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Application-to-Person Messaging

Helping enterprises to respond to consumers' changing communications behavior

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Contents

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Introduction

Ovum view

Changes in consumers' communications behaviors are driving the evolution of the application-to-person (A2P) mobile messaging market. For the moment, SMS remains a key mobile communications channel for enterprises to reach consumers and employees. It is inexpensive, universally available on devices, reliable, and quick.

The distinctive qualities of SMS make it attractive to multiple industry verticals, including retail, media, Internet, telecoms, banking and finance, and travel and hospitality. In addition, OTT communications apps have become one of the largest enterprise users of SMS, the service that they were intended to replace, primarily for user authentication and verification. Other use cases for SMS broadly cover communications, transactions and payments, and content distribution.

However, the overall trend is toward mobile consumers using third-party apps for services such as instant messaging and voice and video calling. This is a dynamic for which enterprises need to prepare themselves if they are to remain relevant to their customer bases. Services such as Viber, WhatsApp, and Facebook Messenger will soon bring a global dimension to A2P messaging via communications apps. So far OTT services have had most of their success in Asia, where WeChat, Line, and Kakao Talk all generate significant revenues from A2P.

App-based push notifications are becoming an established method by which enterprises interact with their customers, but they are not yet widely used. This is because of the effort required from an enterprise to develop an app and then to convince mobile users to download it. Consumers are also wary of opting into a large number of push notifications.

MMS remains a telco service, but it is expensive by comparison with communications apps, meaning that those users who wish to send pictures or videos are more likely to use an app. From an enterprise perspective, MMS still has a following in the media and content and telecoms service provider industries, but primarily in organizations' sales and marketing functions.

It is important for enterprises and the wider industry to have insight into how the A2P messaging market is developing. From a qualitative perspective, trends include the emergence of new communications channels and the way the supply chain is innovating to provide an improved experience for end users and enterprises (for A2P SMS as well as for emerging technologies). From a quantitative perspective, it is useful to measure the extent to which enterprises are currently using A2P SMS to interact with customers and employees, the level of penetration of the services they have recently added to their multichannel arsenals, their expectations for their future use of communications channels, and the degree to which they are engaged with emerging technologies such as WebRTC.

Key findings

- The popularity of communications apps is causing a decline in mobile operators' person-to-person (P2P) SMS traffic and revenues, although A2P SMS remains a key communications channel for enterprises in multiple industry verticals and across multiple use cases.
- To ensure the continued efficacy of A2P SMS, connectivity service providers, cloud communication companies, and vendors are all working to make it easier for enterprises to include SMS in their business processes. They also aim to ensure the best possible quality of experience, particularly as commoditization creates a challenging business environment for traditional players.
- Consumers' communications behaviors are changing, which has already resulted in an expansion of the channels through which enterprises interact with their customers and employees. Relatively new channels for enterprises include social media and social networking, app-based push notifications, and communications apps.
- The A2P messaging industry is also working to make it easier for enterprises to engage with the providers of communications apps, so that they can interact with their customers or employees using these apps. WhatsApp is the most recent chat app provider to commit to enabling its users to interact with enterprises.
- An independent survey conducted by Ovum has confirmed that SMS remains the primary mobile-specific data service that enterprises use to contact their customers – and by a wide margin. However, instant messaging is the next-most-used service, indicating that it is rapidly becoming a more accepted communications channel for enterprises.
- More than 50% of the total respondents to Ovum's survey said that they expect their organizations' use of SMS, social media, and email to increase over the next 12–24 months; slightly more than 40% said the same with regard to their use of messaging apps and push notifications. Overall, the trend is one of continuing growth across both traditional and newer communications channels.
- When asked about whether their organization's increasing use of messaging apps would impact their SMS traffic, and to what extent, 30% of total respondents said they expected no change. However, 15% said they expected their SMS usage to increase by up to 10%.
- The largest proportion of respondents to the survey said that their organizations sent up to 1 million messages per month across all four services surveyed (SMS, MMS, instant messaging, and app-based push notifications). Few respondents indicated that their organizations sent more than 500 million messages per month; those who did represented manufacturing, media and content, and travel and hospitality companies, as well as telecoms service providers.
- Overall, whether targeted at consumers or employees, the survey found that communications-related use cases generate the most SMS traffic for enterprises, whether customer communications, company announcements, crisis management, or field force scheduling and management.
- When asked which alternatives to SMS their organizations used, a high proportion of respondents listed email as their main alternative for all use cases, followed by outbound voice calling and social media and networking.
- Price and reach are still the main decision-making factors for enterprises when selecting a distribution partner for their A2P SMS traffic.
- Ovum also asked respondents to share their experiences with regard to WebRTC. Fewer than one-third of respondents' organizations had commercially deployed a WebRTC-based service, were trialing WebRTC, or were considering using WebRTC. This indicates that the technology is still some way from mainstream enterprise adoption.

Key trends in messaging

Consumers' mobile communications' behaviors are undergoing rapid transition, driven by the increasing penetration of IP-based mobile and fixed networks and of Internet-enabled devices. Mobile users are moving away from SMS and network-based voice and toward app-based instant messaging and voice. The extent to which this transition occurs in any given market is dependent on the penetration of IP-based networks and Internet-enabled devices in that market.

Although communications apps such as WhatsApp and Facebook Messenger have approximately 1 billion monthly active users (MAUs), the fragmentation in communications apps means that SMS and network-based voice remain relevant as universal communications channels – at least for now. Many mobile operators are seeing their P2P SMS traffic and revenues decline, but enterprise engagement with A2P SMS is increasing, again primarily due to the universality of SMS. Even so, all players in the messaging value chain are positioning themselves to also enable IP-based communications services.

P2P SMS declines as use of OTT communications apps grows

The increasing popularity of OTT communications apps is causing a reduction in mobile operators' P2P SMS traffic and revenues. This is especially so in markets with a high penetration of smartphones and mobile broadband and those where mobile operators did not move quickly enough to apply a defensive strategy. For example, in markets such as Spain, the Netherlands, and South Korea, operators typically charged high per-message prices for SMS and were slow to offer affordably priced bundles of unlimited SMS. This meant that large numbers of mobile users in these countries adopted communications apps such as WhatsApp and KakaoTalk, which enabled free in-app messaging.

