2021 Trends to Watch: Communications Apps and Services

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Before we start . . .

An introduction

- I cover the global communications apps and services market, tracking telco and messaging app strategies, application-to-person communications service providers and vendors, and the rich communications services ecosystem. I produce analysis, reports, data trackers, and forecasts on these sectors. I also cover players, strategies, and developments in adjacent markets, including social media, CPaaS, and WebRTC.

- My experience in consultancy comprises projects for operators, vendors, and telecoms suppliers. I am also a regular speaker and chair at industry events, including the Mobile World Congress in Barcelona, Spain and Shanghai, China.

- I have covered the telecoms sector for more than 20 years as an analyst and journalist; joining Informa UK (the owner of Omdia) in 2002.

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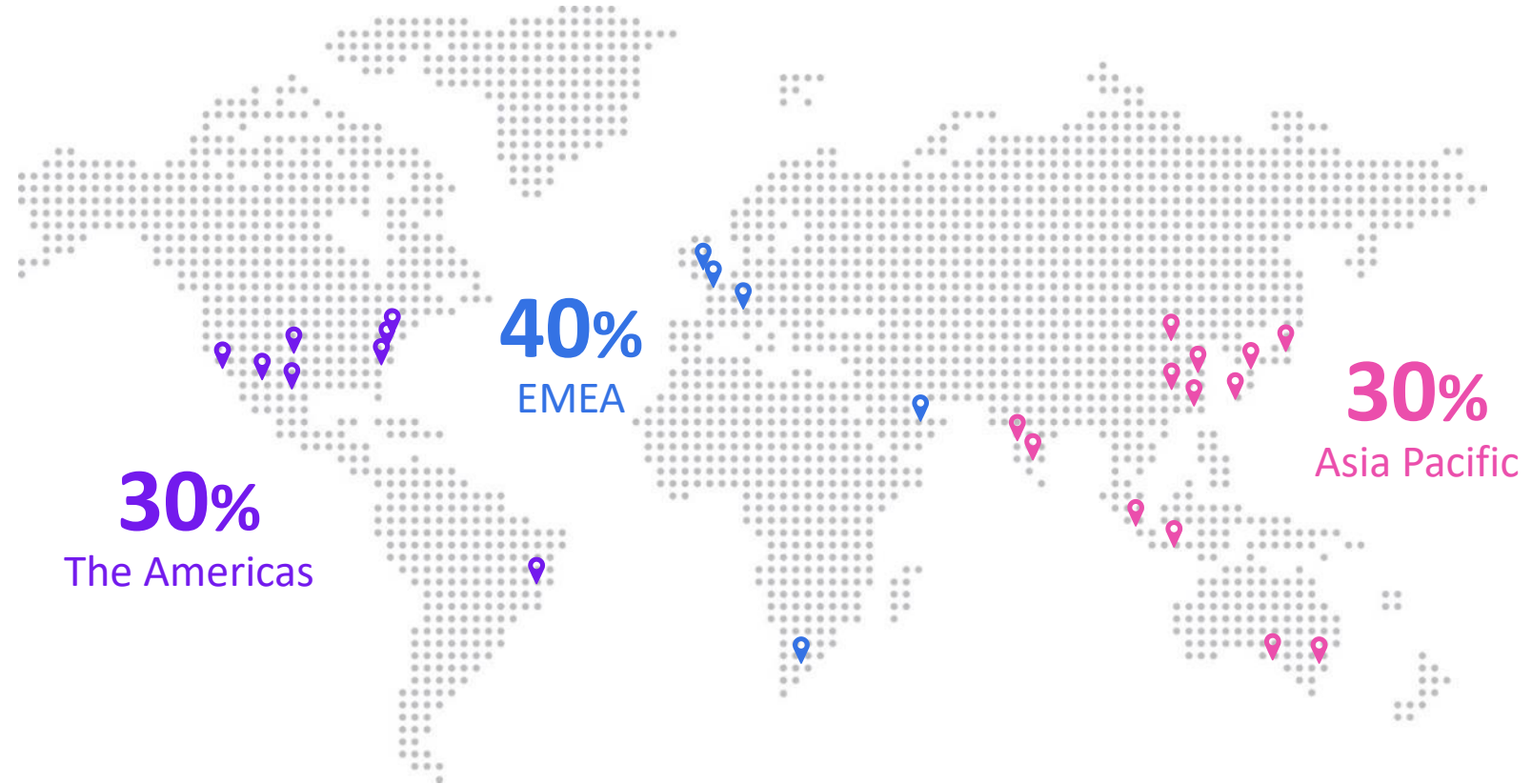
Who we are

Om·di·a | / OM-dee-uh / meaning "All seeing, today and tomorrow" from *omni* (all) and *dia* (day).

A technology research and data powerhouse built from best-in-class companies

Deep analysis of emerging telecom trends

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The Trends to Watch 2021 report series

- The Trends to Watch series is aimed at:
  - Helping clients with strategic planning for the coming year
  - Enabling our clients to "connect the dots" across the TMT landscape

- Almost 100 reports spanning Omdia's research services:
  - AI, Cloud and Data Center, Consumer Electronics and Pro AV, Cybersecurity, Digital Consumer Platforms, Displays, Enterprise IT, Healthcare Technology, Internet of Things, Manufacturing Technology, Media & Entertainment, Physical Security and Critical Communications, Semiconductors, Service Provider and Communications, Smart Building and Energy Infrastructure

- A regular feature on Omdia/Ovum's research calendar for past five years

- Each report includes:
  - 3-4 key predictions
  - Proprietary Omdia visualizations
  - Recommendations for key audiences
  - Impact ratings per prediction and relevant audience

2021 Trends to Watch:
Communications Apps and Services in a 5G World | December 2020

Service providers and vendors need to prepare for the impending ubiquity of video calling post–COVID-19

Player type	What will the impact be?	Impact rating	How should players respond?
Service providers	Increased use of video calling for personal and work communications will place an increased data load on telcos' fixed and mobile networks, especially at peak hours for school and work during lockdowns.	+2 +1 -1 -2	Telcos should ensure that their networks can scale to meet increased demand for third-party video calling services, so that they can enable a high quality, highly reliable service for their consumer (and enterprise) customers.
Service providers	Post–COVID-19, video calling will become a more habitual communications behavior for consumers (who are also students and employees). Telcos are in a position to do more in the video calling ecosystem, beyond simply providing the data network that enables its use.	+2 +1 — -1 -2	Telcos need to evaluate whether the impending ubiquity of video calling means they should themselves offer it at a network level. Many telcos are rolling out 5G networks. Offering a native, free, and universally available video calling service could be a helpful selling point.
Vendors	As consumers become more comfortable using video calling, they will expect it to be available as a customer care option. CPaaS and mobile engagement platform providers will see increasing interest from enterprises in adding video calling to their customer interaction platforms.	+2 -1 -2	CPaaS providers and mobile engagement platform vendors should be ready to add video calling to their offerings—if they have not already—whether through internal development or partnership. They should identify the most likely use cases for video calling, and make it as easy as possible for enterprises to add video calling to their customer care function.

