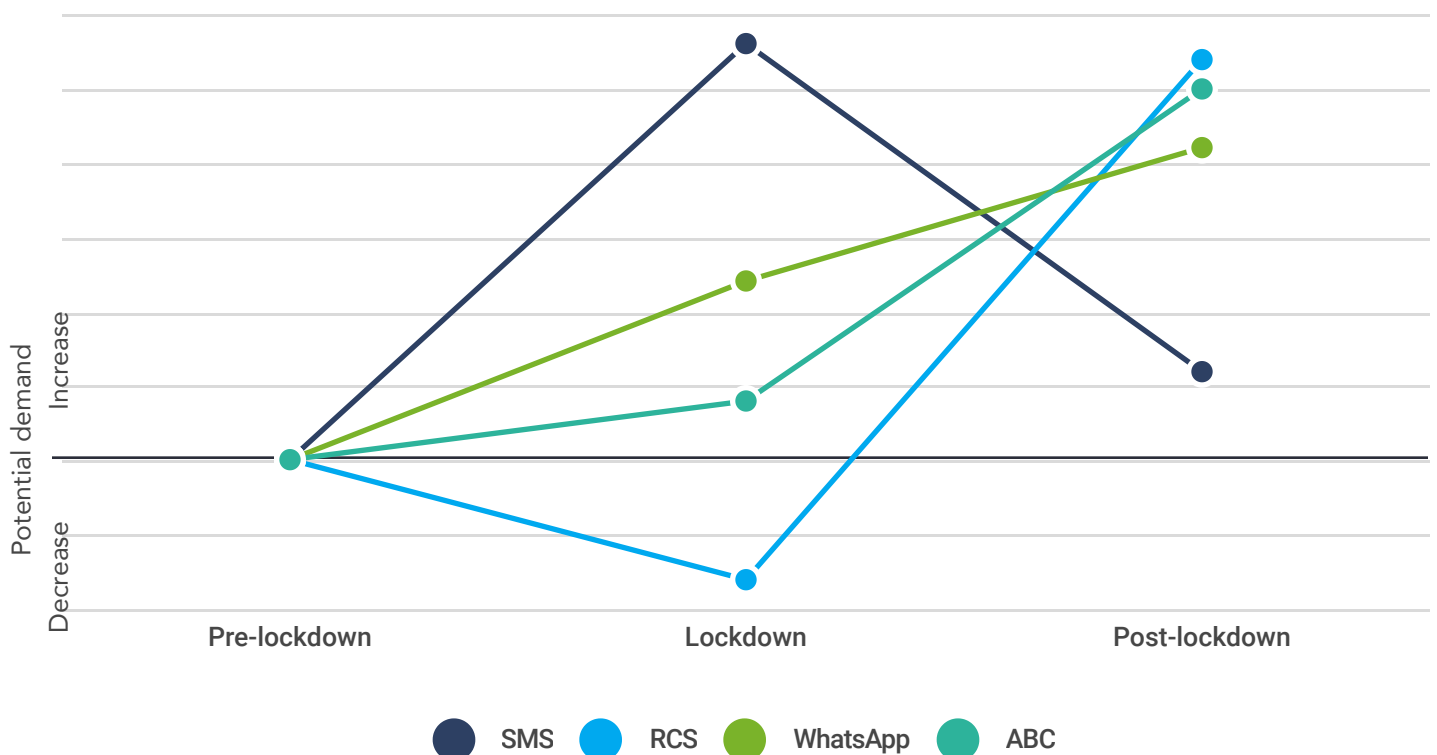
Business Messaging in 2020

To explain how business messaging channel demand changed during the pandemic and how it is likely to impact demand post-lockdown, Mobilesquared developed the Net Demand Score (NDS).

Based on our research into the effects of lockdown on messaging, the data reveals that mobile-operator-delivered SMS was the go-to channel for brands during lockdown with an NDS of 28, followed by WhatsApp Business (NDS score 12) and ABC (4). RCS scored a negative NDS during lockdown, which is not surprising given that it is only becoming a commercial proposition in a number of markets this year.

However, channel demand post-lockdown paints an altogether different picture, with RCS predicted to attract the highest demand from brands over the long-term.

Fig 4: Channel demand; the impact of Covid-19 on business messaging



The upshot of the COVID-19 research is that business messaging is on the cusp of big growth as virtually every brand looks to survive in the “new normal”. The impact of limited face-to-face contact, working from home, the digital transformation of businesses, have all become key components in the emergence of business messaging as the ideal channel to communicate with consumers.

For the second half of 2020, Mobilesquared upped its A2P SMS spend projections by 2 percentage points based on the increased demand by brands for SMS.

Brand spend on A2P SMS is expected to increase 7% year-on-year, which, given that 2020 was an extremely challenging year, is impressive. In fact, A2P SMS has held strong throughout, and highlights that brands turn to tried, tested, and trusted mobile operator channels when they really need to communicate with their customers.

From a mobile operator perspective, it demonstrates the importance of not only the legacy messaging systems, but making sure they are capable of meeting the sustained demand from brands for A2P SMS.

It is imperative that mobile operators avoid a situation where their legacy systems become obsolete and revenue generation is solely reliant on 5G messaging.

During the immediacy of lockdown (tracked as mid-March to end-June 2020) total A2P SMS traffic dropped 0.9% as companies reassessed their communications strategies and looked to revise their business processes according to the new normal. Of the 16 sectors tracked by Mobilesquared during lockdown, 7 sectors experienced

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From a mobile operator perspective, it demonstrates the importance of [their] legacy messaging systems

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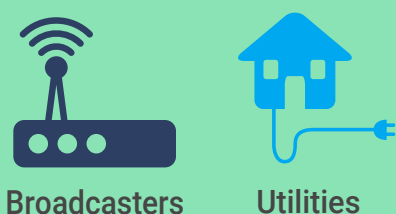
a decrease in traffic, 2 sectors were unaffected, while 7 sectors experienced an increase in traffic. The decrease in traffic accounted for 13.8 billion messages, compared to an increase in traffic of 10.51 billion, leaving an overall traffic deficit of 3.25 billion during lockdown.

