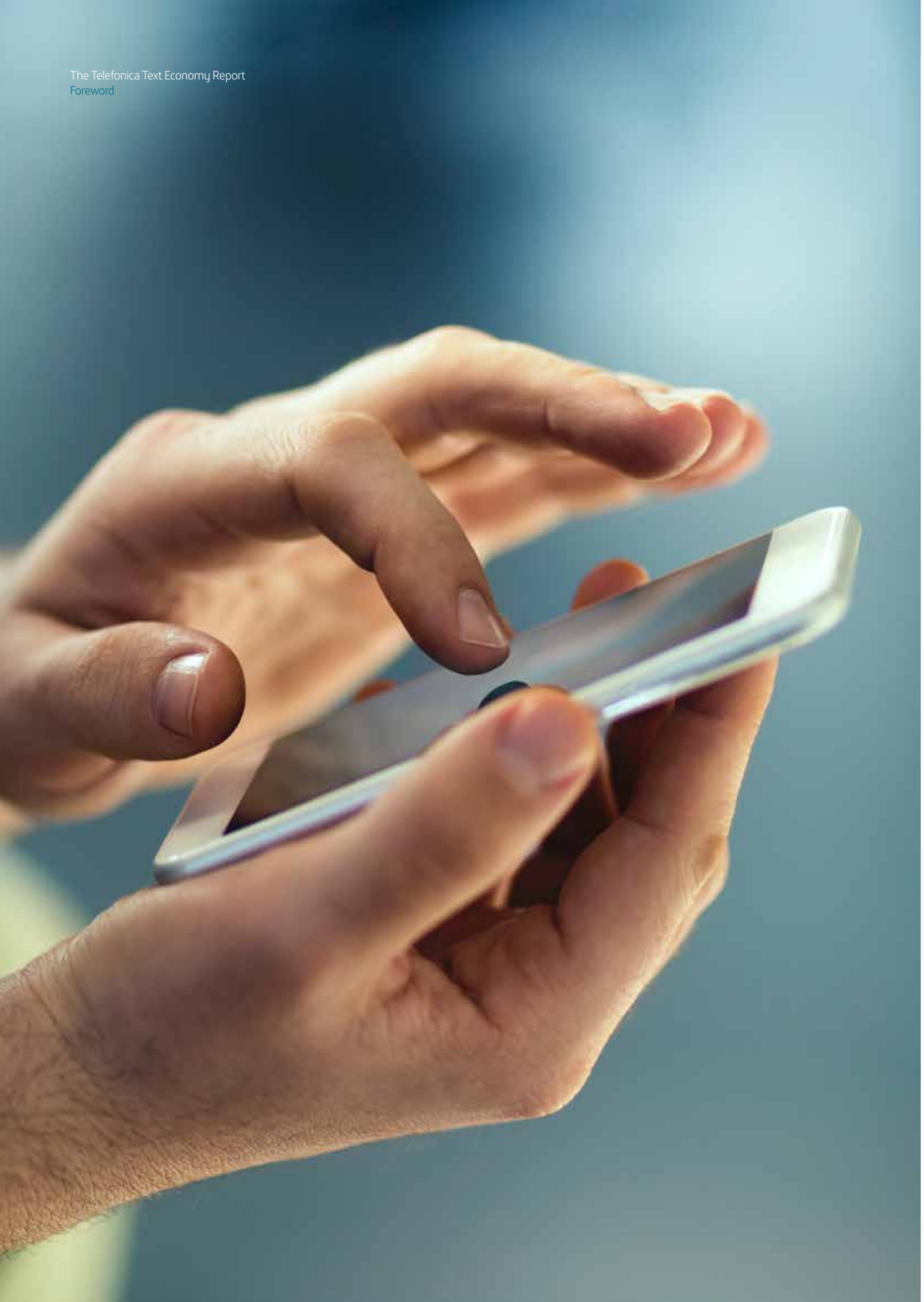
Telefonica

The Telefonica Text Economy Report_

An investigation into the enduring success and economy drivers of the SMS market in 2015

Authors: James Lasbrey, Head of Wholesale Messaging, Telefonica
Contributors: Giovanni Belini, OpenMarket, Joanne Lacey, COO Mobile Ecosystem Forum

Contents_



The Telefonica Text Economy Report
Foreword

Foreword_

The advent of the App economy led to the exponential growth in popularity of digital and mobile services. The enormous success of free communications apps such as WhatsApp, Snapchat, Facebook Messenger or services such as Uber, Square and Eventbrite has resulted in a widely held belief that SMS and texting is not only in decline but also out of favour.

However messaging has moved far beyond Person-to-Person (P2P) communications; now it is among people and machines, push and pull and embedded in application experiences. One of the core arguments in favour of SMS is that it reaches 99.99 pc of handsets globally, its scope goes beyond smartphone or web-enabled mobile phone use so that while not all consumers own an app-equipped smartphone, most today own some type of cell phone which means you have a better chance of reaching your intended audience through SMS than using any other communications method. Indeed SMS is one of the foundation tools of the trade and while messaging apps are chewing into text messaging and displacing text messaging volumes – they have the SMS legacy propelling them along without which they simply wouldn't exist in the way we have come to know and love.

