



# KEY CHANNELS TO GROW THE A2P MESSAGING MARKET IN 2024

Whitepaper



## 1.1 A2P Messaging Overview

A2P (Application-to-Person) messaging is where a message is sent from a software application, run by a brand or enterprise, to a person. This can be used by businesses for use cases where messages can be automated to increase efficiency.

Juniper Research defines A2P messaging as:

*'A type of messaging traffic where a message is delivered from an application to a person, rather than from an individual, with examples including OTPs (One-time Passwords), appointment reminders, and marketing communications.'*

Different messaging channels can be used to send A2P messages, including SMS (Short Message Service), RCS (Rich Communication Services), and OTT (Over-the-Top) messaging platforms. SMS is the most popular channel for sending A2P messages, due to its universality, which is especially important for business-critical messages. RCS messaging is also a communication protocol sent between operators and from operator to person. RCS has added benefits over SMS, since it allows brands and enterprises to send rich media to consumers and messages are end-to-end encrypted.

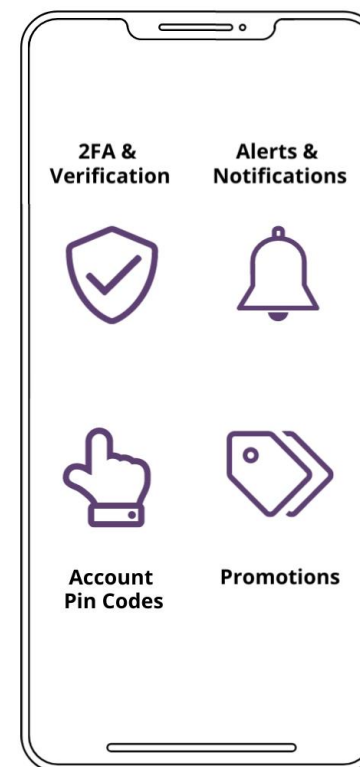
A2P messaging has several different use cases; these can be seen in figure 1.

One of the primary use cases for A2P messaging is authentication. This involves business-critical messages including 2FA (Two-factor Authentication) and OTPs (One Time Passwords), being delivered from a business to a user.

With the rise of rich media channels, such as RCS and OTT platforms for A2P messaging, new use cases will emerge.

Figure 1: Use Cases for A2P Messaging

### A2P Messaging Use Cases



Source: Juniper Research

## 1.2 A2P Messaging Market Growth

The A2P messaging market is expected to grow, as more enterprises undergo a digital transformation and require messaging services to communicate with



customers. However, as the market grows, the proportion of A2P messages sent via SMS, RCS, and OTT messaging is expected to change.

In 2023, the dominant channel for sending A2P messages is SMS. SMS has been a dominant channel as a result of its ubiquity and familiarity, and therefore it is used by enterprises to send both transactional and promotional A2P messages. RCS and OTT channels currently make up a small proportion of overall A2P traffic. The adoption of RCS until now has developed slowly, due to support for RCS currently only being available on Android devices. In addition, OTT apps are regionally fragmented.

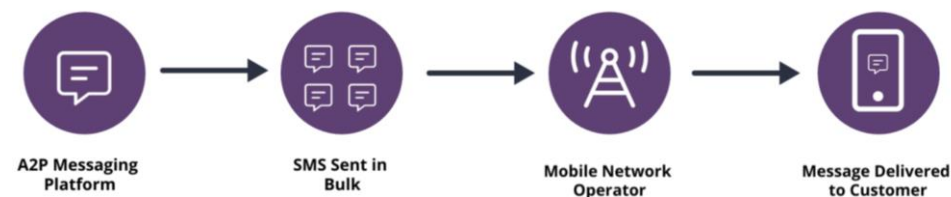
By 2028, the proportion of traffic attributable to each channel is expected to change. Whilst each channel is expected to grow, RCS and OTT channels will make up a larger proportion of the overall A2P messaging traffic. Brands are expected to adopt an omnichannel approach and will use rich media channels to send customers promotional A2P messages, as this will result in increased engagement. With technological developments in AI, the delivery of messages from brands will be more efficient, and messages will be more personalised to each customer. However, SMS will still dominate, as it will be the only channel that can reach both featurephones and smartphones.