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Agenda

Omdia view

Omdia View
Key Messages

Comms App Predictions

Video calling becomes habitual post-COVID 19
Facebook apps use COVID-19 to diversify
Clarity emerges on 5G messaging

Telco Messaging Predictions

Countries shift from P2P to A2P majority
Verification SMS continues to increase
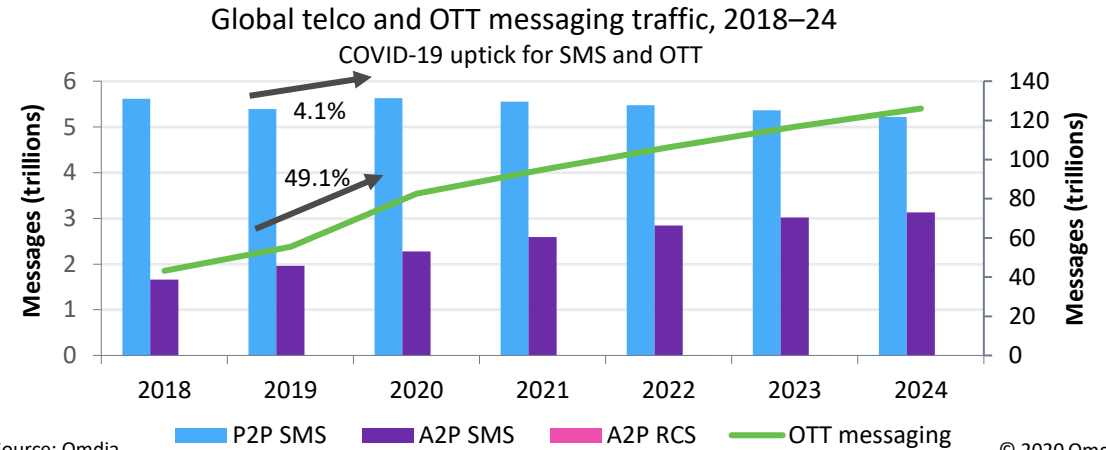Hunt for grey routes intensifies in 2021

Recom-mendations

Recommendations for service providers and vendors

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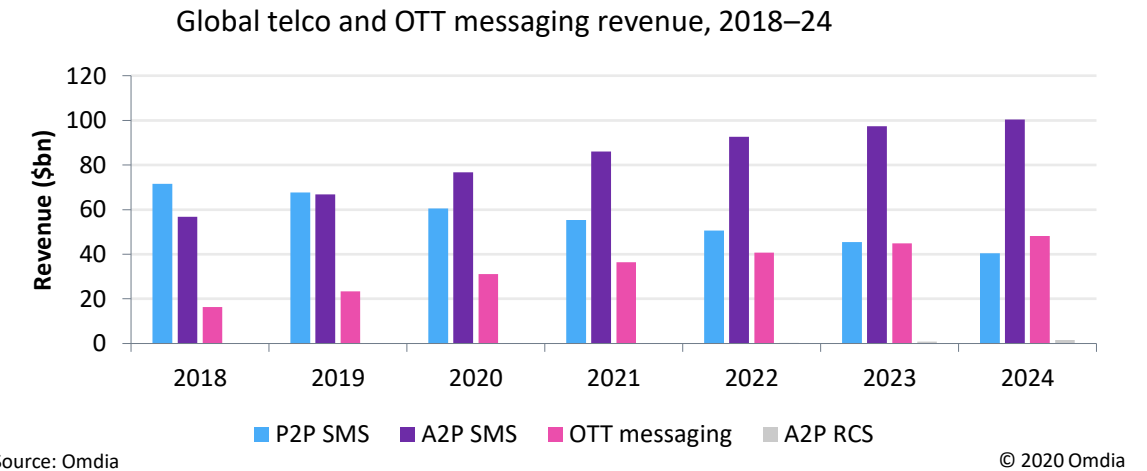
Omdia View

COVID-19 boost sustained into 2021 and beyond

- Video calling and messaging apps emerged as key tools for productivity, connectivity, and commerce during COVID-19, and will remain so well into 2021.

- Person-to-person (P2P) SMS and app-based messaging both saw a COVID-19 spike in traffic. This will continue for messaging apps in 2021 but P2P SMS traffic will resume its gradual decline.

- Most global messaging revenue is in telco messaging, representing an estimated 79.5% of total global revenue in 2021. But application-to-person (A2P) SMS will outpace shrinking P2P revenue in 2020 and growing to 1.55x P2P SMS revenue in 2021.

- In response to increased use of its apps during COVID-19, Facebook introduced more monetization capabilities to its suite. These will provide a solid foundation for Facebook to grow its commerce revenue in 2021.

- 5G networks provide an opportunity for telcos to upgrade their messaging services and introduce free video calling. Whether and to what extent telcos take up this opportunity will become clearer in 2021.