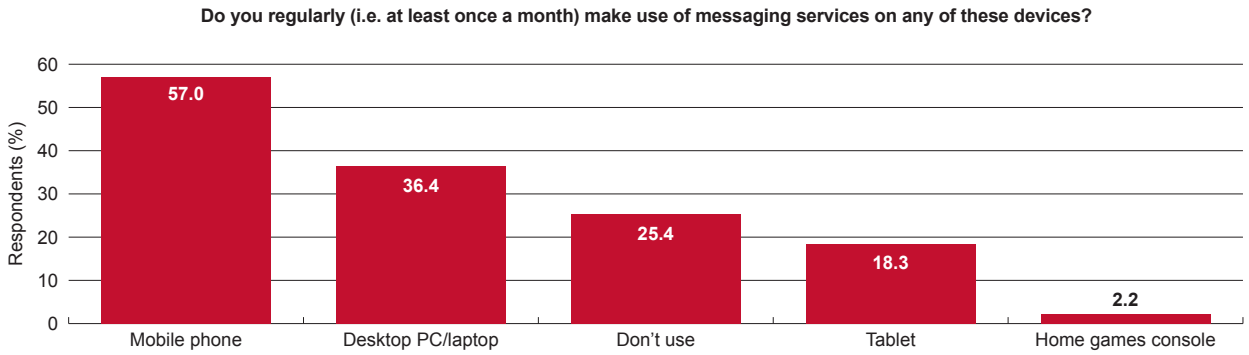
This led to a decline in SMS traffic. For example, Spain saw its total SMS traffic fall by almost two-thirds, from 11.8 billion messages in 2008 – the year prior to the release of WhatsApp – to 2.24 billion messages in 2014. KPN Netherlands has seen a similarly precipitous fall in its SMS traffic, from 1.8 billion messages in 2010 to just 560 million in 2013.

At an aggregate level, Ovum estimates that in 2015, annual global SMS traffic totaled 6.07 trillion messages, down fractionally from 6.2 trillion messages in 2014. By comparison, WhatsApp's annual global traffic was more than double that, at 14.4 trillion messages. This gradual decline in SMS traffic is the result of a mix of factors:

- Operators deploying mitigating strategies such as unlimited text bundles, which encourages their subscribers to use SMS.
- Stronger growth in SMS in developing markets, where the penetration of smartphones and mobile broadband lags behind that in the developed world.
- The increasing use of A2P SMS, as enterprises become more aware of the benefits of using SMS as a communications channel for external and internal purposes.

Meanwhile, consumers' appetite for communications apps continues to grow. Approximately 75% of users globally used these apps, according to Ovum's 2015 Consumer Insights Survey of 16,000 consumers in 16 countries. As Figure 1 shows, mobile device use continues to race ahead: 57.0% of respondents used messaging apps on their mobile phones and 18.3% used them on their tablets. Multi-device access is also a key trend, with 36.4% of respondents using messaging apps on their desktop or laptop PCs (multiple responses were allowed). In markets such as Brazil, India, Indonesia, Mexico, South Africa, and Turkey, the proportion of users accessing messaging apps on mobile phones exceeds 70%; desktop penetration is also comparable with more developed markets, likely due to the use of Internet cafes.

Figure 1: Consumer use of messaging services, by device



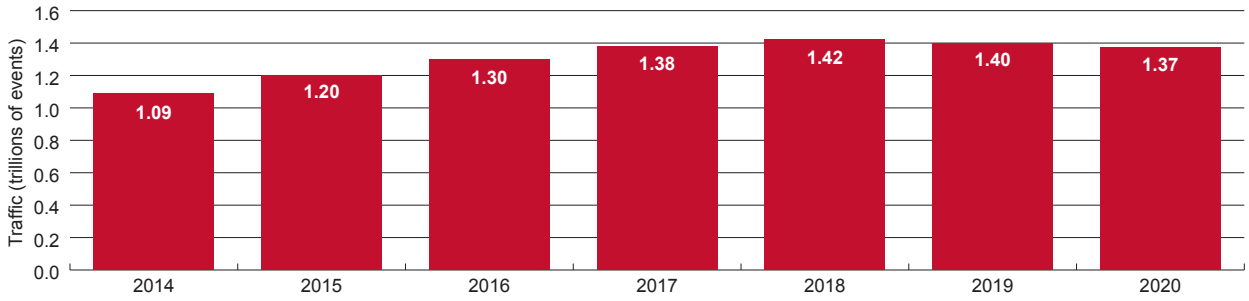
Note: N=11,154

Source: Ovum's Consumer Insights survey 2015

Enterprise adoption of A2P SMS strengthens

Even as P2P SMS traffic and revenue decline, mobile operators – and elements of the enterprise messaging supply chain in general – are seeing a rise in the use of A2P SMS by enterprises. As Figure 2 shows, Ovum forecasts that A2P SMS traffic will increase from 1.20 trillion messages in 2015 to 1.42 trillion messages in 2018. It will then begin a gradual decline as enterprises start to use IP-based communications to reach their customers and employees.

Figure 2: Global A2P SMS traffic, 2014–20



Source: Ovum

The key drivers for increased enterprise use of SMS are its universal reach and low cost. Ovum believes that global mobile penetration (i.e. connections as a percentage of the population) stands at 98.6% and SMS is a standard feature on all mobile devices. Enterprises across a number of vertical industries are realizing that to quickly and inexpensively reach their addressable customer or employee base on their mobile devices they need to use SMS.

Another factor driving the increased use of A2P SMS is enterprises' growing awareness that SMS is becoming easier to deploy. For example, SMEs are using software that enables them to send SMS messages to their customers. In addition, cloud communications providers such as Twilio and Nexmo provide APIs to enterprises, enabling them to add voice and SMS to their existing business processes. Cloud communications providers also offer voice and SMS connectivity services and value-added services (VAS) aimed at improving the A2P SMS experience. In addition, they partner with IT vendors to integrate communications capabilities into business software.

Case study: MakeMyTrip

MakeMyTrip is an online travel provider in India that provides booking services for hotels, airlines, car rental agencies, and public transport (bus and train). The Nasdaq-listed company offers these services both direct-to-consumer and via travel agencies and retail outlets. Established in 2000, MakeMyTrip is regarded as India's leading online travel company, with five million customers; as of 2013 it claimed 47% market share. To remain relevant and retain market share, MakeMyTrip has diversified into the development of digital products, recently launching RightStay, a luxury hotel booking app.