## 1.3 SMS

### i. Overview of A2P SMS

A2P SMS messages, also referred to as SMS business messages, are a type of A2P message that are delivered as an SMS. When businesses first started using SMS messages to communicate with their customers in the early 2000s, a GSM module was used to send SMS messages in bulk. However, web services now send bulk SMS messages much faster. SMS has long been a popular messaging channel for A2P SMS messages owing to its universality, and its A2P SMS traffic and revenue has continued to rise of the years of its use. This has been the result of increased adoption by brands and enterprises for various use cases, and it has played a key role in mobile authentication. The process of sending an A2P SMS message is shown in figure 2.

Figure 2: Process of Sending an A2P SMS Message



Source: Juniper Research

The key benefit of using SMS for A2P messages is that it is a universal messaging channel, and therefore brands and enterprises can reach customers globally. This includes regions with a low penetration of smartphones, where SMS will be the only messaging channel that businesses can use to reach customers. In comparison, RCS is not supported on all mobile devices and OTT channels are third-party applications that must be installed onto the device by the mobile user, which are regionally fragmented. Therefore, given the lack of suitable alternative for sending business-critical A2P messages, SMS has remained a popular channel for sending A2P messages.

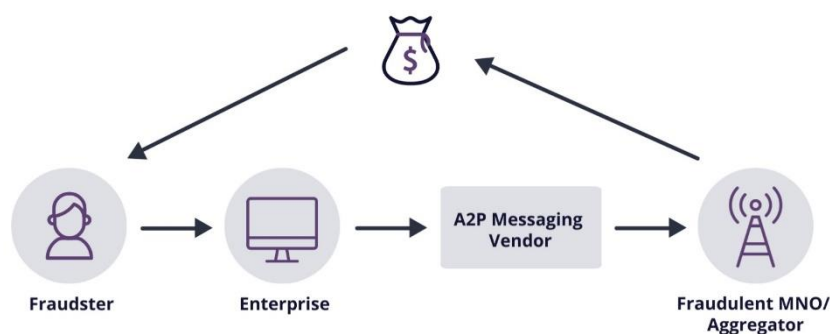
Additionally, SMS providers have invested in extensive SMS gateway infrastructure, which ensures that messages are delivered efficiently. SMS also benefits from high open rates, which ensures that a large proportion of messages that brands and enterprises send are acknowledged.

Furthermore, A2P SMS adheres to strict regulations such as the MMA (Mobile Marketing Association) requirements, which can help prevent spam and unsolicited messages. For example, in North America businesses must register with MNOs and abide by the rules and regulations in order to send A2P SMS messages with guaranteed delivery. Conversely, OTT messaging platforms, such as WhatsApp, do not have the same strict regulations, which could result in increased spam and unsolicited messages across the channel. RCS has also previously had issues with spam in India, where Google had to disable RCS in June 2022 due to businesses breaking its anti-spam policy.

## ii. The Impact of A2P SMS Price Rises

The rising price of SMS has meant that the profit that can be gained from AIT (Artificially Inflated Traffic) has increased, and it is therefore more attractive to fraudsters. AIT is where fraudsters create fake accounts to trigger OTPs, which are sent as SMS messages to mobile numbers. A fraudulent MNO/aggregator will then intercept this traffic and prevent it from terminating with the end user. The enterprise will have therefore paid for an SMS that has not been delivered, and will have to pay again. This generates profit for the MNO/aggregator involved, who then shares this profit with the fraudster. This process is shown below in figure 3.

Figure 3: How AIT Makes Profit for Fraudsters



Source: Juniper Research

The increase in AIT will result in some large enterprises using a different authentication channel instead, in order to minimise losses. As a result of this decreasing SMS traffic, operators have significantly raised A2P SMS prices to ensure that they still make a profit.

These increased costs are then passed on to A2P messaging vendors, meaning enterprises will pay a higher price to send A2P SMS messages. As a result, enterprises will choose to adopt an omnichannel approach for sending A2P

messages and more messages will be sent across OTT messaging platforms instead, particularly when these messages are not business critical. Operators will lose out on profit to OTT players unless they are able to price SMS more optimally to ensure that it remains a viable channel for enterprises.