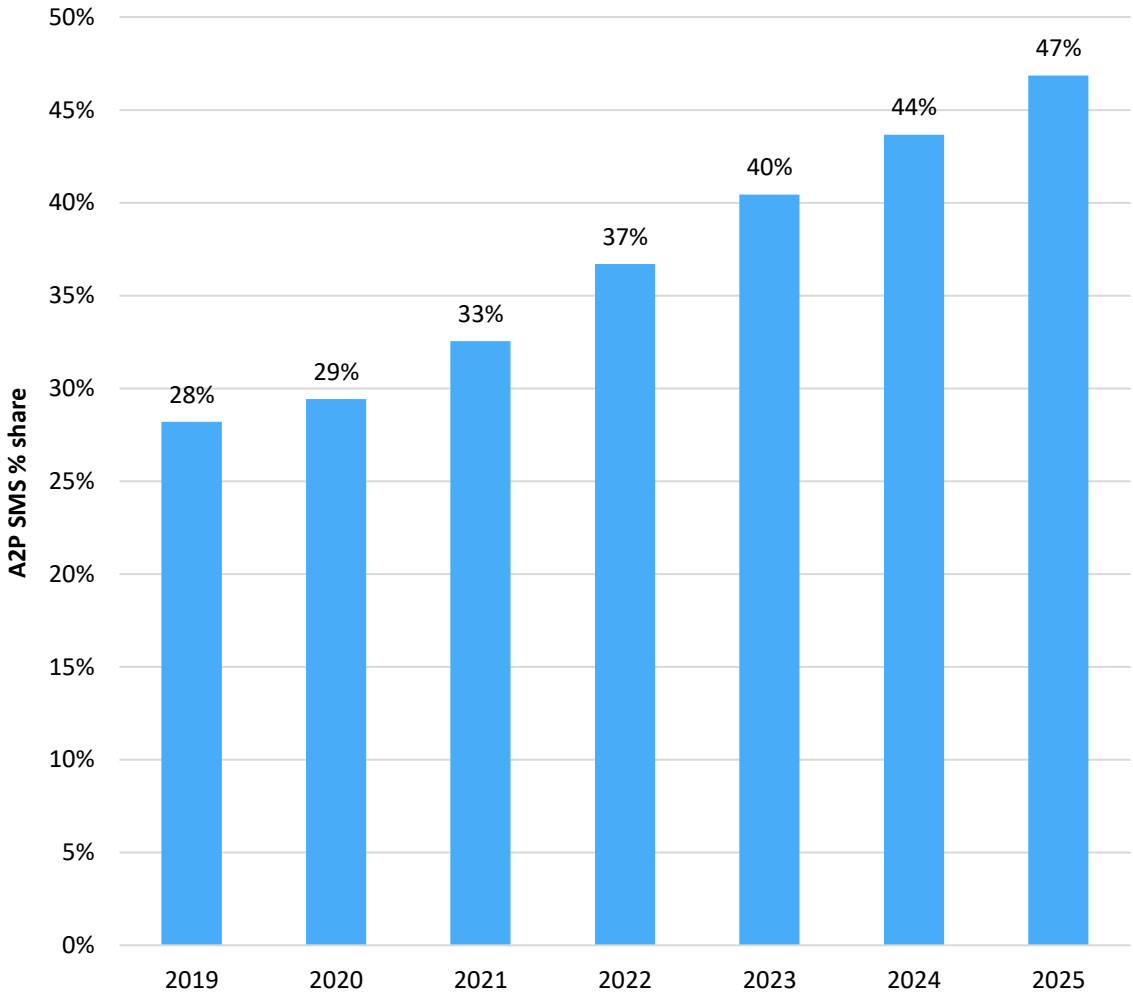**Messaging apps generate significant traffic globally**

Global telco and OTT messaging traffic, 2018–24
COVID-19 uptick for SMS and OTT

Source: Omdia

P2P SMS   A2P SMS   A2P RCS   OTT messaging

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But they still lag behind SMS for revenue

Global telco and OTT messaging revenue, 2018–24

Source: Omdia

P2P SMS   A2P SMS   OTT messaging   A2P RCS

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A2P SMS messaging grows in importance

- In 2021, it will become clearer that A2P messaging is "the future of SMS" as it starts to overtake P2P SMS in terms of traffic in more markets.

- The median A2P share of SMS traffic will surpass 30% in 2021 and almost reach 50% in 2025.

- Omdia expects A2P SMS traffic from two-factor identification (2FA) and other verification processes to increase across verticals in 2021 as people continue to work and study from the home. The travel industry vertical is likely to see the largest negative impact as restrictions on movement remain.

- Grey routes remain a threat to the market. In 2020 there was a rise in grey routing as COVID-19 saw incentives for cheap solutions strengthen and expenditure on mitigation weaken. Omdia expects to see further intensification in the fight against grey routing as the importance of A2P SMS increases.

Global median A2P SMS traffic share, 2019–25

Source: Omdia

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Key messages

1

Post–COVID-19, video calling will be a communications habit for many.

Locked-down consumers use personal or group video calling to stay in touch with family and friends and for work and school. Workplaces, educational institutions, and providers of online schooling invest in platforms and services that enable ongoing virtual participation.

2

Catalyzed by COVID-19, Facebook apps like WhatsApp will diversify revenue.

Consumers have increasingly used messaging apps during COVID-19 to engage with businesses and service providers. Facebook has used this increased engagement to roll out services across its platforms that will help it generate more revenue from commerce.

3

As 5G networks proliferate, clarity emerges on 5G messaging.

Telcos will need to support SMS on their 5G networks, given that SMS has remained resilient as a consumer service and robust as an enterprise messaging service. What telco messaging looks like for 5G networks will become clearer in 2021.

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Key messages

1

Countries will shift from P2P to A2P majority SMS markets.

In 2021 we will see the A2P share of SMS traffic gain momentum to become dominant. The median A2P traffic share of SMS for countries will pass 33% in 2021 on its way up to 46% in 2025.

2

Verification SMS is expected to continue to increase in 2021 as users continue to work and study from home.

Everyday essential verticals such as banking are expected to maintain high levels of traffic. The travel and hospitality industry will continue to see low traffic.

3

The hunt for gray routes will intensify in 2021.

The hunt for gray routes will intensify in 2021 after an increase in usage in 2020. It is estimated that this illegal use of SIM farms siphons off an average of between 5% and 20% of telcos' A2P SMS revenue.

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Post–COVID-19, video calling will be a habitual behavior for many

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Working and learning from the home make consumers virtual participants

- COVID-19 lockdowns and travel restrictions turned millions of employees and students into home workers and learners.

- During COVID-19 lockdowns, consumers increasingly used video calling on messaging apps.

- Virtual participation via personal and group video calling will remain a key consumer behavior into 2021 and beyond.

- Employers and educational institutions will retain use of video calling platform and services in some form beyond COVID-19.