Although the Internet-savvy consumer is MakeMyTrip's target audience for both its core product and its newer digital services, SMS is the company's key channel for customer communications. This is partly because travel agencies and retail outlets comprise a significant proportion of MakeMyTrip's business. It is also partly because of the characteristics of India's mobile market; the penetration of Internet-enabled devices and networks in the country is relatively low, particularly in rural and remote areas. In addition, those consumers with Internet-enabled devices typically switch off data when not using it.

MakeMyTrip typically uses SMS to confirm essential travel details, following a message with an email containing additional information. For those customers who request push notifications, MakeMyTrip will also send an SMS when the communication carries a higher priority, to make sure that the customer receives the message even when they do not have a data connection. The company is moving away from using SMS for marketing and promotions because it believes that its customers regard such messages as spam. Instead, MakeMyTrip is using app-based push notifications as a promotional channel.

MakeMyTrip regards technology as the heart and soul of its service. The company believes that it must keep pace with the demands of its core customers (i.e. Indian consumers) and that it must address the mobile-first dynamic of the Indian market. These factors drove MakeMyTrip to introduce apps, as well as create services for the feature-phone market. Its apps have been downloaded approximately 2 million times and generate 20% of its traffic. In addressing the feature-phone market, MakeMyTrip pioneered natural language speech processing for SMS and it offers a range of features via SMS.

Looking forward, MakeMyTrip is deploying instant messaging across its new digital product line, enabling its customers to chat with its contact center service agents. The company does not believe that instant messaging will replace SMS in this use case; rather, it expects it to become a complement to voice. MakeMyTrip is also planning to add services such as location-based search and live updates while travelling. Ovum believes that MakeMyTrip will likely partner with WhatsApp, which is extremely popular in India.

A2P SMS commoditization drives innovation

To enable A2P, SMS enterprises typically work with third-party connectivity providers, including wholesale carriers and SMS aggregators, rather than with mobile operators. These companies have focused on building reach via direct connections with operators and partnerships with other messaging aggregators; they provide enterprises with a range of VAS. VAS have become important as low-cost messaging aggregators drive down the per-message price of A2P SMS, making it difficult for higher-end providers to generate sustainable revenues solely from reselling bulk SMS and associated services. In addition, cloud communications providers are challenging the role of the traditional connectivity service providers.

Improving quality: SMS firewalls and revenue assurance platforms

The universal availability of SMS has made it a target for fraudulent activity, which typically targets consumers and mobile operators. Consumer-directed fraudulent activity includes spam, phishing attacks, and the distribution of malware via links to mobile websites. Fraud that is aimed at the mobile operator includes the use of "grey routes" and SIM farms.

Grey routes are defined as those for which there is no commercial agreement between the sender (typically a low-cost aggregator) and the mobile operator on whose network A2P SMS traffic is terminated, which means that the operator does not receive SMS termination revenues. Once an operator has identified and shut down grey routes into its networks, fraudsters often use SIM farms as an alternative. SIM farms operate banks of SIM cards and take advantage of the consumer price plans many operators offer, which include large or unlimited buckets of SMS. In this scenario, the operator risks losing revenues because it cannot distinguish between a P2P SMS and what should be a higher-value A2P SMS.

More mobile operators are deploying SMS firewalls and revenue assurance platforms from vendors such as Anam, Adaptive Mobile, and Symsoft to detect and report on traffic that is being terminated on their networks. These platforms allow operators to identify SMS spam or SMS that originates from a grey route or a SIM farm and block the spam or shut down the grey route or SIM farm. Although blocking SMS messages may disrupt legitimate traffic from enterprises that are unaware of how their A2P SMS traffic is being routed, the operator can work with the affected brands to recoup their revenues and provide a higher-quality service. The enterprises may pay higher prices, but their traffic will be terminated legitimately either directly on the operator's network or through an approved "white" route.

Mobile operators that use SMS firewalls and revenue assurance platforms to block SMS spam and to shut down grey routes and SIM farms will help improve enterprise messaging quality and reliability. As a result, they will help build brand confidence in SMS as a mobile communications channel.

Improving effectiveness: analytics, insights, and verification

The commoditization of A2P SMS means that connectivity service providers are offering VAS that enable them to generate additional revenues. Some connectivity services providers offer their mobile operator and aggregator customers managed services such as SMS firewalls. They may also offer their enterprise customers analytics and reporting tools, customer engagement platforms for mobile loyalty and couponing, and the ability to use SMS for two-factor authentication.

Cloud communications providers offer their enterprise customers APIs that enable them to verify phone numbers (Verify API) and to find out information about a number (Number Insights API). These services increase the reliability of the communications between the enterprise and its target audience.

Improving reach: a significant role for partnering

As the A2P SMS market evolves, two types of partnership are emerging: partnerships between cloud communications providers and original equipment manufacturers and partnerships between aggregators and mobile operators. Both of these types of partnerships will further open up the enterprise messaging market by making it easier for enterprises to access and use A2P SMS (and other forms of communications).

Cloud communications companies see value in working with enterprise software companies to better access the enterprise market. In turn, enterprise software companies see value in working with a cloud communications provider to allow their customers to more easily integrate messaging into their business processes. For example, Twilio has partnered with Microsoft and IBM and Nexmo is working with SAP, Salesforce.com, and Marketo.

Mobile operators are also considering how they can play a bigger role in providing A2P SMS, beyond the sale of bulk SMS and SMS termination. Some operators are already working with aggregators on a "business-as-a-service" basis. In this type of partnership, the aggregator provides the operator with the hosted infrastructure that allows it to target the enterprise market directly. Infobip is one example of an aggregator that is already working with a number of mobile operators on this basis.

Service providers lay foundations for IP-based communications

A2P SMS is key for enterprises in terms of their communications with customers and employees, but it is typically part of a multichannel engagement strategy that also includes outbound voice and email and social media and OTT communications apps. The providers of connectivity services, communications infrastructure, and cloud communications are positioning themselves to provide IP-based communications services to their enterprise customers.

Chat apps will play a central role in the next generation of A2P communications. A large proportion of consumers regularly use an OTT communications app to access services such as messaging and voice and video calling. It is therefore logical that enterprises will want to interact with consumers via their chat apps; indeed, this is already happening in Asia, where enterprises are engaging with the users of the local apps WeChat, Line, and Kakao. The next stage of development will see other chat apps around the globe opening their platforms to enterprises. They will do this by working with connectivity service providers, cloud communications companies, and communications infrastructure vendors.