## iii. Future of the A2P SMS Market

The number of A2P SMS messages sent per annum is expected to grow, as brands and enterprises adopt SMS as a channel to communicate with customers as digitalisation occurs.

However, the growth in SMS is expected to slow as a result of increasing SMS prices globally. SMS will continue to be the primary channel for business-critical A2P messages, owing to its universality. However, larger brands that are experiencing revenue losses due to AIT fraud may look for other authentication channels to prevent significant losses from occurring. Operators will lose out on revenue to OTT messaging channels, as more brands and enterprises adopt an omnichannel approach and send promotional messages on OTT messaging channels instead. This will especially be the case in regions with a high penetration of OTT messaging apps.

The trend towards alternative channels will not be the case seen in all regions, as brands in many countries are at the early stages of their digital transformation and are yet to adopt mobile messaging to communicate with their customers. A2P SMS is expected to experience strong growth in Africa & Middle East.

## 1.4 RCS Messaging

RCS business messaging was first formed in 2007 and is a type of rich messaging which is a richer alternative to SMS. RCS allows users to send and receive rich media such as high-resolution images, videos and GIFs. Messages from brands are also verified.

### i. Overview of A2P RCS

RCS has emerged as a channel for sending A2P messages as the number of RCS-capable subscribers has increased substantially over the last two years due to



increased operator support of RCS. RCS messaging is currently only supported on Android devices, which has limited its adoption as a channel to send business-critical A2P messages. However, with Apple announcing in November 2023 that it will support RCS on iOS devices in 2024, this could have a significant impact on the A2P messaging market.

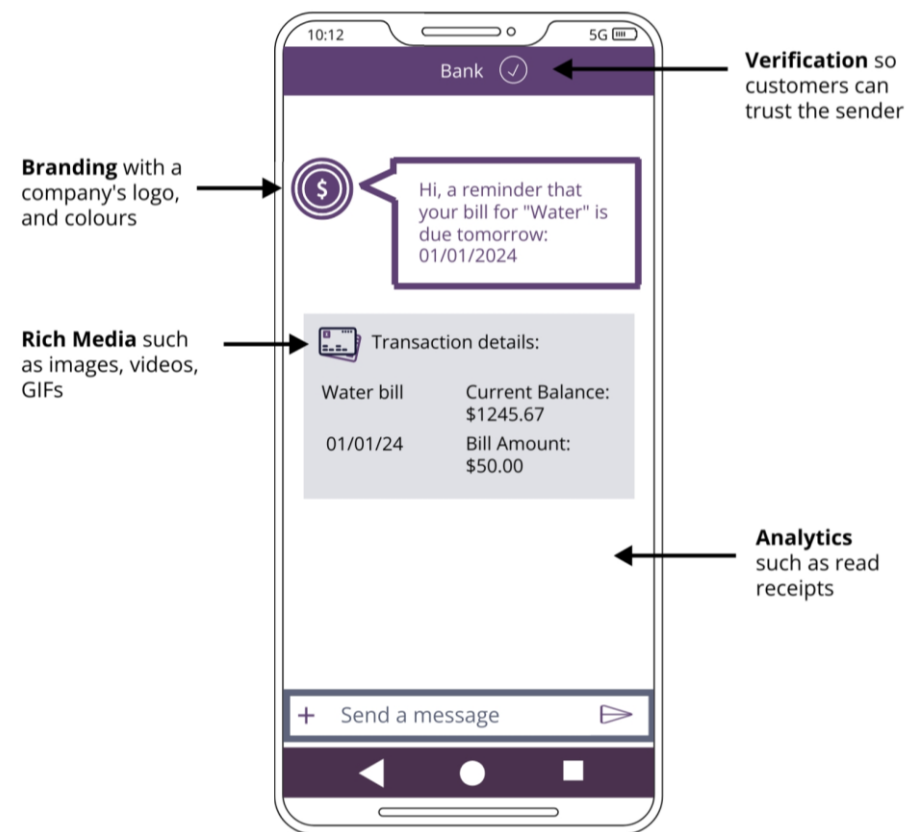
In order to support the move from SMS messages to RCS business messages, MNOs have introduced billing models for RCS messages that contain up to 160 characters, known as Basic Messages. Basic Messages will have price parity with SMS, and this will encourage the adoption of RCS, as brands and enterprises can receive the additional benefits of RCS without the additional cost. However, in order to increase adoption by brands and enterprises globally, there will need to be increased support for RCS by operators worldwide. Currently, there are inconsistencies between markets, and this fragmentation works against the adoption of RCS, as global brands will not be able to reach a large proportion of their customers.