Fig 5: Impact of Covid-19 on traffic, by sector

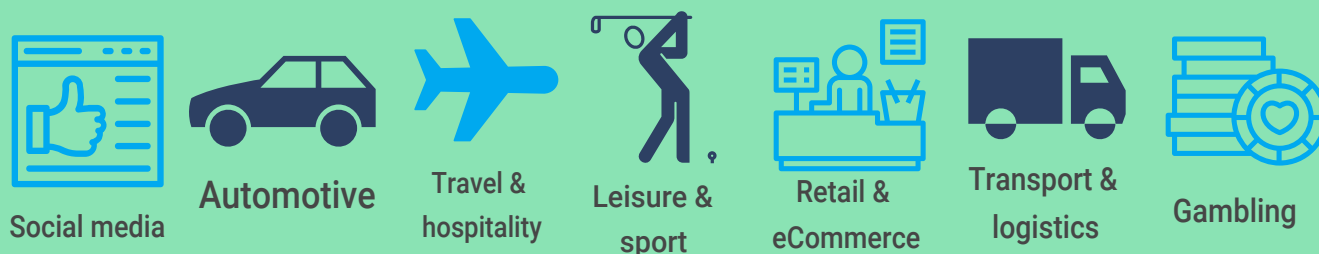
Sectors experiencing increase in traffic



Sectors experiencing the same traffic



Sectors experiencing decrease in traffic



In 2020, A2P SMS remained the only business messaging channel generating sizeable revenue, with brands spending \$17.9 billion on the channel alone. Typically, mobile operators' share is around 85-87% of the cost per message via a white route, with the remainder being the mark-up from the aggregator partner.

Mobile operators, therefore, hold a very dominant position when it comes to business messaging. The question they are now facing is for how long.

As messaging becomes the next major platform for brands to drive engagement with

customers, the need to identify the most effective messaging platform will intensify. History suggests that the messaging incumbent, the mobile operators, could have a battle on their hands.

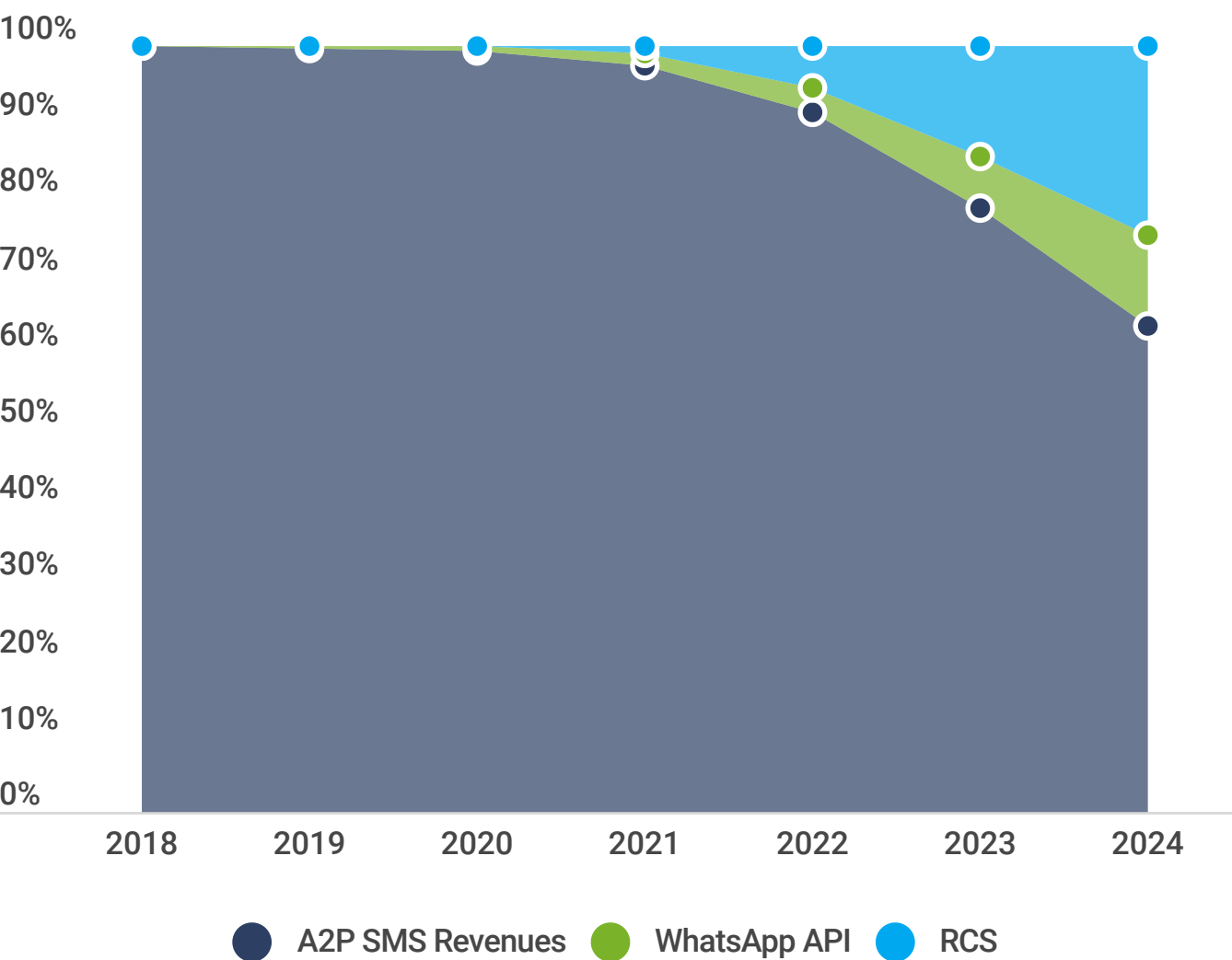
As more consumers use WhatsApp, LINE and WeChat, for example, to communicate with their friends and family, mobile operators have seen their P2P SMS traffic plummet, and associated revenues with it. Having already lost out to the OTT messaging apps in the peer-to-peer (P2P) space, the same companies have now set their sights on business messaging. In explicit terms, messaging apps all but disintermediate the mobile operators from the value chain. It is imperative that mobile operators defend their business messaging revenues, and their importance to subscribers, while also ensuring the longevity of the service.

Presently, the business messaging sector has to be considered as the mobile operators to lose. A2P SMS is not going away any time soon, but the clamour for rich messaging from brands increases daily. This is where a clearly defined mobile operator-controlled RCS strategy comes in to play.

In 2021, Mobilesquared projects just over 0.7% of A2P SMS traffic to migrate over to WhatsApp Business, with a negligible percent of traffic moving to RCS. From a revenue perspective the business messaging market (A2P SMS, RCS and WhatsApp Business) will be worth \$19.44 billion, with A2P SMS accounting for 97.52% of total spend, 1.51% going to WhatsApp Business and 0.97% to RCS.

Over the forecast period, Mobilesquared expects that traffic split to drop to 63.4% on A2P SMS, 24.8% on RCS and 11.8% on WhatsApp. The traffic migration to WhatsApp will account for cumulative revenue leakage from existing spend on A2P SMS of almost \$3 billion.

Fig 6: Business messaging revenue breakdown, by messaging channel



At least with RCS, the traffic (and spend) remains within the mobile operator messaging ecosystem (MOME). Traffic migrating to WhatsApp is completely lost to the MOME. Provided mobile operators develop their RCS strategy and commercial proposition in the short term, lost traffic (and revenues) to WhatsApp in particular, will be limited. But prolonged indecision and procrastination relating to RCS merely opens the door further for WhatsApp and other OTT messaging apps to introduce more services traditionally offered by mobile operators, and further entrenching OTTs in the subscribers’ mobile life.

