

# ***TOWARDS TOMORROWS***

ISSUE 5 | VOLUME 1

## MESSAGING G O E S T O MARKET

Data points to a global and growing interest  
in A2P Messaging with Key insights for  
Enterprise and Telecom Segment

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## 1

# Introduction

Email is dead, long live messaging!

Emails don't cut it anymore. And, call centres infuriate and alienate people. But, most messages are read, in a few seconds, and that is why the big brands have messaging at the core of their communications strategy.

Intelligent, automated texts, engage, inform, and alert customers, and create new opportunities of customer surprise and delight. No wonder, businesses are sending millions and millions of text messages every-day, hoping to hit that sweet spot that lies between messaging and customer delight. Of course, this is only the beginning, with AI coming into its own, that day is not far off, when intelligent chatbots will mimic human conversations by matching user prompts to scripted responses. Also, RCS could be the real game changer, with its ability to deliver richer and more interactive features to everyday mobile messaging. Some even say that RCS is like making an upgrade to a colour TV, you've made the upgrade, there is no turning back.

However, the growth of Grey Routes is a cause of worry. In the race to reduce the cost of message delivery, SMS aggregators are taking to message hopping and SIM farms. The result: the quality of message delivery suffers, and so does the overall customer experience.

All this puts the focus back on the operator. Operators have to be proactive to stop the menace of rising fraud on their network? They should deploy revenue assurance and fraud management platform to nip the growing menace of grey route. In this e-book, we talk about the many facets of messaging, such as the present and the future, and the key challenges and opportunities before the key stakeholders in the messaging ecosystem.





volume of **A2P** messages  
will rise to **1,762 BILLION**  
by **2018**

## 2 Key take-aways from this report



Analyst firm Statista indicates that the volume of **A2P messages** will rise to **1,762 billion** by 2018.



Big brands like Amazon, Facebook putting **messaging at the core** of the customer communications strategy



Messaging **driving new usage cases** in Travel, e-commerce, finance, HR and internal communications, IoT, connected cities



**Pricing and destination** reach are equally important for enterprises, with quality, routing, transparency, and reputation ranking lower. (Ovum)



Enterprise should focus on **quality of message delivery** because at the end of the day it is all about customer experience



Operators are losing **13.7 billion dollar** every year due to Grey route traffic



Brands are also losing out on customer experience due to **poor message delivery on Grey routes**



**Grey route blocking** key to revenue assurance and fraud management



Operators must take a **proactive stand** to detect and report illegitimate traffic such as grey routes and SIM farms



As AI develops, **Intelligent chatbots** will find new usage cases in banking and commerce