One benefit of RCS messaging is that brands can become verified and can send branded messages. This ensures that the customer has trust that a message has been sent from a brand, and not a fraudster. In addition, RCS messages are end-to-end encrypted, whereas SMS messages are not, which improves security. These features will ensure that businesses within the banking and healthcare industries adopt RCS as a channel to send A2P messages, as these industries will benefit from the increased security and protection against some types of fraud observed with SMS. Google, who owns RCS, is also increasing investment into security and spam protection in order to prevent revenue losses from fraudsters.

Another benefit to brands using RCS Basic Messages is that they will get analytics, including on when the message has been received and read. RCS has been shown to have high read rates, similar to SMS, which means that brands can expect higher engagement from customers after sending an A2P RCS message.

As brands and enterprises become more familiar with sending RCS Basic Messages to engage with their customers, RCS will be used for a wider range of use cases, including conversational use cases. This will result in increased revenue for operators, as an increasing number of brands and enterprises will pay higher prices to send RCS messages with rich content such as images.

Figure 4: Example Use Case for A2P RCS Messaging and Key Features



Source: Juniper Research



## ii. Future of the A2P RCS Market

RCS has initially had a slow adoption by brands and enterprises, due to a lack of operator and device-level support. However, the announcement that Apple will support the RCS Universal Profile on iOS devices following a software update beginning in 2024 could have implications for the A2P messaging market, particularly in regions where the penetration of iOS devices is high.

This announcement will result in increased RCS support from operators globally and an increase in the number RCS-capable subscribers. In turn, with or without Apple's support of RBM (RCS Business Messaging) initially, an immediate increase in the number of brands and enterprises adopting RCS is expected. Successful use cases highlight the value that RCS can bring to brands, with the richer customer experience resulting in increased engagement from customers. With RCS, customers can trust that they are interacting with a brand due to the verification status and branded messages.

RCS Basic Messages having SMS price parity will also increase the adoption of RCS by brands and enterprises, as there are several benefits over SMS, including branding and analytics. Brands and enterprises will therefore become more familiar with RCS as a communication channel and RCS will then be used for more complex use cases, which operators can charge at a higher rate.

Driving the initial increase in RCS traffic will be industries such as banking and healthcare, which will benefit from the increased security of RCS as a messaging channel. RCS will be used by brands within the retail industry to send promotional A2P messages, and as messages become more personalised, this will result in higher engagement with messages and increased ROI (Return on Investment) for brands.

## 1.5 OTT Messaging

### i. Overview of A2P OTT Messaging

Another type of messaging channel that can be used for sending A2P messages is OTT apps. OTT messaging platforms are third-party apps such as WhatsApp,

Messenger and WeChat. Businesses can use these to send business messages for various use cases.

Juniper Research defines OTT messaging apps as:

*'Third-party messaging platforms that require an Internet connection to send messages rather than a being sent via a mobile operator.'*

#### a) WhatsApp

WhatsApp is the most popular OTT app in many countries globally. As of July 2023, it was estimated that there are 2.7 billion monthly active users of WhatsApp. Countries in which WhatsApp is popular include the UK, Brazil, India and Indonesia.

One country where WhatsApp has a high degree of penetration is Brazil, where 96% of the population is active on WhatsApp and there are over 147 million users of the messaging platform. The high penetration of the OTT messaging app in the country makes it possible for businesses to send A2P messages to a large proportion of their customers over the platform.