Other IP-based services and technologies such as web chat (text, voice, and video), click-to-call (for example, via Skype), and WebRTC-based voice or video chat/conferencing will also be important. These types of services are mostly accessed via the desktop, but consumers will become more accustomed to accessing them via their mobile devices. (See below for more detail on enterprise perspectives on WebRTC.)

OTT communications apps seek greater engagement with enterprises

As previously mentioned, the Asia-headquartered chat apps WeChat, Line, and Kakao already generate significant revenue from allowing enterprises to access or provide services to their respective user bases. Enterprises can use these instant messaging apps to send their customers advertising and promotional offers, to provide games and content, to offer payments and financial services, and to enable taxi, flight, or hotel bookings among other services. In addition, Line is enabling enterprises to add chat bot capabilities to their Official Accounts so that brands can further automate some of their interactions with customers, for example enabling users to access news, information, or customer service functions.

Elsewhere, efforts by communications apps to engage with enterprises have offered neither the breadth of capabilities nor produced revenues seen in Asia. The communications apps typically offer games or content channels or allow brands to market to their users. Facebook is trialing P2P payments and has established the Businesses on Messenger service. Initially both initiatives were limited to the US, but in March 2016 Dutch airline KLM announced that its customers can opt-in to receive their booking confirmation, check-in notification, boarding pass, and flight status updates via Facebook Messenger. Facebook has referred to KLM as its first airline partner, indicating that further such partnerships are in development.

In January 2016 WhatsApp announced that it intends to develop tools that will allow its users to communicate with enterprises and other organizations. This is a potential game-changer for A2P, given the chat app's 1 billion-strong MAU base. The tools that WhatsApp likely intends to build would allow enterprises and other types of organizations to use its service in the same way that they use A2P SMS. It would also mean that WhatsApp becomes a legitimate communications channel within

the enterprise. At the moment there is a certain amount of use of "shadow" IT or "stealth" IT, where employees unofficially use apps such as WhatsApp to set up chats with their colleagues or the general public.

Another potential game-changer is Facebook's addition of chat bot capabilities for Facebook Messenger, announced at its F8 developer conference in April 2016. As mentioned previously, chat bots will enable developers to create automated instant messaging interactions for accessing content (e.g. news, weather, health, games, entertainment), e-commerce, and customer care among other functions. At launch, Facebook had lined up partnerships with brands such as The Wall Street Journal, CNN, Bank of America, Burger King, Expedia, Rogers, Salesforce, and UNICEF, although only a handful of companies were live with the capability.

Case study: Nexmo

Cloud communications company Nexmo is one of the new breed of service providers focused on giving developers and enterprises APIs and connectivity services to make it easier to integrate communications capabilities into existing software platforms. Companies such as Nexmo and Twilio are reinvigorating the enterprise messaging market by making it more accessible to a wider cross-section of companies, spanning multiple industry verticals and markets and company sizes.

Since its inception in 2010, Nexmo has amassed more than 100,000 customers across multiple verticals, including thousands of enterprise accounts. In 2015 the Nexmo platform supported 4.4 billion API calls – up from just 116 million in 2011. More than half of the company's revenue is generated by its Messaging API, but the revenues from its newer Voice, Verify, Number Insight, and Chat App APIs are growing. Nexmo's KPIs suggest that it is addressing a previously unmet demand from enterprises for simpler access to communications capabilities and for associated VAS. Telcos and traditional messaging aggregators have not adequately addressed this demand, having tended to focus on connectivity services.

Nexmo seeks to cover all facets of communications with its seven public APIs (Messaging, Voice, Number Insight, Verify, US Short Codes, Developer, and Conversion). Most of the APIs are aimed at enabling the integration of the services with which they are associated. However, the Verify and Number Insight APIs allow developers and enterprises to check whether a number is still valid and to find out other information about that number prior to using it. These two APIs enable enterprises to be more effective in their communications with customers and employees.

Nexmo has direct connections with approximately 300 operators and indirect connections with approximately 1,400 (via aggregators). It uses Adaptive Routing technology to find the best route to deliver an SMS into a market. Providing a wide reach means that enterprises with operations in multiple countries can offer a consistent communications experience for their customers and employees.

In addition to working with enterprises across traditional industry verticals, Nexmo is working with organizations in emerging industry verticals, including OTT communications application providers (chat apps). The company provides approximately 40 chat apps with either its Verify or Messaging API for two-factor authentication via SMS; these companies include WeChat, Viber, and Line. As the penetration of chat apps grows, enterprises are starting to use them to interact with their customers and employees. So far, "official" enterprise use of chat apps occurs mostly in Asia, although "unofficial" enterprise use of chat apps is a global trend. Nexmo is keen to enable enterprises around the world to access not only the users of apps such as WeChat, Line, and Kakao, but also the users of chat apps that are more popular in other parts of the world.

Enterprise use of messaging – current status

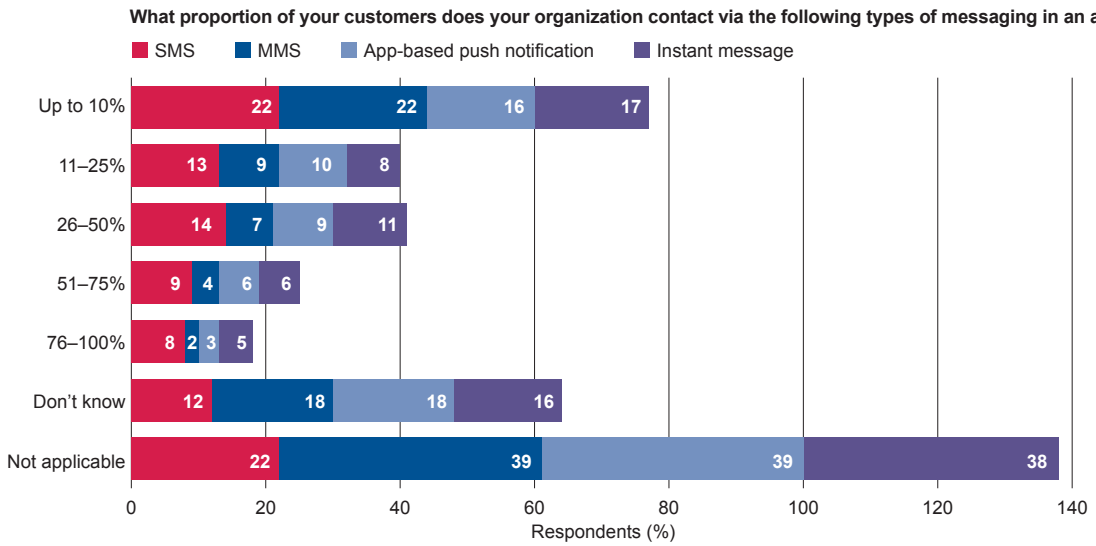
In November and December 2015 Ovum conducted an Enterprise Messaging survey on behalf of Tata Communications, canvassing 575 industry executives across 12 industry verticals. The objective of the survey was to gain insight into respondents' current and future use of A2P SMS, including traffic volumes, use cases for consumers and employees, and the use of SMS in the context of other communications channels such as MMS, email, outbound voice, and instant messaging (OTT messaging). The survey also canvassed respondents on their current and future use of IP-based communications services, including OTT messaging and WebRTC.