- Personal or group video calling therefore becomes as habitual a form of communication as messaging or calling.

More first-time or increased use consumers in the US and the UK will maintain group video calling use after COVID-19

You indicated that you are either a first-time user or have increased your activity in the following areas. Which are you likely to maintain at the new usage level once the COVID-19 threat diminishes?

Source: Omdia

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Service providers and vendors need to prepare for the impending ubiquity of video calling post–COVID-19

Player type	What will the impact be?	Impact rating	How should players respond?
Service providers	Increased data load on telcos' fixed and mobile networks, especially at peak hours for school and work during lockdowns.	+2 / +1 / **-1** / -2	Ensure networks can scale to meet increased demand, and to enable a high quality, highly reliable service for their customers.
Service providers	Telcos are in a position to do more in the video calling ecosystem, beyond simply providing the data network that enables its use.	+2 / **+1** / — / -1 / -2	Telcos should evaluate whether they offer video calling at a network level – a native, free, and universally available video calling service could be a helpful selling point for 5G networks.
Vendors	Consumers expect video calling to be available as a customer care option.	**+2** / +1 / — / -1 / -2	CPaaS providers and mobile engagement platform vendors should be ready to add video calling to their offerings.

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Catalyzed by COVID-19, Facebook apps like WhatsApp will diversify revenue

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COVID-19 spurs Facebook's payments ambitions for 2021

- During COVID-19, global messaging apps became an even more important conduit to consumers for enterprises.

- Facebook stated in October 2020 that more than 175 million people message a WhatsApp Business account daily.

- In 2021, the company will leverage that to make it easier for consumers to purchase from businesses by adding shopping capabilities and hosting services.

- The new WhatsApp features follow Facebook's 2020 launch of Facebook Shops and Instagram Shops, and Checkout on Instagram (US only), and its 2019 launch of Facebook Pay.

- Facebook's apps had a combined 2.54 billion daily active people globally in 3Q20, compared to WeChat's 1.2 billion monthly active users (MAUs), mostly in China.

Tencent's revenue is far more diversified than Facebook's

28.3%

TENCENT

Fintech revenue totaled

RMB29.9bn, or US$4.5bn

1.5%

FACEBOOK

"Others" revenue, which includes

payments, totaled $1.04bn
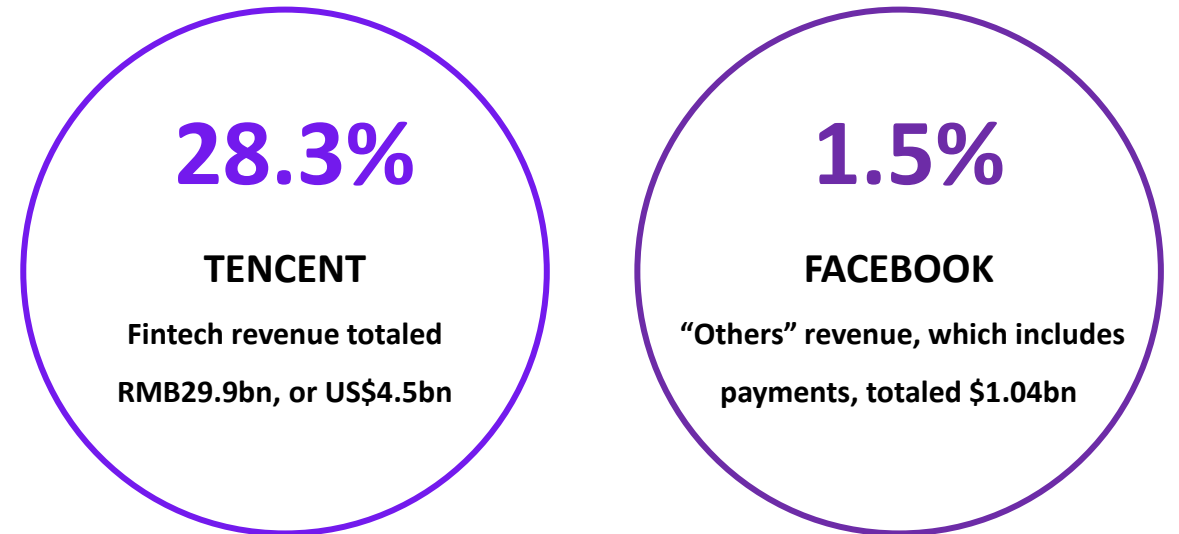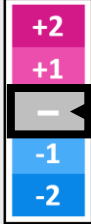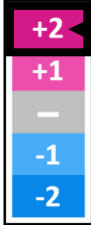
Facebook's huge user base across its four apps gives it vast untapped monetization potential in payments and commerce.

Source: Omdia

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# There are opportunities for telcos and CPaaS providers as Facebook moves deeper into commerce and customer care

Player type	What will the impact be?	Impact rating	How should players respond?
Service providers	Facebook's suite of apps becomes an alternative, desirable customer care channel for consumers. Telcos can improve their customer service by using the Facebook apps.	+2 / +1 / **—** / -1 / -2 (—)	Telcos should assess whether their customers want to engage with them via Facebook Messenger, WhatsApp, or Instagram.
CPaaS providers	Facebook's provision of hosting services for its SME customers could see CPaaS providers take on a growing role.	**+2** / +1 / — / -1 / -2 (+2)	CPaaS providers should proactively reach out to the social giant to express interest and request information, and engage, with their enterprise customers to gauge demand and seed the market.
SMS aggregators	SMS aggregators may find that there is some negative impact on their SMS traffic as consumers move toward using messaging apps. The substitution is unlikely to be significant in 2021 but will build in the coming years.	+2 / +1 / **—** / -1 / -2 (—)	SMS aggregators need to make the services they provide to enterprises as attractive as possible by comparison to messaging apps. They should also start planning for a future in which enterprise messaging traffic moves from SMS to messaging apps.