Understanding Cannibalisation

Business messaging as a service has never been in a better position. Its future has been founded on the bedrock of mobile operator-controlled A2P SMS, and that in itself presents a fantastic opportunity for mobile operators to remain central to the rich messaging environment.

But what is the impact of a mobile operator transitioning from their existing A2P SMS model to RCS?

Using industry data, Mobilesquared has developed a cost analysis for two differing RCS deployment models, looking at the impact of, potential cannibalisation to, and uplift of, existing and projected A2P SMS revenues, to a fictional mobile operator, which we've called AverageCellco^[1].

Cannibalisation of A2P SMS revenues remains a major hurdle for mobile operators when it comes to committing to an RCS strategy. In A2P SMS, the mobile operator receives the cost per message that they set based on an agreed interconnect rate. With RCS there is the additional cost of the platform that has to be recompensed, whether that is on-premise or cloud-based, with mobile operators typically faced with an upfront cost or revenue-share models with their RCS provider. Therefore, each mobile operator must develop a business plan that accounts for the transition of SMS messages onto RCS and associated platform costs.

However, given that the evolution of SMS to RCS will transform consumer behaviour from unilateral communication with a brand to a two-way conversational engagement, will result in a substantial increase in the number of messages sent by a business. Mobile operators need to expedite their RCS deployment strategy sooner rather than later in order to capitalize on the significant uplift in traffic and revenues that they will subsequently enjoy.

In the following scenarios, we have assumed that AverageCellco launched RCS and its rich

^[1] Average Cellco is based on average data from Mobilesquared's RCS and A2P SMS Databooks

business messaging offering in 2020. We have used Mobilesquared forecasts, and underlying data.

In model 1 AverageCellco deploys an on-premise RCS core platform + MaaP from a third-party provider with a 3-year amortization period starting in 2021 based on a revenue share agreement of RCS business messaging revenues. Following a period of grace in 2020, the revenue share between mobile operator and RCS platform provider starts in 2021 (year 1) on 20%. This falls to 8% in year 2, and 3% in year 3. Thereafter, from 2024 onwards, the mobile operator has amortized its RCS platform and is no longer tied to a revenue share agreement with the provider.

In model 2 AverageCellco wants a quick launch so they select a cloud-based RCS core platform + MaaP from a third-party provider with no costs except an on-going revenue share agreement of RCS business messaging revenues. The mobile operator has no capital expenditure or operational expenditure costs associated with the RCS platform, and enters an on-going revenue share of 20% with its RCS platform provider. This agreement remains in place for the duration the mobile operator uses the RCS platform.

Mobilesquared estimates that 0.05% of brands' messaging spend on A2P SMS with AverageCellco migrated onto RCS in 2020, and will rise to 12% by 2024. We have assumed that AverageCellco has set a 15% premium per RCS message compared to existing SMS cost per message.

“ **In model 1 the mobile operator will actually receive a 13% revenue uplift [from RCS] compared to if it had remained on SMS only** ”

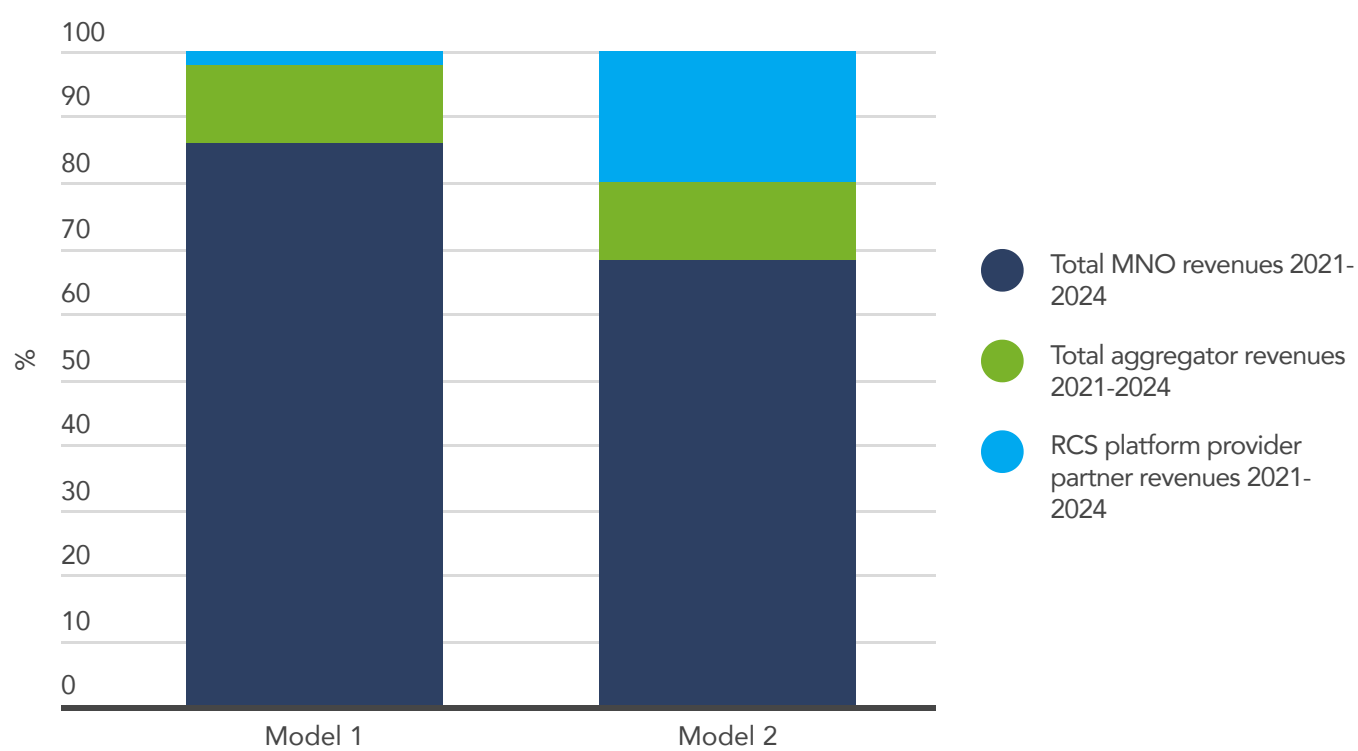
In total between 2021 and 2024, AverageCellco will experience 5.3% of its total A2P SMS revenues migrate to RCS. However, when that is converted into RCS, based on the 15% mark-up, in model 1 the mobile operator will actually receive a 13% revenue uplift compared to if it had remained on SMS only (once partner revenue costs and aggregator mark-ups have been removed). In this model just 2.1% of total revenues during the forecast period have been shared with the platform provider partner, and no cannibalisation has occurred.