**RCS** will provide superior engagement than text SMS

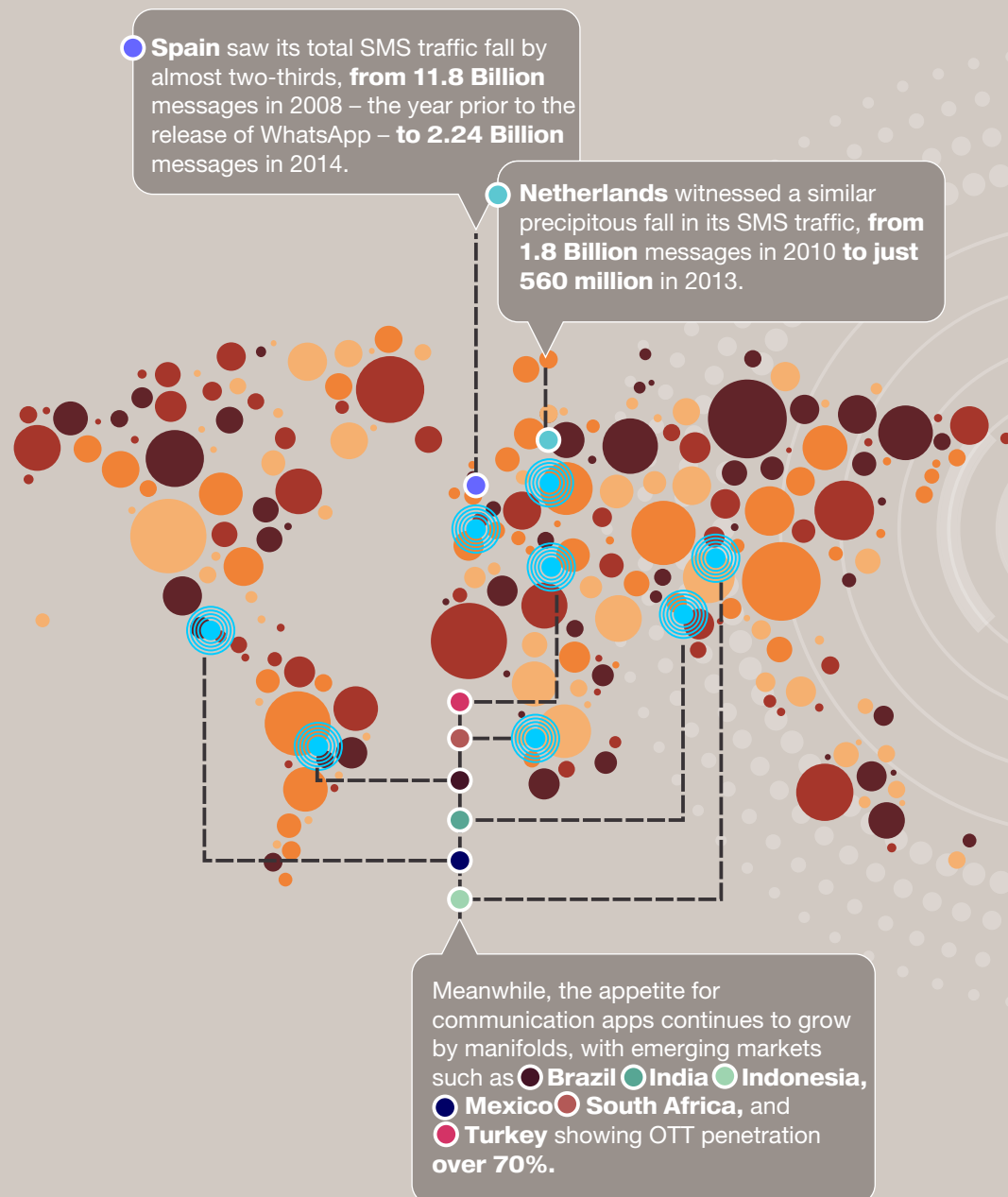


Although enterprise OTT communication apps are the flavour of the month, **SMS is in it for the longer haul**

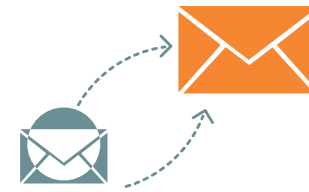
# 3 Key Trends in Messaging

## Declining P2P Messaging, as OTT takes deeper root

According to the International Telecommunications Union, the use of SMS peaked in 2010, with over 200,000 texts being sent per minute (Source theweek.com)



## Enterprise adoption of A2P Messaging strengthens



The global A2P share of SMS traffic doubled from **11.7%** in 2010 up to **22%** in 2015.



Analyst firm **Statista** indicates that the volume of A2P messages was **1,625 billion** in 2015, and will rise to **1,762 billion** by 2018.



**Credence Research** goes further, forecasting **two trillion** A2P messages a year by 2017.

intelligent, automated texts  
engage, inform, and alert customers.



major brands are putting text messaging at the centre of their customer communication

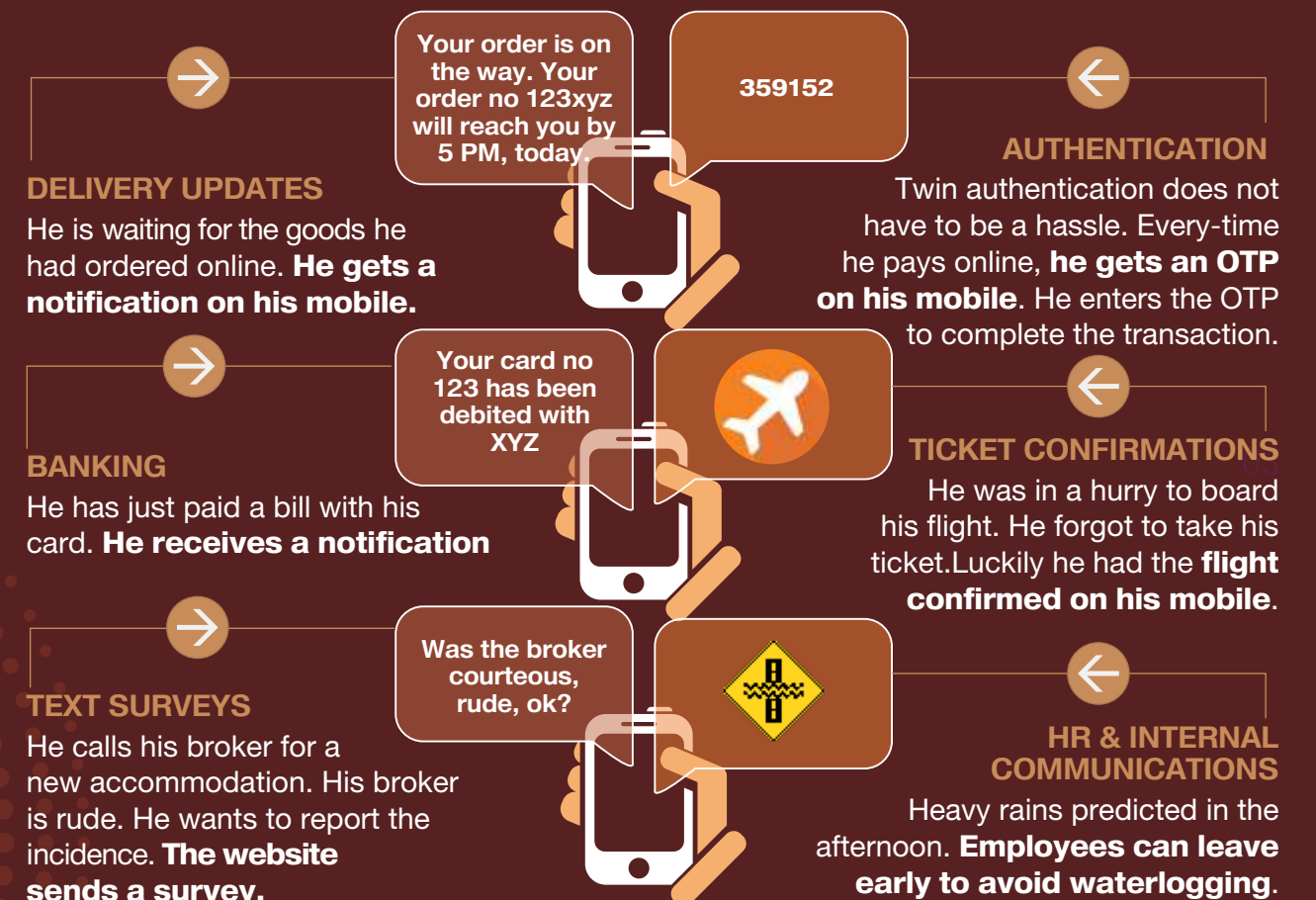
## A2P breathes new lease of life in messaging, driving new usage cases