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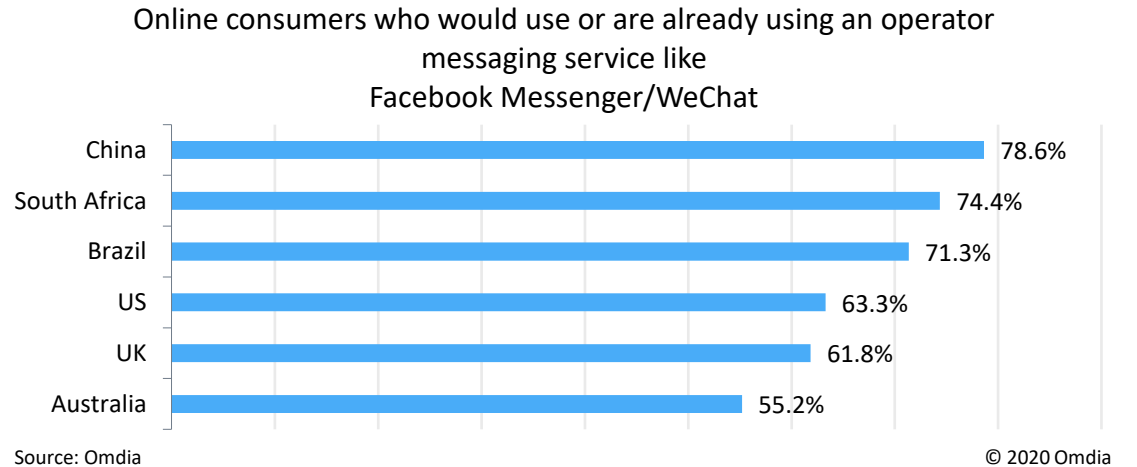# As 5G networks proliferate, clarity emerges on 5G messaging

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Telcos begin their move to 5G messaging

- More than 100 telcos had deployed 5G networks and services by the end of 3Q20. Subscriptions were expected to reach around 200 million by 4Q20.

- But telcos still need to support legacy services such as SMS over 5G, not only for consumers and enterprises, but also for machine-to-machine (M2M).

- Omdia expects telcos will pay more attention to how they enable SMS over 5G, and what 5G messaging looks like, including rich communication services (RCS).

- 2020 has been a quiet year for RCS, the telcos' upgrade path for SMS, with only six mobile operator launches in 3Q20, bringing the total to 87.

- 2021 could see more activity. The GSMA has mandated 5G handsets must include RCS, and Google will continue its seeding of Guest RCS, available in seven markets. However, Apple still does not support RCS in its 5G iPhones.

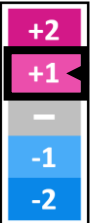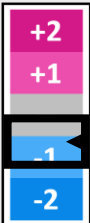- There is also support among consumers for RCS-like services.
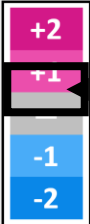
Operator launches of RCS have slowed

Global RCS launches, 2016–20

Source: Omdia

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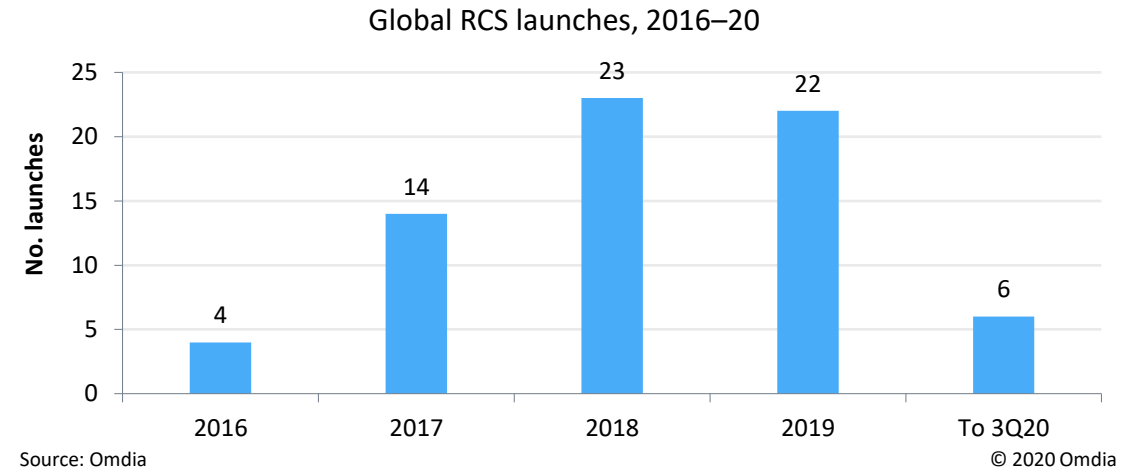
But over half of online consumers would use or are already using such a service

Online consumers who would use or are already using an operator messaging service like
Facebook Messenger/WeChat

China	78.6%
South Africa	74.4%
Brazil	71.3%
US	63.3%
UK	61.8%
Australia	55.2%

Source: Omdia

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# 5G can be more than just a "housekeeping" opportunity for telco messaging and communications services in 2021

Player type	What will the impact be?	Impact rating	How should players respond?
Service providers	P2P SMS traffic and revenue has remained resilient against messaging apps. So, as telcos deploy 5G networks, they will need to ensure that their 5G subscribers can still use SMS.	+2 / **+1** / — / -1 / -2	Telcos' 5G platforms must have SMS interoperability with 2G/3G/4G networks. 5G price plans should offer commensurate pricing for SMS.
Service providers	5G offers telcos the opportunity to deploy new or enhanced services that can take advantage of higher speeds and lower latency.	+2 / **+1** / — / -1 / -2	Telcos should explore whether and how they can offer more advanced messaging and communications over 5G, including assessing whether RCS is a viable service for the consumer and the enterprise (B2C) messaging market. Work with partners where necessary.
Vendors	The rollout of 5G provides an opportunity for vendors to develop new services tailored to the capabilities of 5G networks.	+2 / +1 / — / **-1** / -2	Work with other companies in the value chain to provide the equipment/infrastructure upgrades necessary to ensure SMS compatibility with 5G networks. Be prepared to innovate.

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2021 will see the shift towards A2P traffic majority accelerate

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Countries are increasingly becoming A2P-focused markets

- 2021 will see the start of an acceleration in the number of territories where A2P SMS traffic surpasses P2P.

- By the end of the forecast period in 2025, almost half the territories covered by Omdia research will have a majority of A2P traffic for SMS.

- The main reason for this shift is the decline in P2P SMS traffic.

- The resilience of P2P SMS traffic to date has largely been determined by the pricing strategies adopted by the service providers.