If we look at the total market opportunity, in model 1, the mobile operator will receive 86.1% of total RCS brand spend, the aggregator partners 12%, and the RCS platform provider partner 1.9%. In model 2, the mobile operator receives 68.2% of total brand spend on RCS, with the aggregators 11.8% and the RCS platform provider partner 20%.

It is worth noting that these two scenarios are based on a simple, flat-rate RCS pricing model applied to all messages, and does not take into account session-based traffic pricing, or increased price points based on the richness of content.

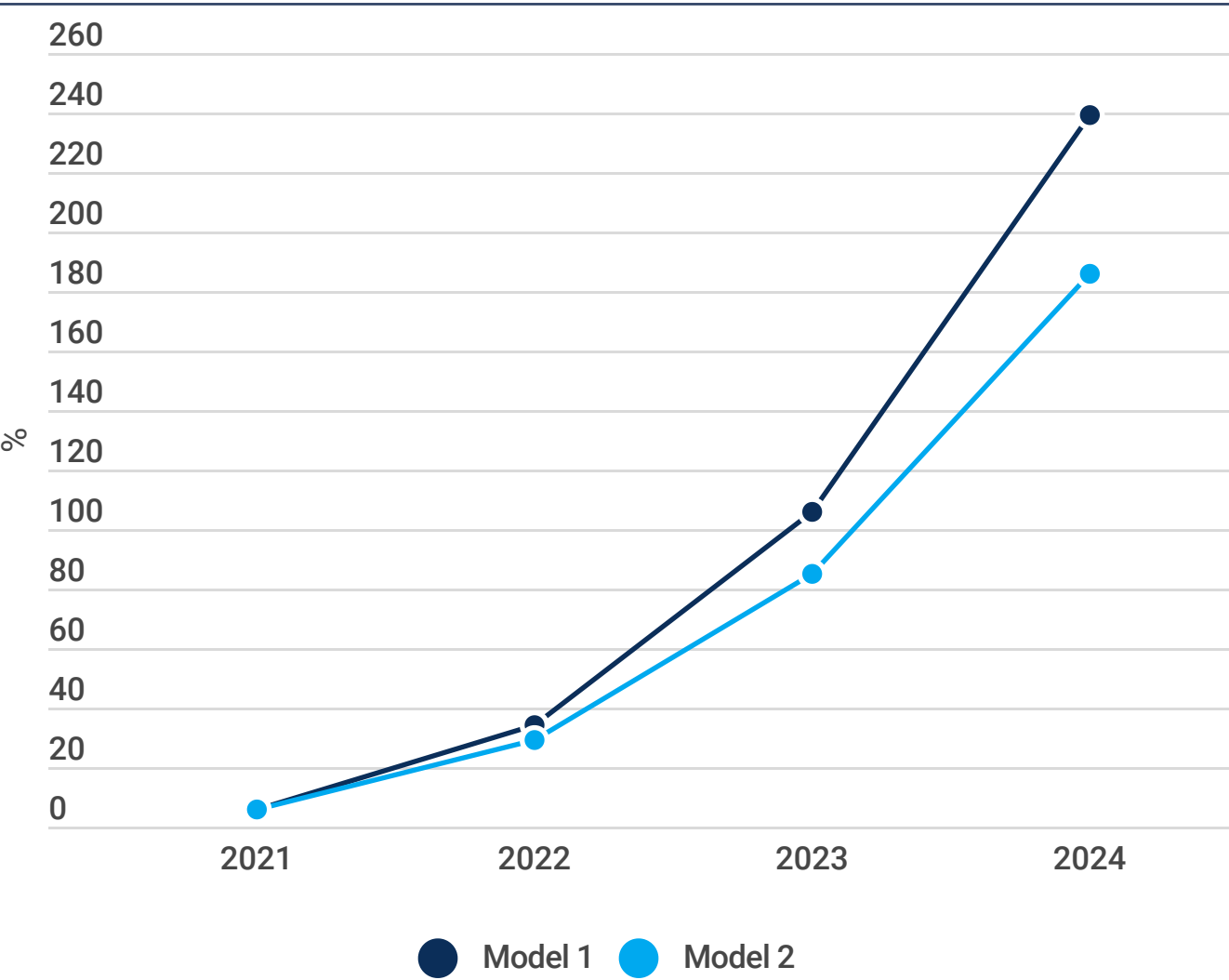
Regardless of which model is applied by AverageCellco, RCS will become the fundamental vehicle for the generation of messaging revenues of the future for mobile operators. As Fig 8 highlights, by 2024, AverageCellco with a business messaging platform of SMS + RCS will be enjoying a 240% revenue uplift compared to if it had just stuck with SMS. For model 2, the revenue uplift is 185% by 2024. In delaying their migration to RCS, mobile operators are restricting their messaging revenue generation capability.

Fig 7: Revenue share comparison



The data reveals that the bigger threat is not acting now, and just relying on SMS revenues. Consumers are already reliant on rich messaging, brands want it, and mobile operators need to deliver it.

Fig 8: Total business messaging revenue uplift (SMS + RCS)



Section 3: Where Will the Business Messaging Opportunity be?

Based on existing RCS and MaaP deployment plans from around the world, Mobilesquared forecasts that RCS will generate revenues of \$8.3 billion by 2024. This is based on the traditional (telco) messaging spend model, with those brands already with a messaging budget migrating a percentage of that over to RCS, where their spend will multiply because of the exponential increase in interactions and engagements with consumers. In essence this is the organic growth materialising from the existing messaging base into a rich messaging environment.

In conjunction with this, Mobilesquared believes there will be an additional two revenue-generating avenues for RCS. The first part of this will stem from the call centre revolution, and the second, with the migration of digital media ad spend.

Brands are looking to support call centres with messaging, to ease the pressure on agents and help manage the volume of incoming enquiries by transferring a voice call made to an IVR (interactive voice response) solution, or direct the user immediately via messaging and circumvent voice altogether. At this stage, a chatbot or an agent can deal with the enquiry. Mobile operators who launch RCS can employ these same tactics to reduce their own customer care costs and better engage with their subscribers to increase loyalty.