With intelligent text messaging, enterprises are able to connect with their customers, at those precise moments, when it is needed the most, which is the hallmark of a responsive brand.

The messaging opportunity is so huge that major brands such as Facebook, Amazon, and Apple are putting text messaging at the centre of their customer communication. A2P Messaging usage cases given below.



## Transactional purposes



## Promotional purposes





# Key factors influencing the shift towards Enterprise A2P Messaging

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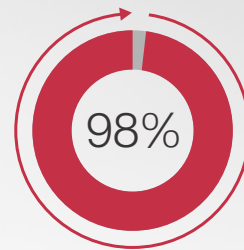
## Universal reach and low cost of SMS



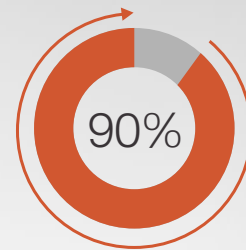
Emails don't cut it anymore, but text messages can, as they are read within seconds, literally!



6 billion people are using SMS

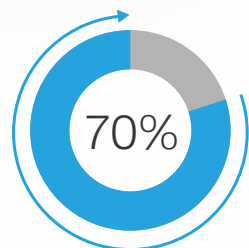


of texts are read (compared to 20% of emails)



of texts are read within 3 minutes

## Customer experience emerges as a key driver



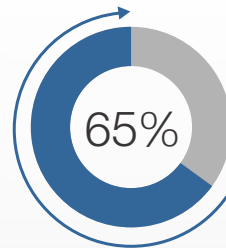
of customers rate their purchase experience based on the how a brand engages with them (**McKinsey**)



One billion revenue impact with 10% improvement in customer experience (**Forrester LABS**)

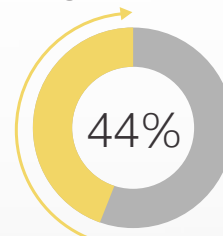
## Changing consumers' communications behaviour

According to **MEF's messaging report**,



of consumers communicate with businesses on chat apps; increasing to 76 per cent globally via SMS.

Consumers prefer SMS. According to the **Direct Marketing Association poll**,



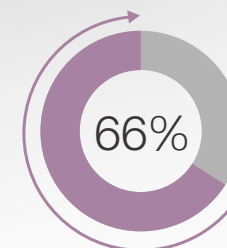
of respondents would rather receive product details and marketing messages via SMS.

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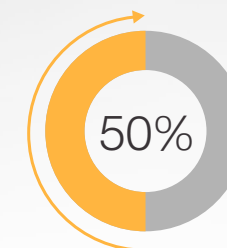


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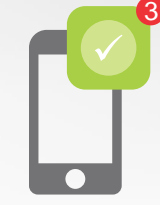
## Growing App fatigue



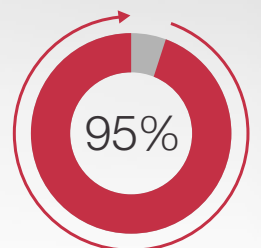
of smartphone users download zero apps every month



drop off rate during app on-boarding



It takes \$270,000 to build an app on average

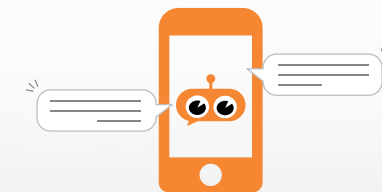


activity loss after 90 days of install

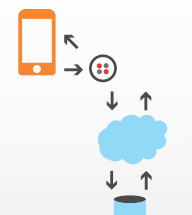
## Emergence of New Technologies and Platforms



Growing use of messaging apps and push notification in line with increasing penetration of smartphones and mobile broadband



Growing use of Chat-bots



Open API platforms provided by companies like Twilio and Nexmo

text messages are read within seconds, literally!