- Telcos in countries like France and the US offer unlimited SMS as part of their pricing plans and were able to insulate their P2P messaging from the impact of OTT messaging apps.

- Germany, Spain, and Italy are examples of countries where P2P SMS traffic has plummeted and there is already a majority of A2P traffic.

- A2P traffic continues to grow globally, benefiting from the ubiquity of SMS on all mobile phones as the bearer of updates, secure communications, and marketing functions.
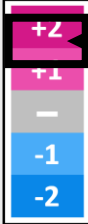
Number of countries where A2P SMS traffic is above 50%, 2020, 2021, and 2025
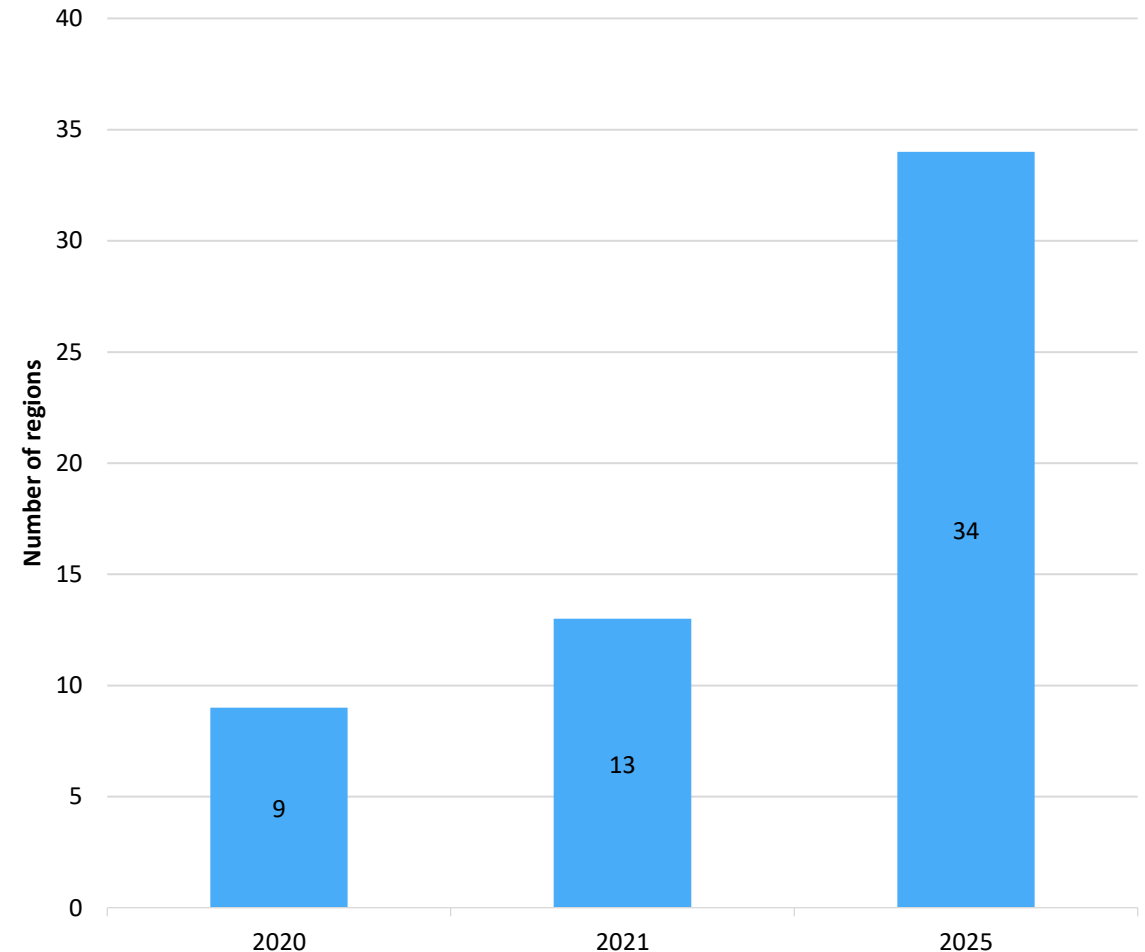
Source: Omdia

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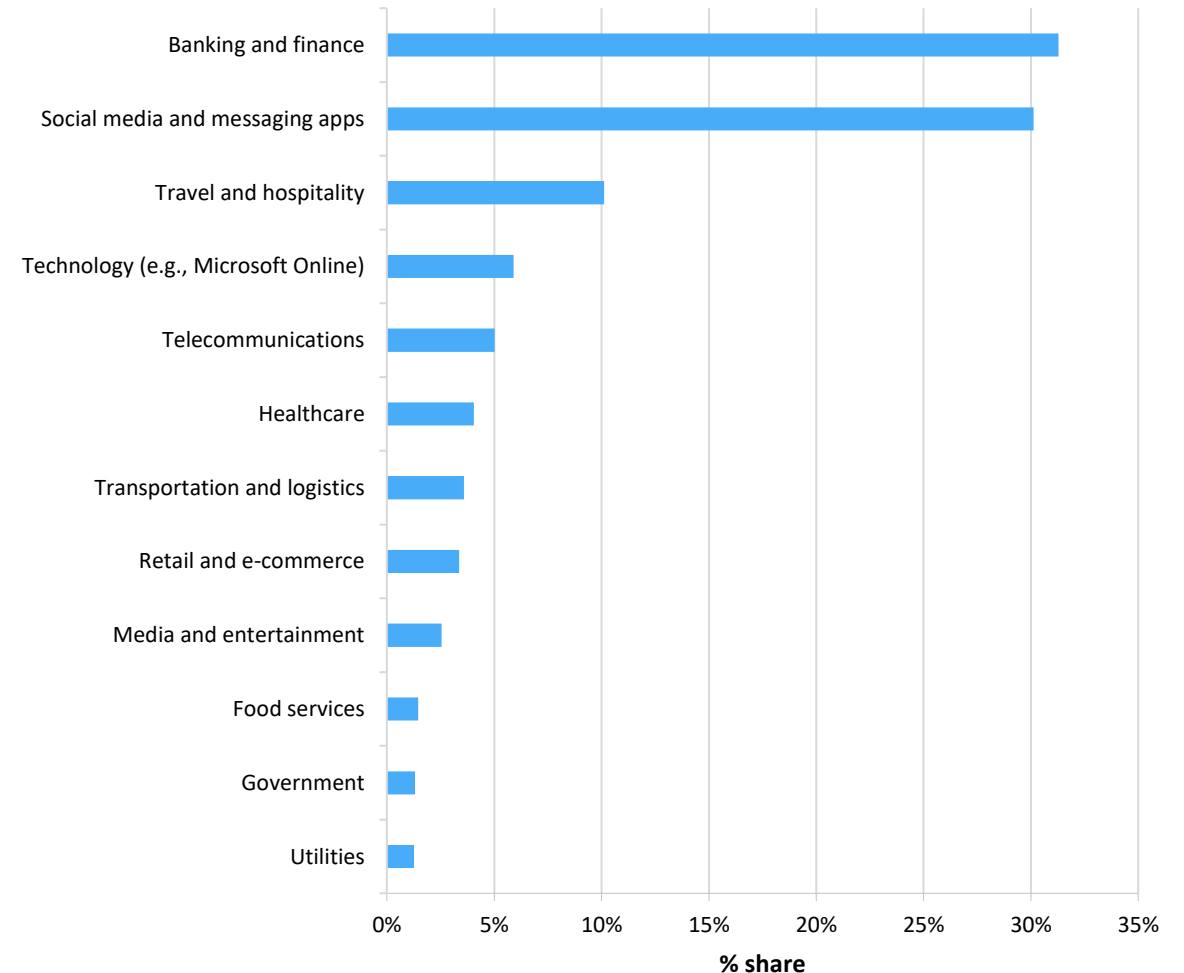
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A2P SMS traffic will start to take over from P2P