SMS remains key, but instant messaging is gaining

The Enterprise Messaging survey found that of the four main ways enterprises use mobile messaging services to contact their customers – SMS, MMS, app-based push-notifications, and instant messaging – SMS remains the primary communications channel for enterprises overall. In total, 66% of total respondents contacted some or all of their customers via SMS in an average month and 47% contacted some or all of their customers using instant messaging, compared to 43% each for MMS and app-based push notifications.

Across all verticals the highest proportion of respondents contacted some or all of their customers via SMS. In some verticals – manufacturing, Internet, device vendor, and telecoms service providers – 80% or more of respondents did so. Instant messaging was not far behind: in half of the verticals canvassed, the next-highest proportion of respondents said they contacted some or all of their customers via instant messaging each month. MMS ranked next-highest to SMS in the manufacturing, device vendor, and Internet verticals; app-based push notifications were next-highest to SMS in the media and content, telecoms service provider, and travel and hospitality verticals.

Figure 3: Mobile messaging services used to contact customers



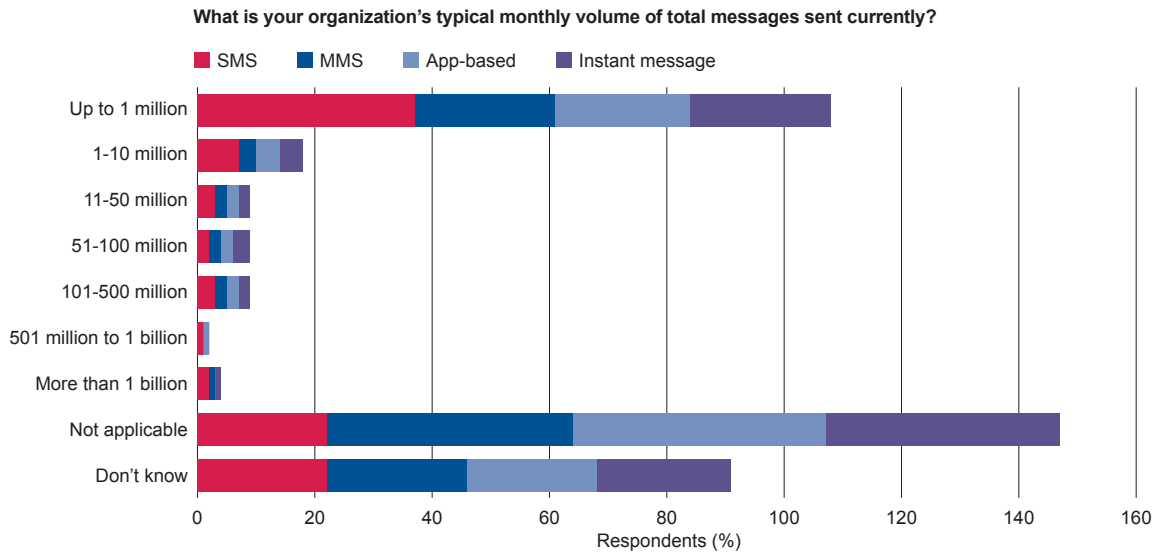
Note: N=514

Source: Ovum Enterprise Messaging Survey 2015

In terms of organizations' typical monthly volume of messages, the survey results show that SMS is the channel used by most respondents to contact their customers. By channel, the highest share of respondents, 37%, said that their organizations sent up to 1 million SMS messages per month, followed by MMS and instant messaging (24% each) and app-based push notifications (23%).

As Figure 4 shows, most respondents' organizations sent fewer than 1 million messages per month, which reflects the fact that 59% of survey participants worked for companies with up to 250 employees. Most, but not all, smaller companies would have fewer customers, so their external communications would be more targeted and possibly reactive – appointment reminders, for example. This type of traffic would be irregular, unlike scheduled SMS mass marketing campaigns conducted by a large media companies. Smaller companies would also typically not have the technical resources to establish internal communications.

Figure 4: Total messages sent per month



Note: N=498

Source: Ovum Enterprise Messaging Survey 2015

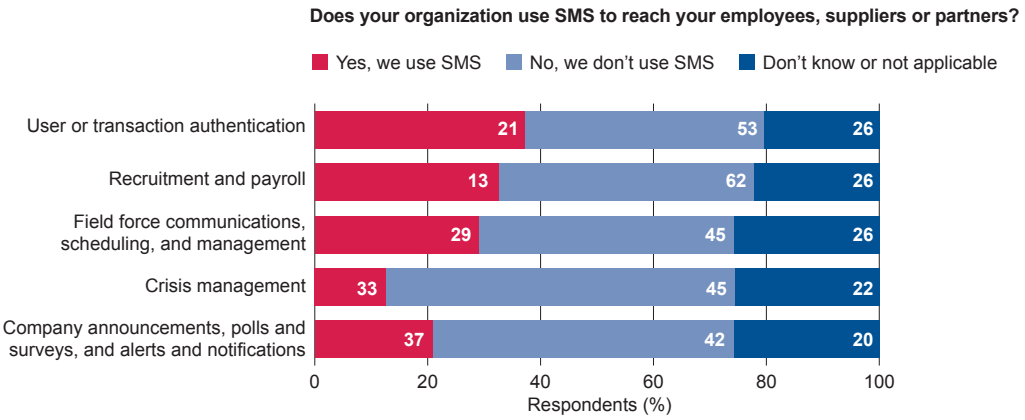
SMS is consistently used for customer-facing activities, but use varies for employee communications

Ovum canvassed survey respondents on their use of SMS for communications with their customers and their employees. Some of the SMS use cases surveyed were common to both customers and employees: communications (such as announcements, polls and surveys, and alerts and notifications), crisis management, and user or transaction authentication. Others were specific to employee communications only: field force communications and recruitment and payroll.