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# 5 Key challenges in A2P Messaging


## Enterprises want to keep messaging cost as low as possible


In the race to keep costs down, SMS aggregators use message hopping and SIM farms.

**The result:** the quality of message delivery suffers, and so does the overall customer experience.


 50% of the enterprises say they would stop using A2P services if the price increases from .03 to .05.

 Even banks consider price as a top priority

 Pricing and destination reach are equally important for enterprises, with routing, transparency, and reputation ranking lower. (Ovum)

 Only government institutions rank reputation higher, as they've to deal with personal information

## Most operators lack visibility into the traffic on their network.


  
75%  
of operators  
are unable to  
monetize A2P Traffic

  
>1/5  
of the operators  
claim they carry  
legitimate A2P traffic

  
Almost  
41%  
agree that Grey route  
traffic is increasing,  
but they have no visibility

## Recourse to Grey route trafficking

The above challenges leads to the growth of Grey route trafficking, and SIM farms that are a major source of revenue loss for the operators.

 \$13.7 Billion  
in losses every year  
due to Grey route traffic

 Grey route messaging  
will cost upwards of  
\$ 82 Billion

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pricing and destination reach  
are equally important for enterprises.

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# 6 What is a Grey route?

Grey route is an umbrella term for non-commercialized traffic – i.e., lack of any agreement between the sender (low cost aggregator) and the receiving network. This is in contrast to white routes, which have a terminating agreement between the parties.

Grey route traffic is difficult to detect, as they operate within the grey area between white route and black route traffic. It is mostly legit, as the enterprise may be taking a price advantage unknowingly through an intermediary called SMS aggregator.

There are several ways in which SMS aggregators take advantage of Grey routes -

## Using the services of a rogue operator

The SMS aggregator routes its traffic through a small operator and pays a small fee for using their service. In time, the operator receiving the messages notices this unusual traffic and either blocks that traffic or set-up a proper interworking agreement. Meantime, the SMS aggregator finds another small operator, which is willing to monetize its assets through the grey route.

## SIM Farms

SMS aggregators buy P2P messaging in bulk, and use it for A2P messaging in bulk. In many countries, it is very easy to get a mobile SIMs in large numbers. These are put in a modem, and used to churn out messages in bulk. In order simulate movement, the SIMS are used inside a moving vehicle.

## GT Spoofing

It is easy to spoof the global title (GT) as many rogue countries specialize in it. By imitating the GT of an operator A, the SMS aggregator can send the messages to operator b. Operator b charges operator A for the message.

It is necessary to block grey routes as they cause harm to the operator, the enterprise, as well as the subscriber receiving the message. The operator loses out on revenues amounting to several millions every year. The enterprise loses out on an opportunity to engage with their customers fruitfully, as the message is delivered very late, or not at all. Grey routes harm the subscribers, as they get exposed to spam or viruses on open networks.



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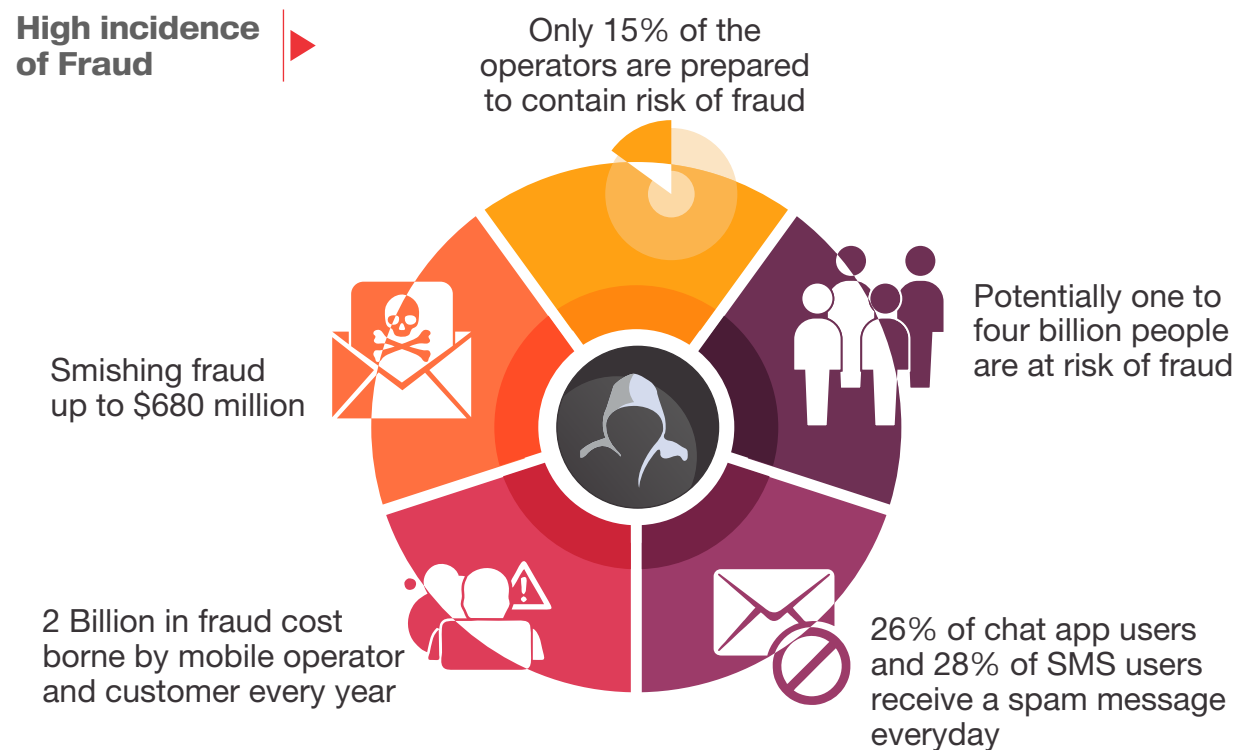
# 7 What are the benefits of Grey Route Blocking