Player type	What will the impact be?	Impact rating	How should players respond?
Service providers	The flip from P2P SMS to A2P SMS majority traffic yields new opportunities for service providers to transition to A2P as the primary source of SMS revenue.	+2 / +1 / — / -1 / -2	Partner with innovative enterprise customers that utilize the channel. Look for opportunities with SMS aggregators or go directly to enterprises.
Vendors	Vendors face the challenge of providing service providers with cost-effective A2P SMS platforms at a time when margins are being squeezed.	+2 / +1 / — / -1 / -2	Cloud-based platforms will help vendors to drive the capex down for service providers while also providing flexibility for pricing and feature updates.

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The impact of COVID-19 on A2P SMS will vary based on vertical

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Social and travel restrictions will determine 2021 A2P SMS traffic

- Omdia expects a significant rise in A2P SMS use for 2FA and verification during COVID-19 and beyond as people continue to work from home and the education system goes in and out of online learning.

- Conversely, the travel industry will continue to take a hit in 2021. Even though some level of international and domestic travel will resume, it is unlikely to reach 2019 levels by the end of the year.

- Essential services like banking, finance, and telecommunications experienced a spike in A2P SMS traffic in 2020 as a response to the pandemic. This is expected to smooth out in 2021, but there will still be sustained high levels of traffic.

- Social media and messaging apps have seen a significant growth in users and engagement over the last few years. This has meant an increase in the use of telco messages for one-time passwords (OTPs) and 2FA, which is expected to carry on into 2021.
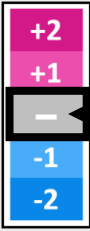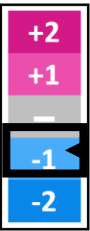
Split of North American A2P verticals, 2021

Source: Omdia

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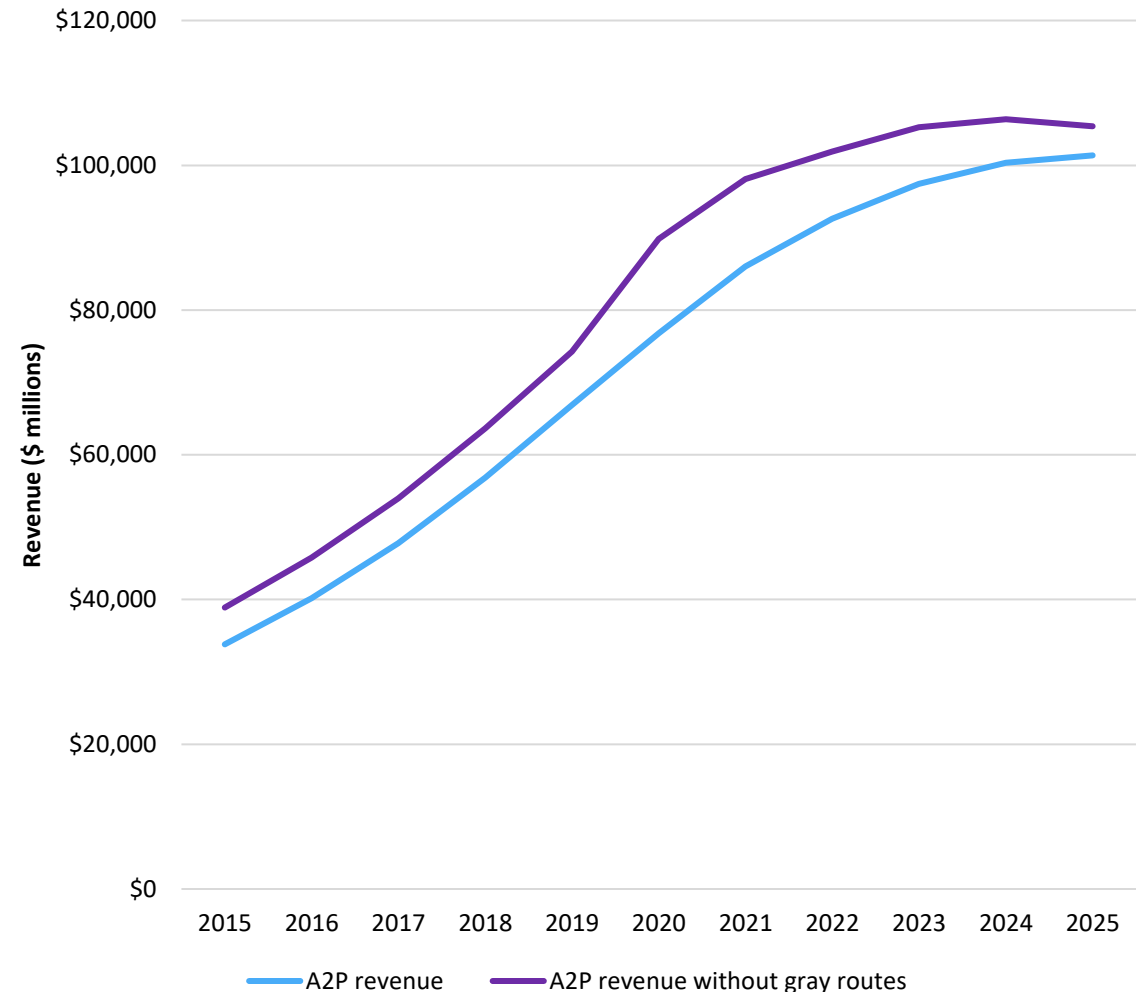OMDIA