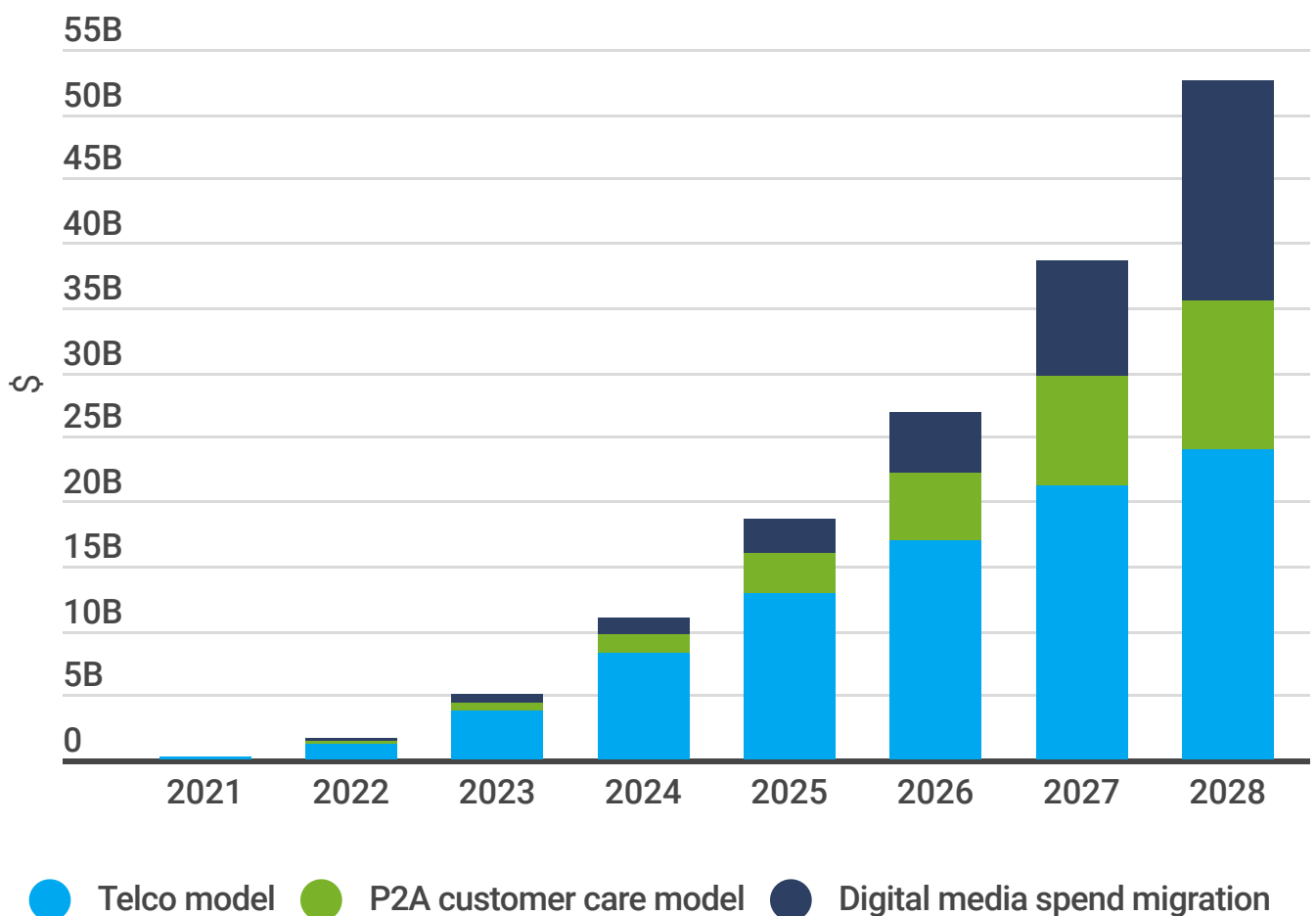
WhatsApp Business and Apple's ABC both experienced an increase in traffic during and post-lockdown, as brands transitioned their customer care agents from call centres to home-workers, successfully integrating messaging to supplement their IVR (interactive voice response) solution. This meant customers calling a brand were then given the option to transfer onto a messaging platform to deal with their query, as brands looked to ease the pressure from the sheer volume of incoming calls. This person-to-application (P2A) customer care evolution was already underway prior to the pandemic and RCS in particular, but the pandemic has clearly acted as an accelerant.

The second additional avenue is the migration of digital media spend from faltering channels, such as banner ads, onto RCS, as brands look to generate a significantly improved return on their digital investment.

And it makes obvious business sense to chase these alternate sectors. At the start of 2021, business messaging (namely SMS) will be worth \$18 billion, which when aligned next to the \$300 billion spent on digital media advertising, or the \$1 trillion-plus spent on customer care, is minuscule in comparison.

Based on the traditional model only, RCS will be worth \$1.2 billion in 2022, increasing to \$8.3 billion in 2024, and \$24.1 billion in 2028. However, with the cumulative effect of the three revenue channels outlining what MobileSquared believes to be the total potential opportunity of RCS, the platform will generate \$1.5 billion in 2022, growing to \$11 billion in 2024, before accelerating to \$52.5 billion in 2028.

Fig 9: Key platforms for brands



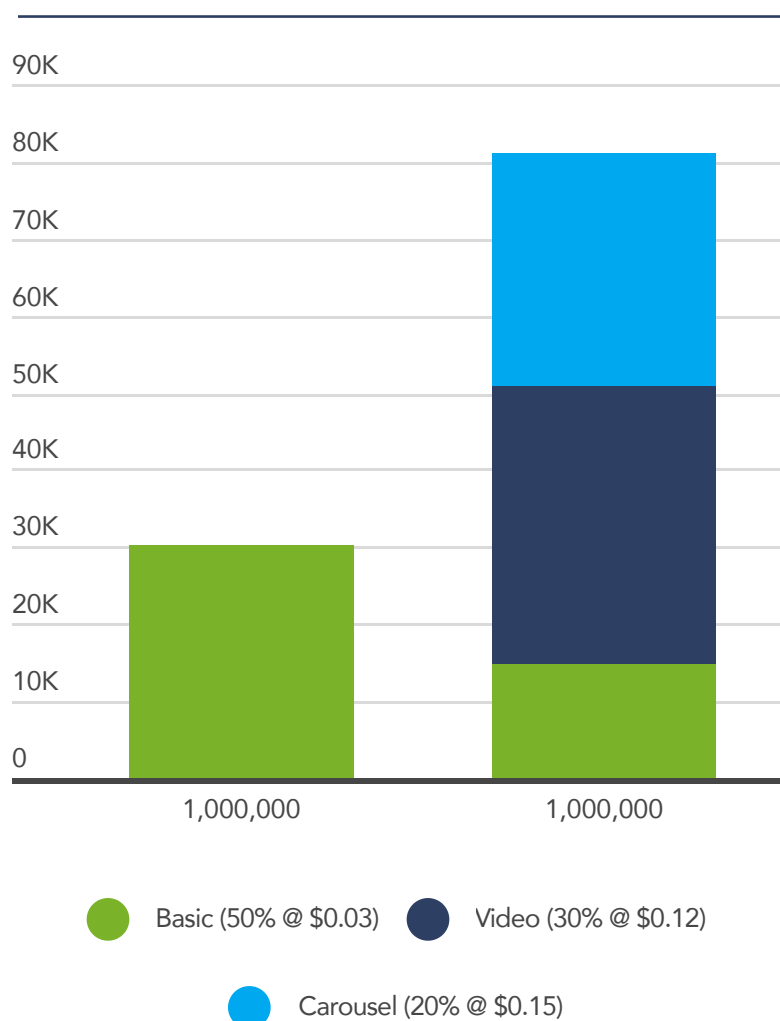
Based on every mobile operator launching RCS, by 2028 they would on average be generating \$70 million per year (excluding A2P SMS revenues). But the revenues could be significantly increased if mobile operators adopted a differentiated pricing model based on the varied feature-set associated with RCS.