SMS firewall and revenue assurance platform help operators to detect and report Grey route traffic on their network. This helps them to control fraud on their network, curtail denial of service attack, and stop revenue leakages.

## Fraud management

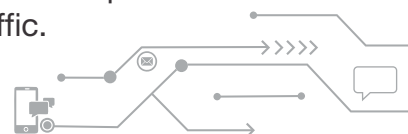
Without visibility into grey routes, the ability of the operator to manage the network traffic suffers, which leads to an increase in fraudulent activities, affecting both the operator as well as the customer. The subscriber also gets targeted through spam, phishing attacks, and distribution of malware.

### High incidence of Fraud



The operator must ensure Real time analysis of messages before they enter the network. Sophisticated filtering and pattern recognition techniques must be in place to analyse various messaging parameters such as GT (Global Title), Sender ID, SMSC.

Also, Pattern recognition systems monitor messaging patterns and trends on a large scale which help in recognizing suspicious activities proactively. Once the suspicious activity is identified, the antifraud systems can block the grey route traffic.



## Revenue Assurance

The typical cost of an A2P message using grey routes was often just 25 percent of a directly connected A2P message - with many enterprises understandably drawn to the lower priced messaging service offerings. The typical cost of an A2P message using grey routes was often just 25 percent of a directly connected A2P message - with many enterprises understandably drawn to the lower priced messaging service offerings.

Revenue assurance platforms allow the operator to identify the enterprise sending the messages. In fact, many enterprises are unaware that their messages are being sent through grey routes. The operator can inform these enterprises that their messaging has been blocked because of grey route. The enterprise can negotiate with the operator to keep their messaging service open.

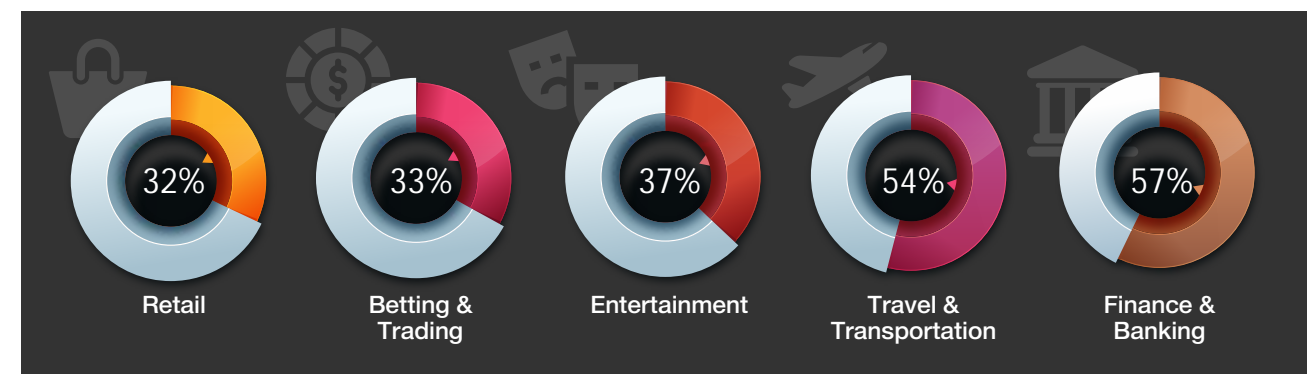
In this way, the way operator's revenue is assured, and any threat on their network gets effectively neutralized. SMS revenue assurance platforms will see grey-route messages drop from 65 per cent of total A2P global traffic in 2015 to 19 per cent by 2020.

## Providing better services to enterprise

By bouncing A2P SMS, the A2P aggregator is able to provide a lower price to enterprises. However, by bouncing A2P messages, or hopping, the message delivery gets delayed, which affects the quality of service, when the customer expects instant delivery of alerts and notifications.

This is especially true in the financial services segment, where quickness of message delivery is of utmost importance, with message delay or failure the difference between a happy and an irate customer.