#### b) WeChat

WeChat functions as a messaging, social media and mobile payment app, and has 1.2 billion global users, the majority of which are in China. There are more than 800 million WeChat users in China, which accounts for more than half of the population, and the number of users is expected to continue to grow. WeChat can therefore be used by brands and enterprises to reach a large number of customers in China. Brands and enterprises will mostly use this messaging channel for sending promotional messages, as the penetration of the app is not high enough for enterprises to use this channel to send authentication messages.



c) *LINE*

LINE is the most popular OTT app in Japan, with over 70% of the Japanese population using the app, a total of 92 million users. The high penetration of LINE in Japan will result in brands and enterprises adopting LINE as a primary channel to engage with customers within the country.

d) *KakaoTalk*

KakaoTalk is the most highly penetrated messaging app in South Korea, with 93% of Korean Internet users using the OTT messaging app. Therefore, brands and enterprises within the country will adopt this channel for sending A2P messages, as a large proportion of customers can be reached across the platform.



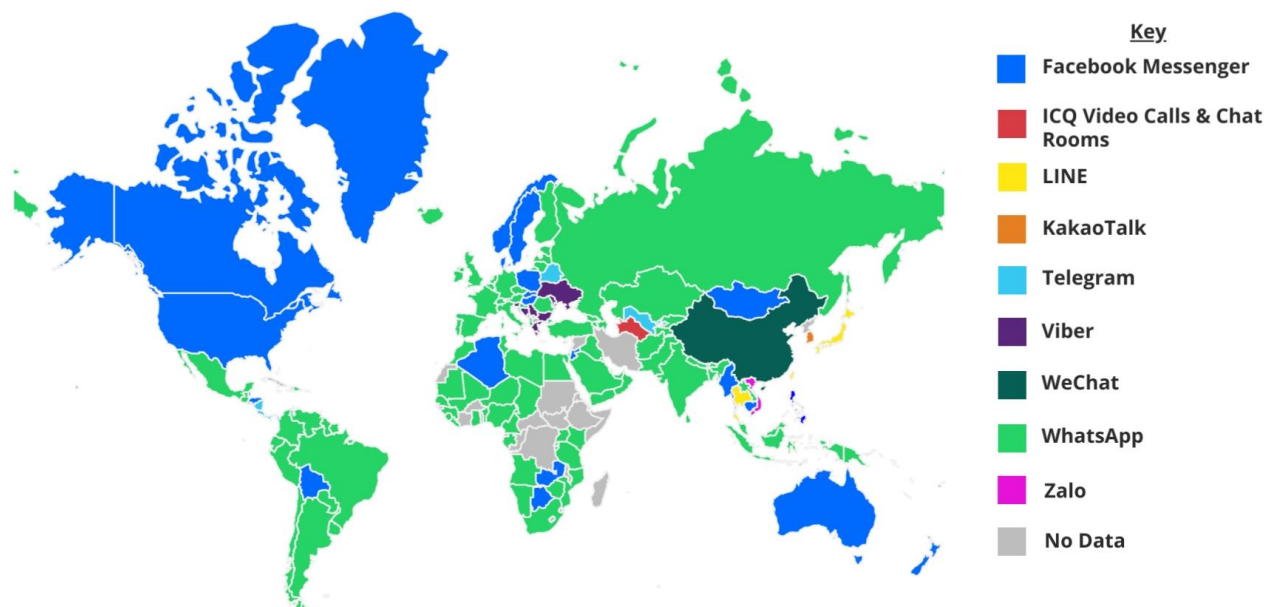
## ii. Future of A2P OTT Messaging Market

The number of A2P messages sent across OTT messaging channels is expected to significantly increase. OTT messaging will be adopted for promotional A2P messages initially, as it is not critical that these messages are delivered.

The trend is expected for OTT messaging apps in regions where these apps are highly penetrated. Brands are expected to adopt an omnichannel approach in order to reach customers across their preferred channels, and this will include sending promotional messages. However, the regional fragmentation of OTT apps will be limiting factor in its adoption for business-critical A2P messages such as 2FA and OTPs.