The survey found that, for customer-facing activities, a high proportion of respondents overall and per vertical used SMS for all of the use cases. This indicates that enterprises universally accept SMS as a communications channel and that they are happy to use it across multiple touchpoints with their customers.

Organizations' use of SMS for contacting employees, suppliers or partners is a different story, with significant variation between respondents' use of SMS. This indicates that enterprises have different priorities for SMS when using it for internal communications. Overall, 37% of respondents said their organization used SMS for company announcements, polls and surveys, and alerts and notifications. The next-highest proportion of respondents, 33%, said that they used SMS for crisis management. Just 13% said their organizations used SMS for recruitment and payroll.

Figure 5: Enterprise use of messaging to reach employees, suppliers, or partners



Note: N= 486

Source: Ovum Enterprise Messaging Survey 2015

Use of SMS was highest among respondents from the telecoms service provider and central and local government verticals. The high usage of SMS among telecoms service providers is likely because they are more aware of the benefits of the technology for internal as well as external communications and because they can use their own infrastructure, reducing costs. Meanwhile central and local government departments are held publicly accountable for their expenditure; SMS is a communications technology that has helped them to reduce the cost of internal communications while at the same time improving the efficiency of their operations.

Communications-related activities are predominant use cases for external and internal interactions

Overall, most of an organization's SMS traffic is communications-related, whether directed at customers or at their employees, partners, and suppliers. The use of SMS for communications-related activities highlights organizations' first priority: keep customers and employees informed and engaged. Once this priority is met, enterprises typically expand their use of SMS to resolve other business challenges. This means that enterprise priorities can shift from communications to engagement – time-dependent special offers or surveys and polls, for example.

Ovum's survey found that, for customer-facing traffic, 32% of respondents overall said that their organizations sent up to 1 million SMS messages per month focused on customer communications. A further 25% said they sent up to 1 million per month for information and entertainment and 23% sent up to 1 million per month for crisis management. For internal traffic, the highest proportion of respondents, 33%, again said that they sent up to 1 million SMS messages per month for company announcements, polls and surveys, and alerts and notifications, followed by 23% for field force communications scheduling and management and 22% for crisis management.

SMS is also the most-used communications channel by organization department across all the industry verticals canvassed, with sales teams being the highest users; 38% of respondents said their sales departments used SMS. The high response rate for the sales department is again indicative that SMS is fairly commonly used by organizations to contact customers during the sales process, for purposes such as confirming a purchase, providing order tracking, confirming delivery, and requesting feedback.

Email, voice, and social media are the main alternatives to SMS

Ovum also canvassed survey respondents on their use of alternatives to SMS for multiple use cases. The alternatives to SMS comprised mature services such as outbound voice, email, IVR, and MMS and newer capabilities such as app-based push notifications, messaging apps, and social media.

Across all use cases, the main alternatives to SMS that respondents said their organizations used when communicating with their customers consisted of a mix of the old – outbound voice and email – and the new – social media. Email far outstripped both social media and outbound voice as the most-used alternative to SMS. Consumers are long-accustomed to supplying service providers with their email address in return for receiving newsletters, product announcements, and special offers.

Behind email, social media leads outbound voice for voting and polling, customer communications, time-dependent special offers, ticketing, payments and donations, and information and entertainment. This indicates enterprises' recognition of the central role that social media plays in their customers' lives and their willingness to embrace social media themselves as a way of staying closer to their customers.

However, outbound voice leads social media for crisis management and user/transaction authentication, which makes sense from the perspective that outbound voice is a more direct form of communication than social media. For crisis management, outbound voice would be more effective for a one-to-one use case such as a financial institution contacting a customer about a fraud alert.

Destination reach and price rate highly in choice of distribution channel

It appears that there remains a lack of awareness among enterprises regarding the importance of ensuring that their A2P SMS traffic is delivered reliably and with a good quality of experience. Ovum's Enterprise Messaging survey found that for 67% of respondents overall price remains either very important or important in their decision to use a distribution partner. Destination reach was a close second, with 64% of respondents identifying it as very important or important. Quality of routing, transparency/reporting, and reputation all ranked lower, indicating that most enterprises seem unwilling to pay a premium to ensure that they receive a good quality of service from a reputable supplier of A2P SMS.

When split by enterprise vertical, 90% of respondents from the financial services industry stated that price was either very important or important in their decision to use a distribution partner, ahead of destination reach and quality of routing. The majority of survey respondents in this vertical focusing on price at the expense of the quality of routing and the reputation of the distribution channel is surprising, given that financial services providers are typically keen to ensure their customers' privacy and security.

A higher proportion of respondents from the central and local government enterprise vertical, 76%, indicated that the reputation of the distribution channel was very important or important for their organizations, ahead of price and destination reach at 63% each. Central and local governments also hold significant amounts of confidential data about their clients, so the survey results seem to indicate that respondents from this vertical are more aware of ensuring that they work with a reputable supplier of A2P SMS.