Industries with SMS response rate between the first 15 minutes are given below –



Banking represents the most popular vertical for A2P messaging, with more than one billion customers worldwide. According to Juniper research, "Companies that are unwittingly using grey route traffic risk having their messages delayed or simply not delivered which would be unacceptable for those using A2P for time critical alerts or notifications"



## New monetization opportunities

The high “read” rates of SMS, delivered at “precise moments” provides the trusted delivery mechanism for connected devices. Usage cases will be driven by IOT applications, with mission critical status, such as manufacturing, health, transportation, where prompt and secure message delivery is valued highly.



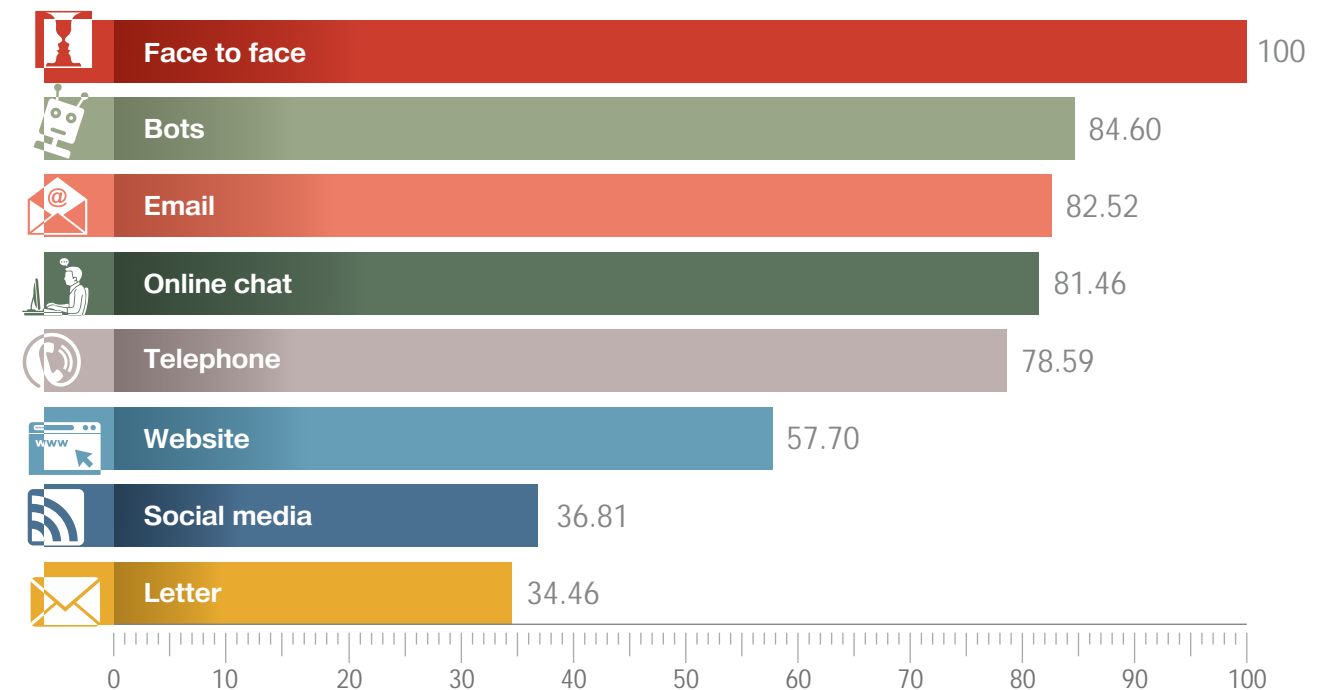
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# 8

## What is next in Messaging?

### In 2017, Chatbots get serious

Brands are taking customer relationship to the next level with “conversational commerce”. Chatbots are already playing an important role in this shift towards automated and intelligent conversations by providing a blend of convenience and immediacy. The customers have also spoken, they like chatbots. In a survey carried out in UK, which mapped channel efficiency, chatbots were second only to face to face conversations.



Chatbots answer routine questions regarding account detail, balance etc. According to the survey, the consumers predicted the following use cases for chatbots in the future –

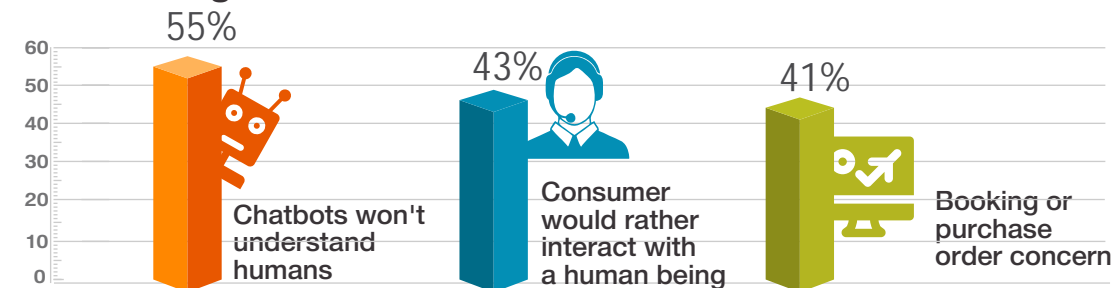


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However, chatbots are still lagging behind face 2 face conversations, when it comes to buying expensive goods, for example cars (only 5%), or complex problems, such as app consolidation (4%) or paying bills (19%).