The key challenge for the use of OTT messaging platforms for A2P messaging is that messaging apps are regionally fragmented. This means that brands have to adopt an omnichannel approach, which can increase costs if a message is not delivered by the first channel, as this can mean the brand will be charged multiple times until the message is delivered.

Figure 5: Most Popular OTT Apps in each Country in 2023



Source: Juniper Research

OTT messaging apps are likely to be adopted for authentication in countries where there is a high penetration of an OTT messaging app, for example WhatsApp in Brazil. OTT messaging will compete more with SMS for use cases such as promotional messages, rather than authentication.



### 1.5.2 Fraud Prevention

As the A2P messages market continues to grow, this will also lead to increased fraud as there is increased opportunity for fraudsters to make profit. Therefore, it is essential that service providers invest in solutions to prevent fraud in order to ensure that messaging channels remain a viable option for business messages. In particular, there is a threat to SMS as AIT fraud has led to operators driving up the price of SMS. Due to this, it is essential that new solutions are found in order to protect SMS as a viable messaging channel.

An example of a service provider that has launched a solution to try and combat AIT fraud is CM.com. Its new platform feature, 'Safeguard: Destination Management', helps to combat AIT fraud by allowing for destination blocking and for the implementation of an allow-list. The destination blocking feature allows enterprises to block traffic to specific destinations, thus ensuring that the enterprise has greater control over its messaging traffic. The allow-list approach is where all messaging destinations are blocked by default, except for countries added to the allow-list. This solution will help enterprises experiencing loss of revenue due to AIT fraud.

Another example of a service provider that has launched a solution to combat AIT fraud is Infobip. This solution, known as Infobip Signals, uses machine learning to detect and block fraudulent traffic by identifying a series of numbers generating OTPs in order to protect a brand from the generation of fake accounts.

Soprano Design's fraud prevention and detection solution allows businesses to set parameters about where OTPs are sent to. For example, OTPs can only be sent to destinations below a certain risk threshold. This is similar to CM.com's approach of blocking certain destinations. This solution could also result in some genuine consumers not being able to receive OTPs, although it would protect a company from revenue losses as the result of AIT fraud.

Regulations have also been introduced by some governments in order to try and protect consumers from fraud. One example is in Malaysia, where SMS messages containing URLs are blocked in order to prevent consumers from malicious content contained within links.

Another way enterprises can protect themselves from AIT fraud is to make the signup process more advanced, with multiple fields included. This makes it harder for bots to generate OTPs. Moreover, an OTP timer can be set, between when the first OTP is generated and the next, in order to delay a bot from continuously generating OTPs.

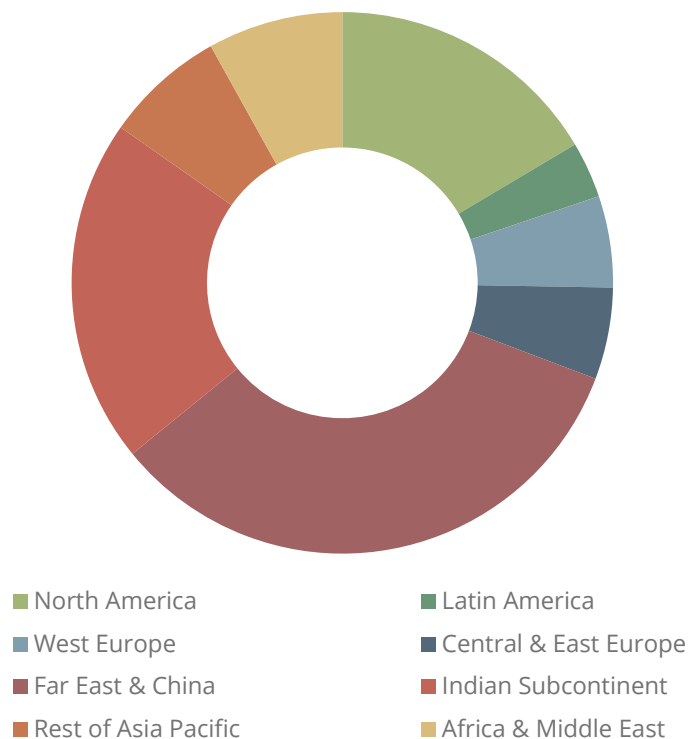
The introduction of rules by major operators in the US mean that enterprises are charged in order to be approved for sending SMS messages through the A2P 10DLC framework, where without the compliance, the messages will not go through. This helps protect consumers by categorising A2P traffic and preventing spam from being sent.