In the traditional telco model outlined above, revenues are based on a flat-rate pricing model for per-event RCS messages. As SMS morphs into RCS, it effectively transitions from analogue to digital, and that throws up a whole new world of opportunities.

If we look at the digital world, and banner ads in particular, the cost per thousand is priced on a number of variables based on the richness of the content and the data to increase the targeting, such as location. A varied pricing structure will massively impact on the revenue generation by the mobile operator.

For example, a flat-rate pricing model based on existing A2P SMS would see a brand spend \$30,000 on a campaign involving 1 million messages at a cost-per-message (CPM) of \$0.03. If that campaign was split between 50% basic messages, 30% video messages (at a CPM of \$0.12) and 20% carousels (CPM \$0.15), the brand would spend \$81,000, resulting in a 170% uplift in revenues for the MOME.

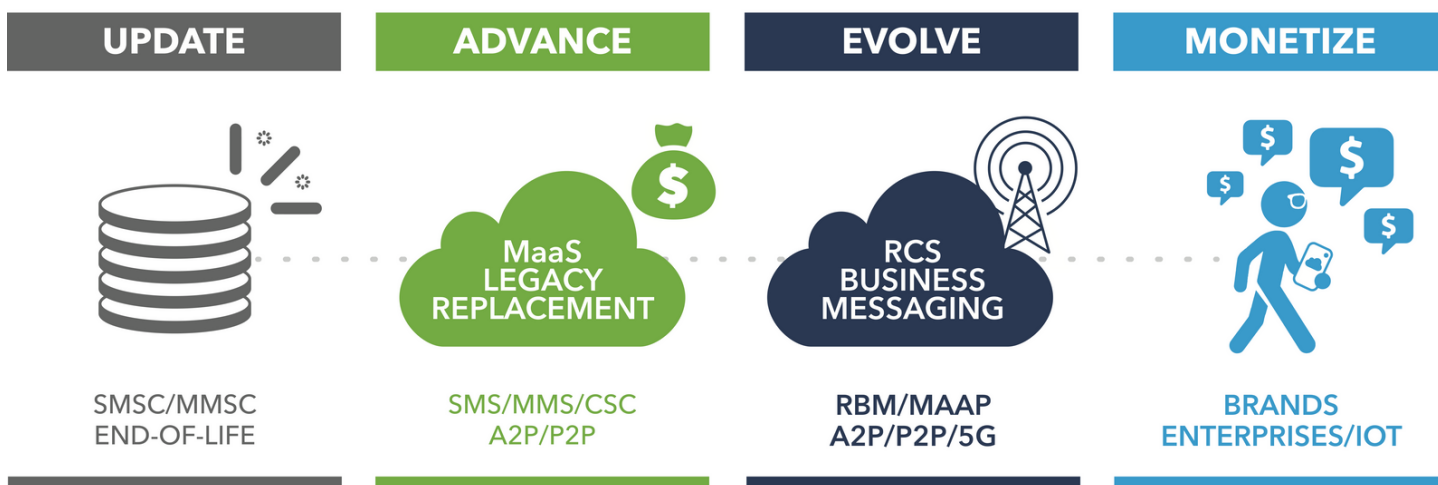
Fig 10: Cost-per-message comparison



This uplift in brand spend will be the result of the introduction of a range of future service offerings through Chatbots, Plug-ins, Artificial Intelligence and third-party industrial applications based on RCS' native and rich messaging functionality.

Mobile operators are already central to the existing business messaging SMS opportunity. They need to protect their revenues, whilst ensuring they migrate/develop a platform to safeguard future revenues in the RCS-integral 5G world.

MESSAGING NETWORK METAMORPHOSIS



Section 4: Mobile Operator Strategies for Success

Selecting the right RCS partner will be crucial for any mobile operator. As highlighted in the previous section, just by developing an RCS strategy will generate a significant boost on messaging revenues compared to just sticking with A2P SMS. The right partner and the right RCS deployment model will change from mobile operator to mobile operator. Get it right and mobile operators can reap the rewards with a significant uplift in revenues, but get it wrong or wait too long, and the mobile operator could be hit hard by cannibalisation, impacting not only their A2P SMS revenues, but potential RCS revenues too.

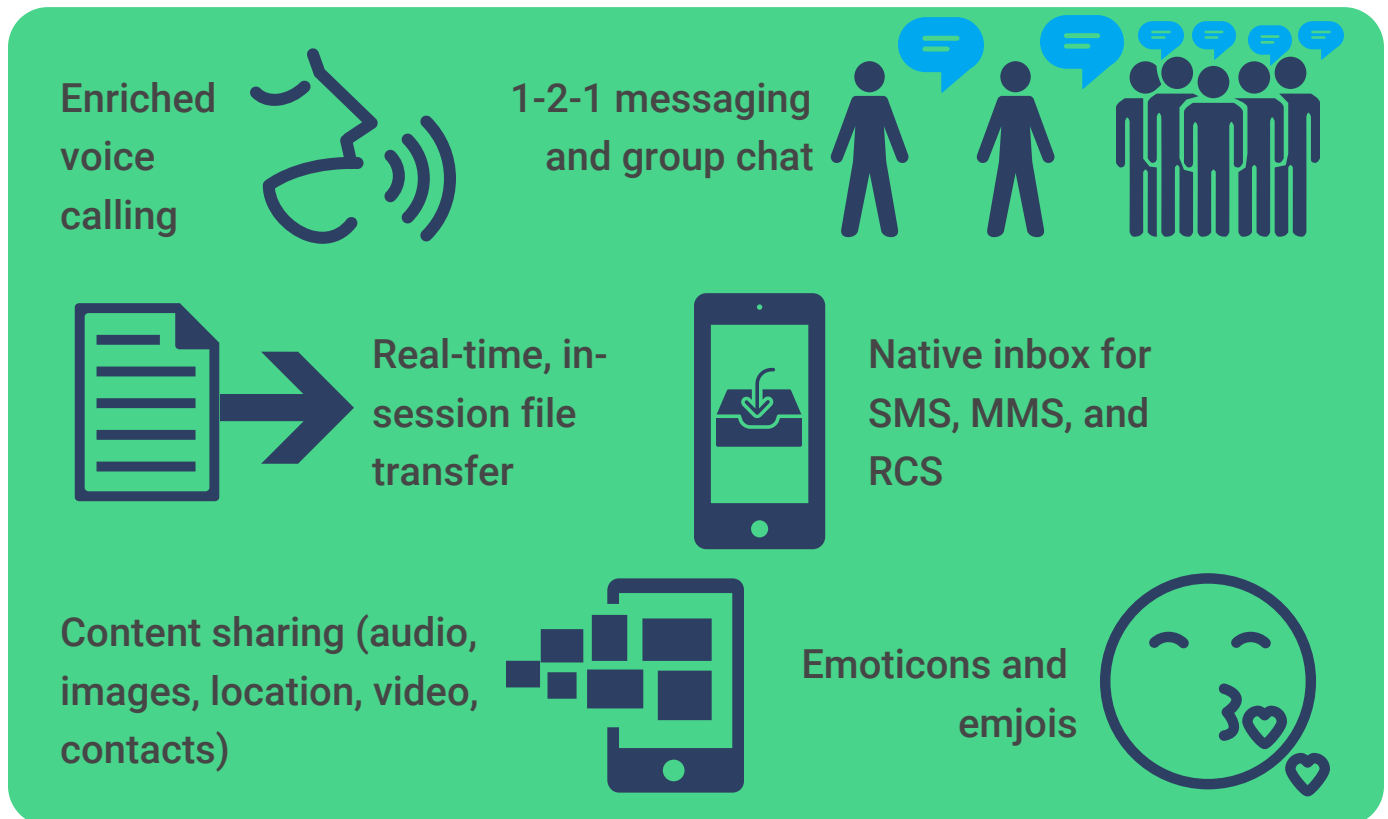
RCS is not as simplistic as SMS, but to achieve a successful and fully-functional RCS platform, mobile operators need to remain at the centre of the messaging ecosystem, which is why it's imperative that they develop an RCS strategy based on partnerships and collaborations that will help the rich messaging ecosystem thrive and flourish.