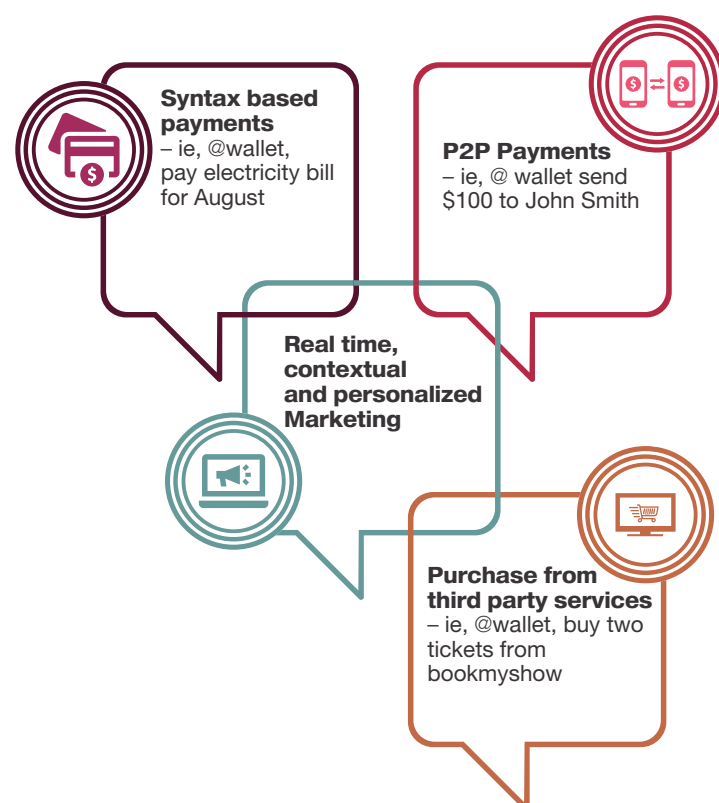
### The challenges



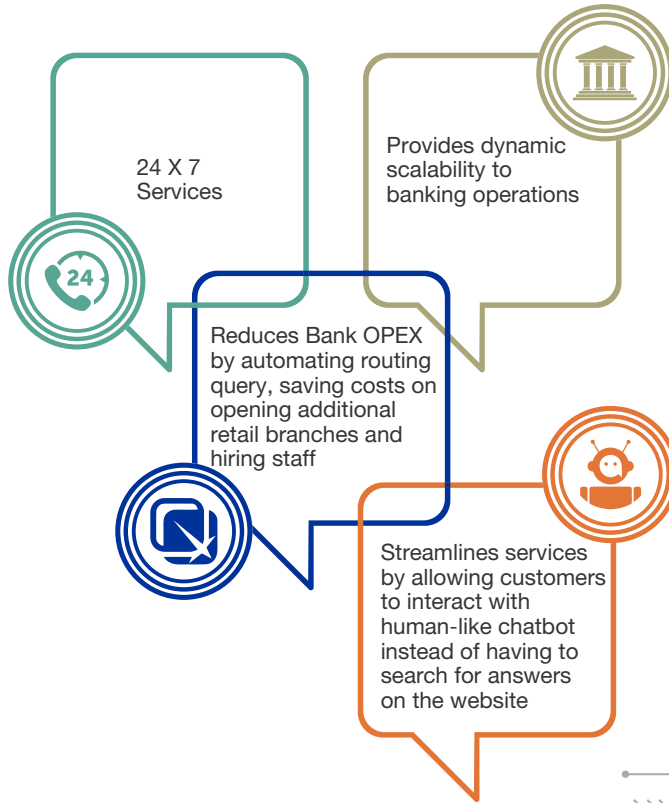
However, as AI becomes smarter, they can be configured to understand new words and phrases, and correctly process customer's requests. For example, Bank chatbots are changing the face of customer service, by providing faster service, and reducing operating costs. Banks can integrate their intelligent bots on social networks and messaging apps, corporate websites, and mobile wallets.

The digital assistant is integrated to the customer database via bank API, allowing for quicker evaluation of customer's data and better results. Biometrics and stronger authentication provide bank grade security to customers.