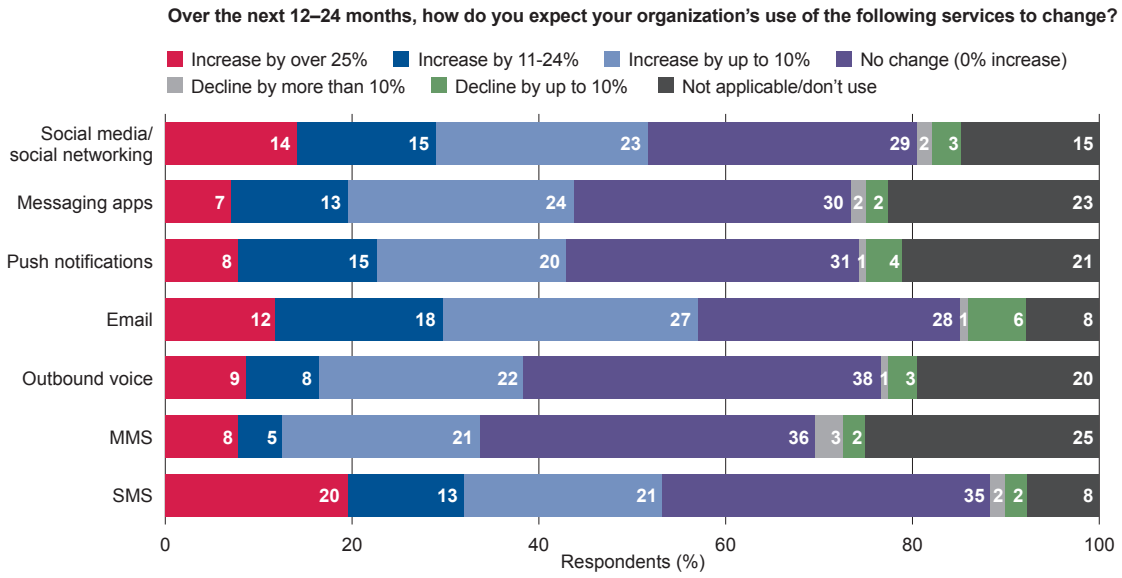
Enterprise use of messaging – future developments

Consumers' communications behavior will continue to evolve over the next 12–24 months, which means that the ways in which enterprises communicate with their customers and their employees, partners, and suppliers will also need to change if they are to remain relevant. The communications channels in use today will remain important through 2017 and 2018, but new technologies and platforms are emerging. It will be vital for enterprises, and the wider value chain, to understand to what extent their use of existing communications channels will change over the coming two years and to evaluate which, if any, of the emerging technologies has promise as a communications channel.

More than half of enterprises expect their use of SMS, social media, and email to increase

Over the next 12–24 months, the prevailing trend with regard to enterprise use of traditional and recently emerged communications channels will be one of growth. As Figure 6 shows, Ovum's survey found that more than half of total respondents expected their organization's use of SMS, social media, and email to increase over the next 12–24 months. In addition, 44% and 43% of total respondents respectively said that their use of messaging apps and push notifications would grow; this growth will likely be in line with the increasing penetration of smartphones and mobile broadband.

Figure 6: Expected change in use of outbound communications channels



Note: N=128

Source: Ovum Enterprise Messaging Survey 2015

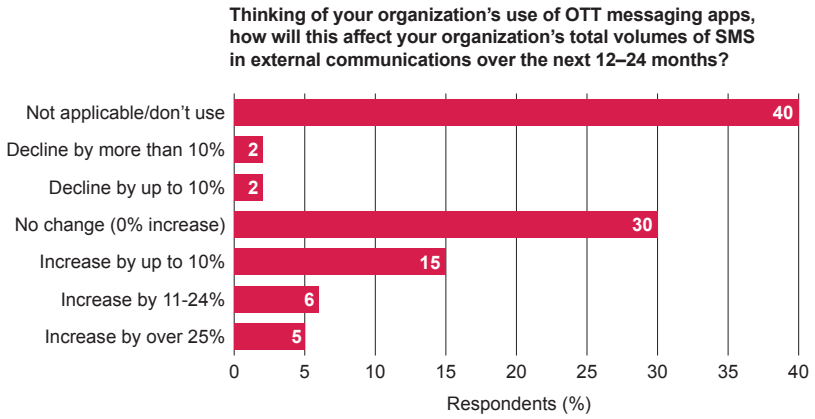
The results indicate that enterprises will continue to invest in their use of multiple communications channels, allowing them to reach a higher proportion of their customers and employees. It is also likely that enterprises will tap into new use cases across additional departments for services such as SMS, which will also result in traffic growth.

A higher proportion of respondents from the manufacturing, telecoms service provider, central and local government, and travel and hospitality verticals indicated that their use of various communications channels would increase, particularly SMS, email, and social media and networking.

OTT messaging apps are expected to be complementary to SMS rather than a substitute

OTT communications apps have achieved extraordinary adoption among consumers and so it is likely that there will be some replacement of A2P SMS with OTT communications apps. This is even more likely now that WhatsApp has committed to enabling its users to interact with enterprises via its messaging app, and because Facebook and Line have both added bots to their respective apps which are aimed at automating enterprises' interactions with their customers – whether to provide content, send advertising and promotions, enable e-commerce, or facilitate customer care.

Figure 7: The impact of OTT messaging apps on SMS traffic within 12–24 months



Note: N=458

Source: Ovum Enterprise Messaging Survey 2015

To understand the impact of OTT messaging apps on enterprises' use of SMS, Ovum asked Enterprise Messaging survey respondents to indicate to what extent they expected such apps to affect their total volumes of SMS traffic. Overall, 30% of respondents expected there to be no change in their organizations' use of SMS for external communications as a result of their own use of OTT messaging apps. The survey results indicate that, if anything, enterprise use of OTT messaging apps will increase SMS traffic, with 26% of respondents saying that they expect their organizations' use of SMS to grow. This is likely because enterprises will probably use an OTT messaging app to start a conversation or a communication with their customer and at some point the communication will switch to SMS. For example, the enterprise might use SMS to send a verification code for a transaction initiated via the messaging app.

Enterprise use of WebRTC

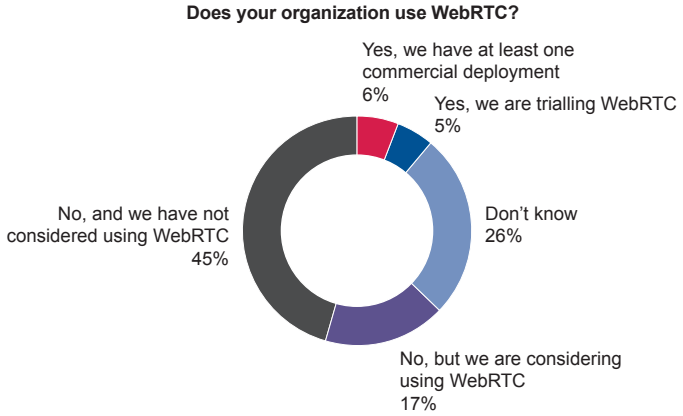
Web Real-Time Communications (WebRTC) is an open source project that Google initiated in May 2011. It seeks to create a framework, protocols, and APIs for real-time voice, video, and data communications delivered through a WebRTC-enabled browser via multiple device types (including desktop, mobile, tablets, and set-top boxes) and multiple network technologies. Google's Chrome, Mozilla's Firefox, and the Opera mobile browser already include native WebRTC, though not all WebRTC capabilities are supported. Google, Mozilla, and Opera account for the majority of the browser market, but they are more consumer-oriented; Microsoft's Internet Explorer and Apple's Safari – which currently do not enable WebRTC – have greater penetration in the enterprise market. Numerous live, commercial WebRTC services and trials are already underway across multiple industries and use cases. There is a strong weighting toward video- and audio-conferencing for customer care, remote learning, and services for those working in the field.