Not every mobile operator will select the same RCS provider, but it is imperative that the chosen company is GSMA-accredited with a standards-based platform providing seamless interoperability, scalability, and total interconnectivity on a national, regional and global level. A mobile operator needs to ensure that their RCS platform provider is fully compliant with the GSMA's UP 1.0, 2.0, 2.1 and 2.2 specifications, and is therefore future-proofed with continuous upgrades as standards updates evolve in the RCS ecosystem.

“ Select the right RCS deployment model... reap the rewards from a significant uplift in revenues. Get it wrong or wait too long... get hit by cannibalisation and [lower] A2P SMS revenues and potential RCS revenues too! ”

Non-standardised RCS platforms will result in isolated pockets of RCS users unable to exchange messages with RCS users on mobile operators with a standardised platform. The threat of RCS fragmentation fails to tackle the global OTT messaging challenge, and will hand the future of business messaging initiative to the likes of WhatsApp and Facebook Messenger.

Fig 11: RCS key features



Where to Start?

Going from SMS to RCS is often likened to the transition of black and white TV to 4K HD TV, but instead of a journey lasting 30 years, the messaging transformation can happen overnight. RCS elevates SMS into an advanced rich messaging experience that surpasses the feature-sets of rival OTT messaging applications such as WhatsApp and iMessage, and that makes it a necessity for every mobile operator.

Having a robust messaging platform is now seen as a vital component in mobile operator competitiveness, to such an extent that it can improve subscriber quality of experience and also reduce churn.

By developing a native RCS offering to subscribers, it ensures that mobile operators remain at the centre of the next major platform, both for consumers and for brands.

The RCS Application Servers and IMS Core, RCS interconnect hub, and RCS business messaging platform are all integral components. The former provides UP 1.0 features to subscribers' on-network, such as group chat, location sharing, high-res file/photo sharing, video streaming, read receipts and more. The RCS Interconnect Hub enables peering with interconnection providers which enables subscribers to message users on RCS-enabled globally. While the RCS Business Messaging Platform provides UP 2.2 functionality, with access to A2P and B2C content from global brands through ecosystem aggregators with API control and charging capabilities.

For any mobile operator, it's not a case of simply ripping one technology out and replacing it with another. Every market is different and the balance between Android devices, iPhones and smartphones from other OEMs varies greatly. The one common messaging platform they have in common is SMS, which means any RCS strategy has to be founded on the backward compatibility of legacy hardware and future-proof reliability.

Mobile operators typically have three primary RCS deployment models open to them. A turnkey, on-premise platform based on a perpetual licensed model requiring capital expenditure from the mobile operator. Alternatively, a private cloud model just requires operational expenditure from the mobile operator, with the RCS platform ran as a service with the option to expand as required. Lastly, is a hosted model where the entire platform is outsourced to a third-party provider. With both the cloud and hosted model, the mobile operator always has the option to migrate to an on-site integration at a later date.

As demonstrated in the previous section, a capital expenditure model can be amortized over a set period based on a revenue share model following the successful deployment of the RCS platform and MaaP. Typically, the less expenditure required by the mobile operator, the greater the revenue share demanded by the RCS platform provider.

It's worth noting that there are a large number of mobile operators running legacy SMSCs and MMSCs from companies that no longer exist, and that are approaching the end of their hardware life. But stopping messaging because the hardware will become obsolete is not an option, especially in light of revenue forecasts predicting its continued reliance and usefulness. In addition, an RCS platform provider must understand the mobile operator's existing messaging network infrastructure for IMS and VoLTE compatibility and integration, and their long-term plan to incorporate 5G with a plan to migrate their messaging capability to RCS either via a cloud or in-premise solution dependent on the mobile operator's requirements.