Telcos must prepare for volatile traffic patterns due to COVID-19

Player type	What will the impact be?	Impact rating	How should players respond?
Service providers	Telcos may experience varying levels of A2P traffic terminating into their networks, depending on the impact of COVID-19 on different vertical industries.	+2 +1 — -1 -2 (rated —)	Telcos need to continue to provide a reliable termination capability for A2P traffic that scales to the peaks and dips of use depending on COVID-19 recovery. Problems such as long lag times could undermine SMS as a reliable form of communication.
Vendors	SMS aggregators may experience higher demand on their networks from some vertical industries over others. Some vendors may find their position weakened due to overreliance on certain sectors due to COVID-19.	+2 +1 — -1 -2 (rated -1)	Make sure platforms are robust and also make sure businesses have a diversified customer base to avoid negative pressure on the bottom line.

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The hunt for grey routes will intensify in 2021

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Use of grey routes will be curbed after 2020 increase

- The industry has seen an increase in grey route activity in 2020, partially due to COVID-19.

- In 2021, Omdia expects increased efforts to block grey routes and protect revenue for the entire A2P SMS ecosystem. These revenues are more important than ever due to the decline in P2P SMS.

- The pandemic has placed further downward pressure on A2P SMS pricing in an industry where margins are already narrow due to the use of grey routes to reduce costs in some market segments, for example 2FA and OTP.

- Telcos are aware of grey routes and some have deployed SMS firewalls and revenue assurance platforms to detect and block them.

- However, there are indications that telcos are cutting back their spending on these platforms, further placing the A2P SMS ecosystem at risk.
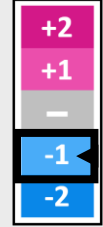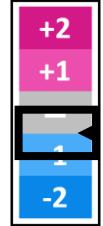
Global A2P SMS revenue estimates, 2017–25

Source: Omdia

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Deployment of counter measurements and raising awareness of the grey route problem is needed

Player type	What will the impact be?	Impact rating	How should players respond?
Service providers	Service providers that haven't deployed SMS firewalls and revenue assurance platforms may not see as much A2P SMS revenue as they could potentially generate through identifying and blocking grey routes.	+2 +1 — **-1** -2	Deploy platforms such as SMS firewalls and revenue assurance to help identify and block grey route traffic and monetize legitimate A2P SMS traffic.
Vendors	All SMS aggregators will be negatively impacted, directly or indirectly, when a certain segment of the industry uses grey routes.	+2 +1 **—** -1 -2	SMS aggregators need to ensure their own networks are clean from grey routes as far as possible. They should also encourage other players in the A2P SMS industry to use legitimate SMS routes, and to raise awareness among enterprise customers.

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Key recommendations

Key recommendations – Communications Apps and Services

Service providers

- **As telcos roll out their 5G networks, they should consider whether the impending ubiquity of video calling means they should offer it themselves.** Natively available, free, universal video calling could be a selling point for telcos seeking to entice subscribers to upgrade to 5G.

- **5G can be more than just a "housekeeping" opportunity for telco messaging and communications services in 2021.** Telcos will need to upgrade their messaging platforms to ensure backward compatibility for with previous generation networks. But telcos could also look at 5G as an opportunity to enhance their voice and messaging services or add video calling.

- **Service providers will not directly benefit from Facebook's increased focus on commerce, but there is still upside.** Telcos will need to add messaging apps to their own omnichannel customer engagement platforms to make sure they reach their subscribers on the channels they are using.

Vendors

- **With video calling becoming widely penetrated due to COVID-19, vendors should make it easier for enterprises to add it to their customer care platforms.** It will not be as simple for enterprises to integrate video calling into their customer care platforms, as for SMS and voice.

- **Messaging equipment vendors should work with telcos, aggregators, and CPaaS providers to roll out the infrastructure upgrades necessary for SMS over 5G.** They should also be prepared to innovate if there is an opportunity to develop a new 5G messaging or communications service.

- **While SMS is currently the main source of revenue for CPaaS providers and SMS aggregators, revenue from messaging apps is poised to grow.** CPaaS providers need to engage with their enterprise customers to gauge demand, while SMS aggregators should start planning for a future in which enterprise messaging traffic moves to messaging apps.

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Key recommendations – Telco Messaging Services

Service providers

- **Proactive steps are needed at this stage to engage with the A2P SMS industry to further its development.** Partner with innovative enterprise customers that utilize the channel. Look for opportunities with SMS aggregators or go directly to enterprises.

- **Secure the technical excellence of the SMS infrastructure to ensure reliability**. Telcos need to continue to provide a reliable termination capability for A2P traffic that scales to the peaks and dips of use depending on COVID-19 recovery. Problems such as long lag times could undermine SMS as a reliable form of communication.

- **Invest in countermeasures against grey routes.** Deploy platforms such as SMS firewalls and revenue assurance to help identify and block grey route traffic and monetize legitimate A2P SMS traffic.

Vendors

- **Invest in cloud-based platforms.** This will help vendors to drive the capex down for service providers while also providing flexibility for pricing and feature updates.

- **Be agile and prepared to face new opportunities and increased traffic.** Make sure platforms are robust and also make sure businesses have a diversified customer base to avoid negative pressure on the bottom line.

- **Raise awareness about the problem of gray routes among customers and encourage legitimate practices.** SMS aggregators need to ensure their own networks are clean from grey routes as far as possible. They should also encourage other players in the A2P SMS industry to use legitimate SMS routes and to raise awareness among enterprise customers.

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Questions?

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Thank You

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