High interest in WebRTC, but few deployments

As Figure 8 shows, Ovum's Enterprise Messaging survey found that only 29% of respondents said that their organizations had commercially deployed a WebRTC-based service, were trialing WebRTC, or were considering using WebRTC. Almost half of the respondents, 45%, said they had not considered using WebRTC, indicating that the technology is still some way from achieving significant penetration in the enterprise market.

Not surprisingly, the telecoms service provider vertical exhibited the highest involvement with WebRTC, with 53% of respondents stating that their organizations had commercially deployed or were trialing WebRTC or were considering WebRTC. Telcos are typically engaging with WebRTC to understand the impact that it may have on their existing services, but most have deployed it as an enterprise communications channel rather than launching a direct-to-consumer service. The next-most engaged verticals are retail and wholesale, manufacturing, central and local government, and travel and hospitality, indicating that WebRTC use cases apply to multiple industries.

Figure 8: Enterprise use of WebRTC



Note: N=456

Source: Ovum Enterprise Messaging Survey 2015

Customer care and customer relationship management is the most popular use case for WebRTC among survey respondents (46%), followed by technical support (44%) and remote teaching/training (40%). The most-widely deployed WebRTC service at the moment is audio/video conferencing, which is an ideal communications channel for each of the above use cases. For example, some companies have built WebRTC-based call centers that enable agents to make and receive browser-based calls without customers downloading an app or leaving the website.

Figure 9: Enterprise use cases for WebRTC

Note: N=132

Source: Ovum Enterprise Messaging Survey 2015

WebRTC expected to substitute A2P SMS

When asked about the likelihood of WebRTC replacing their organizations' A2P SMS traffic, the majority of respondents, 47%, said that they expected WebRTC to substitute from up to 10% to more than 25% of A2P SMS. This substitution might occur if WebRTC makes it easier, less expensive, and more productive for enterprises to contact their customers or employees using browser-based audio or video conferencing, or if it can be used to send large files (such as product information or manuals) via the WebRTC Data Channel. Today an organization might use SMS to enable simple text-based communications and transactions, but in the future that organization may switch to WebRTC-based services for more meaningful interactions with customers and employees.

However, 34% of total respondents said that they did not think that WebRTC would have any impact on their organizations' A2P SMS traffic over the next 12–24 months. This is likely because, for some use cases in some verticals, there is little overlap between WebRTC and SMS, which means that the two technologies will coexist.

A higher proportion of respondents in the manufacturing and the travel and hospitality industries, 75% and 60% respectively, said that they expected WebRTC to replace their organizations' A2P SMS traffic to some extent. In the manufacturing industry, WebRTC could replace A2P SMS for use cases such as collaboration, fault management, and product marketing. In travel and hospitality WebRTC could be used for purposes such as customer communications and sales and marketing.

Summary

SMS enjoys widespread use among enterprises and is set to remain a key communications channel for organizations in all verticals for at least the next two years, even as consumers' communications behaviors transition toward IP-based communications services. Connectivity service providers, aggregators, cloud communications companies, and vendors are working to ensure that A2P SMS continues to play a central role in enterprise messaging, while at the same time positioning themselves to help enterprises add IP-based communications.

Ovum's Enterprise Messaging survey found that SMS is used widely within all verticals for a range of customer and employee communications use cases. Although SMS use is uniformly high across all verticals for customer-facing communications use cases, there is variation in the use of SMS for employee-facing communications depending on the use case and the vertical. This finding confirms that enterprises' priorities differ markedly across verticals when it comes to using SMS for internal communications, but are similar with respect to their communications with customers.

The use of instant messaging by enterprises is also growing and it is the second-most-used mobile messaging channel behind SMS in terms of organizations contacting some or all of their customers at least once a month. SMS continues to generate the most traffic for enterprises, closely followed by instant messaging and MMS.

Enterprises do use other types of communications channels, including outbound voice, email, and social media and networking. Their use of these channels varies depending on the industry vertical, the use case, and the target audience. However, when asked about which service their organizations use or would use as an alternative to SMS, the highest proportion of total respondents indicated that their organizations preferred email, followed by outbound voice and social media.

Price and reach are still the key factors for enterprises in their choice of distribution partner for A2P SMS, even in the financial sector, where banks and other financial institutions might be expected to be willing to pay more for quality of service.

Enterprises are generally positive about the outlook for their use of most communications channels over the next 12–24 months. A higher proportion of enterprises expect their use of all communications channels to increase than expect there to be no change or a decline. Enterprises are also positive about the effect of OTT communications apps on their A2P SMS traffic. One-quarter of respondents indicated that their organizations will see their A2P SMS traffic grow as a result of their use of OTT communications apps; just less than one-third stated that there would be no change.

WebRTC already has a presence in the enterprise market, with more than one-quarter of respondents' organizations having deployed, trialed, or considered a WebRTC-based service. However, the majority of respondents' organizations have not considered using WebRTC or were not aware of it, which means that the technology is some way from achieving mainstream adoption. In addition, slightly less than half of the respondents indicated that they thought WebRTC would substitute up to 25% of A2P SMS. The extent to which substitution occurs will depend on the vertical and the use case.

Appendix

Methodology

Ovum conducted an online survey of up to 575 industry executives between November and December 2015. This survey was sponsored by Tata Communications and conducted independently by Ovum. The sample included enterprises based in all seven regions. Demographically, 41% of enterprises surveyed had more than 250 employees; the remainder had up to 250 employees. Respondents were drawn from 12 industry verticals, including central and local government, financial services, retail and wholesale, manufacturing, media and content, telecoms service provider, and travel and hospitality.

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