### Benefits for customers



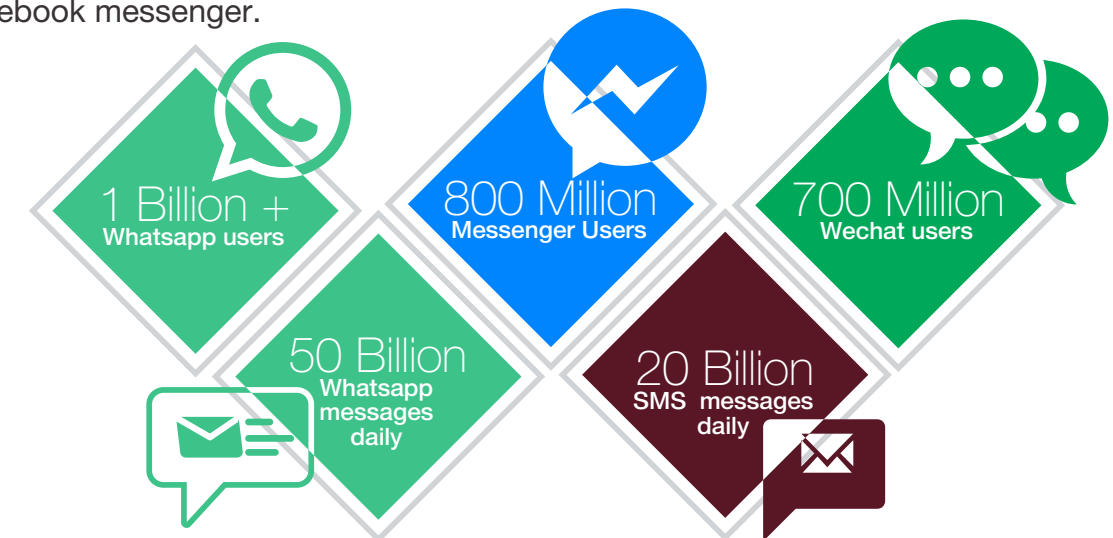
### Benefits for banks



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## Messaging for commerce

Most customer communications today – chat, voice, or video – is happening on OTT Communication Apps, especially OTT communication apps, such as WhatsApp, Facebook messenger.



Therefore, it is natural for businesses to target this segment, as it provides them with easy access to billions of active users.

Already, airlines, such as KLM, are providing booking confirmation, check-in notification, flight status updates to passengers who have opted in for such services on Facebook messenger. Car manufacturers are using new and innovative ways to engage with their customers. For example, Kia Motors' NiroBot, which was introduced on Facebook Messenger, provides customers access to product information about a new car, driving tutorials, as well as access to customer service reps when they need help. Expedia is another company to have launched a chatbot application recently. It allows customers to find hotels from its chatbot application.

In Asia, Wechat is enabling 10 million businesses connect to 600 million people to check for flights, check in for flights, play games, manage banking and buy tickets without having to leave their app.

**Messaging is the new browser!!!**



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## RCS for a richer messaging experience

In the recently concluded GSMA Network 2020 seminar, one of the speakers likened RCS as an upgrade from black and white television to colour TV. Once the user has upgraded to RCS, there's no turning back.

This is because, unlike SMS, which is basically a text based service, RCS (Rich Communication Service) comes with popular chat features like typing indicators, read receipts, high-quality photo sharing, messaging over Wifi and more. For brands this is the opportunity to add richer and more interactive features to the millions of messages they send every-day. For example, Virgin Trains provides boarding information by mobile to some of its customers ahead of main display, helping it to control crowd better. Similarly, a telecom company in North America is able to receive the exact location of a pole that has tilted after a storm, through sensors located on the pole.

The future is very much here, and happening to, with RCS receiving active support from Google and GSMA. According to GSMA, RCS has received support from 60 global operators, device manufacturers and OS providers, representing 4.7 billion users.

## An immersive future with AR/VR integration

AR/VR is being touted as the next big thing in brand engagement. According to Tech Pro Research report, 67% of businesses are considering using AR in the future, while 47% are considering VR for the future. A recent report from IDC claims that the combined revenue for both the AR and VR markets will hit \$162 billion by the year 2020, growing from the present market of \$5.2 billion. And a big part of that revenue growth will be driven by services related to enterprise applications of the technologies, the report stated.

Hotels like Marriot are already using AR/VR to provide an immersive customer experience to their customers. They launched an app that allows customers to check in and check out on their mobile, see the layout of the hotel, and provide opinion. However, it was the Teleporter that took immersive experience to the next level. The Teleporter is equipped with Oculus Rift and other devices that simulate sensory experiences like Sun and the wind to truly create an immersive experience. Once the user is inside the booth, he/she is transported to exotic Marriot locations.

# 9

## Conclusion

The security provided by mobile networks, the rising penetration of mobile phones, combined with the high open rates of SMS messages will continue to fuel the uptake of A2P Messaging in the future. However, the lack of visibility into grey route traffic and SIM farms, it is likely that mobile operators will continue to lose out on the messaging opportunity.

AS a measure to bolster the messaging ecosystem it is therefore imperative to employ strong anti-spam platforms that both enable the deployment of multi-channel messaging and adhere to regulations.

Furthermore, whilst today's chat apps and OTT messaging are largely a P2P endeavour, in the coming months and years many of these players will seek ways of opening their APIs for the enterprise messaging market. This will allow enterprises to focus on applications, push notifications and other IP based communications.

However, enterprises will continue to use SMS as a channel for customer communications because it is reliable and dependable and unlike OTT communication apps does not require the user to own a smartphone or log into 4G or WiFi network.



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