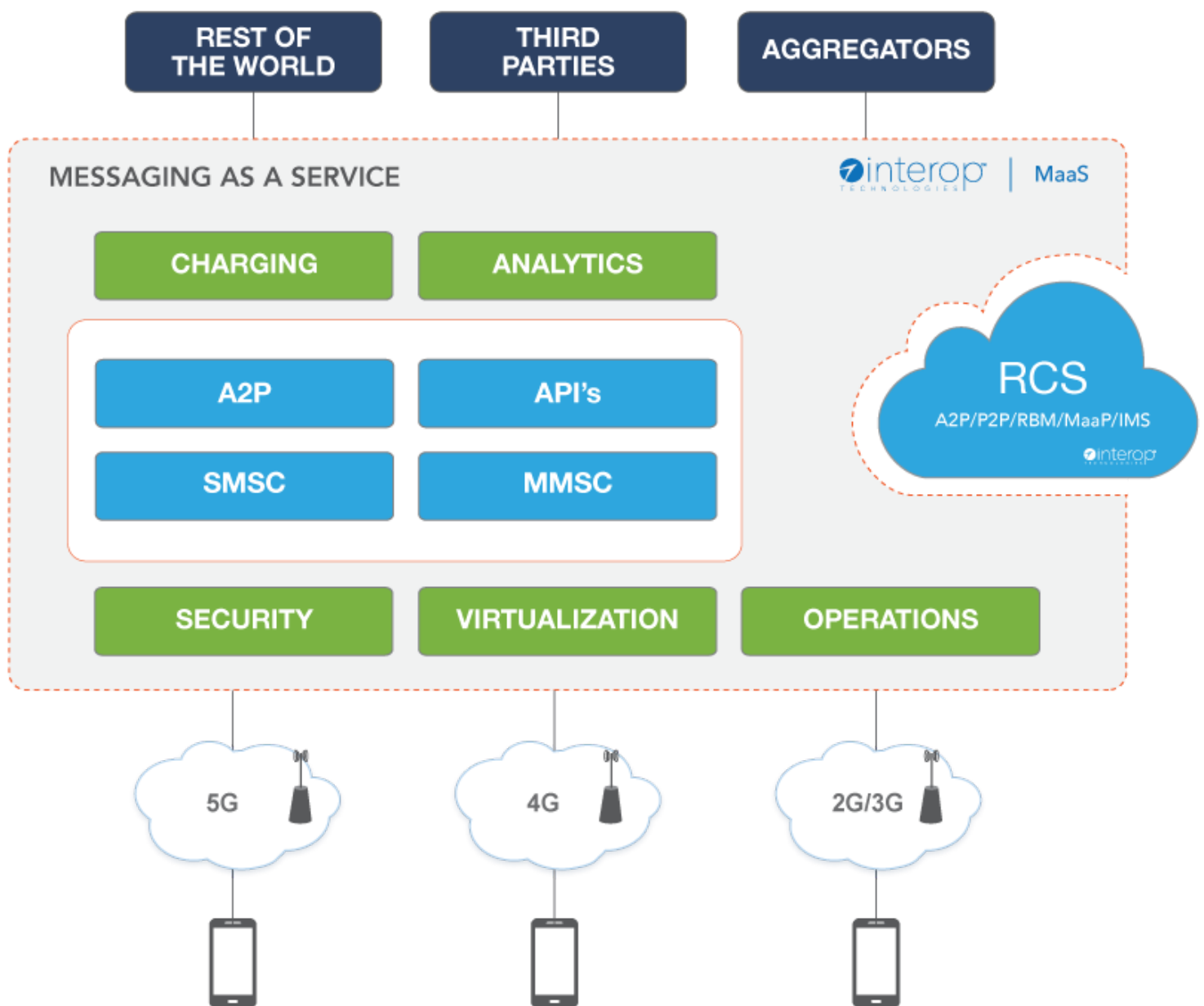
As a way of expediting their messaging network metamorphosis, mobile operators are looking to embrace virtualized network infrastructure that enables them to quickly launch new, innovative services. The emergence of network functions virtualization (NFV), software-defined networking (SDN) and service virtualization, provides mobile operators with numerous choices when it comes to updating the old, and deploying new technologies, including RCS.

In effect, a Messaging as a Service (MaaS) strategy enables a mobile operator to simplify the replacement of their existing out-dated legacy messaging network components like SS7 and SMSCs with a cloud-based managed services platform. By supporting all-generations and all types of network delivery simultaneously, MaaS enables the interworking of next-gen and legacy messaging methodologies across multiple messaging services. A virtualized messaging solution future-proofs the mobile operator's messaging into one managed platform, that reduces on-going management costs and offers greater efficiency, lower total cost of ownership and an effective migration path to the latest IP-based technologies like RCS.

Having launched RCS and MaaP, mobile operators will improve their relevancy and combat OTT messaging cannibalization, and unlock new revenue opportunities with brands, enterprises and IoT as a participant in the commerce driven MaaP ecosystem economy.

The enriched native messaging experience will drive engagement and subscriber loyalty. In turn, subscriber brand equity increases in line with subscriber satisfaction.

From a network perspective, evolving to MaaS will consolidate legacy-messaging infrastructure in advance of 5G network changes, and eliminate end-of-life risks for a sizable portion of your network. Additionally, mobile operators can capitalize on cost savings derived from cloud services, and reallocate operational and engineering resources towards deploying new initiatives.



Section 5: Recommendations and Conclusion

Mobile operators need to act now.

The data reveals that the biggest threat is delaying, and just relying on SMS revenues. RCS will become the fundamental vehicle for the generation of messaging revenues of the future for mobile operators. In delaying their migration to RCS, mobile operators are restricting their messaging revenue generation capability.

Select the Right RCS Partner.

Understand the business model and ensure cannibalisation is avoided or at least minimised, while revenue uplift is maximised.

Select an RCS platform provider that is GSMA-accredited with a standards-based platform providing seamless interoperability, scalability, and total interconnectivity on a national, regional and global level. Having a robust messaging platform is now seen as a vital component in mobile operator competitiveness, helping to improve subscriber quality of experience and reduce churn.

By not developing a native RCS offering for subscribers, mobile operators risk being disintermediated from the business messaging opportunity.

Future-proof legacy systems with Messaging-as-a-Service

Evolving to Messaging-as-a-Service (MaaS) will consolidate legacy-messaging infrastructure in advance of 5G network changes, and eliminate end-of-life risks to legacy messaging network components like SS7 and SMSCs.

A virtualized messaging solution future-proofs the mobile operator's messaging into one managed platform, reducing on-going management costs, delivering greater efficiency, lower total cost of ownership and an effective migration path to IP-based technologies like RCS.

In addition, mobile operators can capitalize on cost savings derived from cloud services, and reallocate operational and engineering resources towards deploying new initiatives.

Section 5: Deploy the Interop Way

Interop Technologies, a long-standing GSMA-accredited global RCS provider, asserts that launching a Rich Communications Suite does not have to be a prolonged process, but one that can be deployed within a three to six-month timeframe. This estimated timeframe assumes full cooperation on behalf of the operator to expedite the numerous integration points of their network and the greater RCS ecosystem – mainly device/client procurement and subscriber readiness.

The features, functionality and ecosystem of RCS messaging are constantly developing, but the complexities of this industry-impacting evolution can be mitigated by stepping through the process with a proven GSMA-accredited RCS messaging vendor –not a network infrastructure provider who is comfortable with a 18-24-month delivery schedule.

Mobile operators who realise the true potential of RCS and are ready to partner with an RCS technology provider will be best prepared to fully capitalise on the new 5G economy and the RCS revenue opportunities it will bring.



*TIMES SHOWN ASSUME OPERATOR DEVICES ARE COMPATIBLE AT TIME OF DEPLOYMENT AND ENGINEERING STAFF IS AVAILABLE.

About: Interop Technologies

Interop Technologies assists mobile network operators with better ways to deploy and manage next-generation technologies and services. Founded in 2002, the company develops Telco-grade, standardized mobile solutions with the highest level of deployment flexibility and lifecycle management. Interop Technologies' portfolio includes an industry-leading, accredited, end-to-end RCS Business Messaging Platform with global connectivity for legacy integration to prepare operators for their 5G transformation. Interop Technologies is headquartered in Fort Myers, FL, and has EMEA regional headquarters in Dublin, Ireland. The company owns and operates network operation centers in North America and Europe.

Interoptechnologies.com.

About: Mobilesquared

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