## 1.6 Market Forecast Summary: Global RCS Active Users and Operator Revenues in 2025

Global operator revenue from RBM traffic will grow from \$1.3 billion in 2023, to \$8 billion in 2025. This substantial growth will be largely driven by Apple's announced support of RCS technology in late 2024.

Figure 6: MNO Revenue from A2P RCS Traffic In 2025 (\$8 Billion), Split by 8 Key Regions



Source: Juniper Research

- Apple's entrance into the market, with support over iOS devices, will grow the number of active users by 900 million over the next two years; reaching 2.1 billion active users globally. This will increase the value proposition of RBM amongst enterprises. In turn, this growth will encourage more operators to roll out the technology over their networks, attracted by the significant growth in RBM termination revenue.
- Additionally, RCS will become a key technology for operators in the business messaging ecosystem, given the high levels of fraud affecting the SMS business messaging sector. It predicted that the launch of RCS will enable operators to retain business messaging traffic over telecoms networks, as SMS growth slows, and OTT business messaging channels continue to experience significant growth.
- For the first time, the value of SMS is being questioned by enterprises. Operators must act quickly if SMS fraud and high prices cannot be resolved. Apple's introduction raises the profile of RCS, a technology that has historically been hindered by a lack of support, and can become a substitute for SMS business messaging traffic.



## Order the Full Research

Benefit from invaluable insights into key trends and strategic guidance for A2P message vendors in global markets in this latest report. With data split by seven key market verticals across three channels, the report identifies key focus markets from the Country Readiness Index, and reveals 27 leading vendors via the Competitor Leaderboard, plus briefings with more than 10 vendors. With unparalleled coverage, this research suite is an incredibly useful resource for charting the future growth across different A2P messaging channels.

### Key Features

- **Market Dynamics:** Insight into the A2P messaging market by giving an in-depth overview of each messaging channel, including the challenges that must be overcome in order for each channel to grow. In particular, it addresses the impact that AIT (Artificially Inflated Traffic) fraud and the rising SMS prices will have on the future growth of A2P SMS, and highlights how Apple's support of RCS in 2024 will change the market dynamics. The A2P messaging research also includes an analysis of key market verticals, including which channels will be most popular for A2P messaging depending on the use case.
- **Key Takeaways & Strategic Recommendations:** In-depth analysis of key development opportunities and findings within the A2P messaging market, accompanied by key strategic recommendations for stakeholders.
- **Benchmark Industry Forecasts:** The overview into the A2P messaging market includes forecasts for total A2P messaging revenue for operators, split by key market verticals.
- **Juniper Research Competitor Leaderboard:** Key player product and positioning, and capability and capacity assessment for 27 vendors within the A2P messaging space, via the Juniper Research Competitor Leaderboard.

### What's in this Research?

1. **Market Trends & Opportunities:** Detailed analysis and strategic recommendations for the conversational commerce market, looking into the future market outlook for conversational commerce channels, across 8 key regions. This is aligned with market forecasts and interviews with conversational commerce vendors. Also included is a Country Readiness Index that positions countries as focus, growth, saturated, or developing markets, depending on their market readiness and opportunity for future growth.
2. **Strategic Analysis:** Assessment of future prospects and developments of conversational commerce; focusing on key trends and market challenges. The report also includes an evaluation of 19 leading conversational commerce vendors via a Juniper Research Competitor Leaderboard.
3. **Interactive Forecast Excel:** Highly granular dataset comprising over 117,000 data points; allied to regional and sector analysis tools. Includes regional and key country-level analysis, together with five-year forecasts for Conversational Commerce users and spend.
4. **harvest Digital Markets Intelligence Centre:** 12 months' access to all the data in our online data platform, including continuous data updates and exportable charts, tables, and graphs (ONLINE).



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