One thing the app economy does not have is the value of 1-to-many business messaging which is hitting its stride in a big way and later in the report Open Market, aggregator partner and the Mobile Ecosystem Forum (MEF) weigh in on how powerful text is for businesses as a way of connecting to their customers - indeed it is the new battleground - and how the industry is and needs to evolve.

The ability to service your customers proactively in their moment of need - Forrester Research refers to these interactions as "mobile moments" - improving revenues, customer engagement and satisfaction with products, services and organisations is the new frontline for gaining marketshare. McDonalds for instance has spent 2015 developing additional features to speed up the shift from mass communication to personal one-to-one engagement with customers in the future.

Meanwhile the perception continues to be that SMS has been replaced by shinier players and while they are gnawing away at telco messaging share, specific messaging use-cases customers are clearly placing SMS at the top of the heap demonstrating that the trusted 'old school' option is preferred when there is a message you absolutely have to either send or receive.

> McKinsey experts says that SMS messaging generates 50,000 times more revenue per megabyte, on average, than data average revenue per user

Meanwhile we're seeing a paradigm shift in the way apps are being used. While they might appear to be all the rage, many users in fact are starting to take stock and for a variety of reasons - ranging from privacy concerns to confusing interfaces - are culling them back and sticking to just a few "snacking" apps such as news, music and social media. This year for instance 500 million messages per day were sent via Twitter versus 23 billion SMS . Dull by comparison as it may seem, the truth is there likely would have been no app economy without the functionality and reach provided by the nuts & bolts telecom model of the humble text – and it looks like the halcyon days of the app economy may be coming to an end.

This report will show that not only is SMS one of the primary channels of communication worldwide, it underpins the majority of today's most popular digital mobile services and as such wholesale SMS specifically has a very central role to play in today and tomorrow's increasingly digital economy and lifestyle.

James Lasbrey

Executive Summary_

This report provides a mostly quantitative look at the state of wholesale business SMS (or Application to Person - A2P) ecosystem, the challenges and opportunities for industry and concludes with predictions and recommendations for best practices going forward. The methods of analysis include trend, horizontal and vertical analyses based on qualitative and in some instance quantitative analytical industry reports as well as insights and contributions from key industry players including aggregators and associations – namely The Mobile Ecosystem Forum.

The results of this first ever report on the mass messaging market by Telefónica finds the prospects for the wholesale SMS industry are encouragingly positive – highlights and predictions include:

- People worldwide will send 8.3 trillion text messages this year alone
- 80 pc of people are currently using texting for business with over one third of business professionals saying they can't go 10 minutes without responding to a text (eWeek).
- 44 pc of consumers said they would rather receive product details and other marketing material through text over any other channel (Direct Marketing Association)
- McKinsey experts says that SMS messaging generates 50,000 times more revenue per megabyte, on average, than data average revenue per user
- 58 pc of the world's messaging population lives in Asia Pacific
- WhatsApp heads the leader board closely followed by Facebook Messenger then WeChat, Instagram and Snapchat making up the top 5 . Citigroup puts the combined value of these companies at $373.4bn – text then could be said to be a core driver of the so-called digital economy.

Finally the following conclusions and recommendations have resulted:

- The A2P SMS market was valued at $53.07bn in 2013 and is expected to grow at a CAGR of 4.2 pc. (Transparency Market Research,) This positive growth rate will be fuelled by the growing use of A2P SMS in the web and mobile sector.
- One thing is clear, the growth in popularity of messaging apps is projected to continue, and eMarketer predicts that by 2018, the number of chat app users worldwide will reach 2 billion, representing 80pc of smartphone users.

According to Telefonica, strong new market segments will emerge in areas of delivery updates, Smart Home and local Government services

- Based on lessons learned in markets around the world, McKinsey says carriers should consider constructing a mobile messaging strategy that matches the level of risk inherent in their corresponding market
- Telefónica's Wholesale SMS business unit has seen digital integration fuelling growth. Incorporating SMS into digital communications provides a simple, effective and on the move way of updating customers in today's fast paced digital lifestyle
- According to Telefónica strong new market segments for messaging will emerge in areas of delivery updates, Smart home and local Government services. We are already seeing this trend in the UK and Spain and expect this to accelerate in 2016
- Finally Telefónica also believes that digital identity is the future. Brands that focus on customer digital identity and tailor their services to this will succeed. SMS (short code and long numbers) are critical to this

Predictions_

Top 5 predictions 2016

01 We expect to continue seeing wide scale adoption of SMS by global and local businesses looking to communicate effectively with their customers to 2025. This growth will be fuelled by SMS integration with digital communications as business adapt to a completely mobile lifestyle

02 Delivery updates, Smart home and local government will emerge as strong new market segments for messaging. We are seeing this trend already in UK and Spain and expect this to accelerate in 2016.

03 There is a lot of talk about critical mass but SMS can reach every user globally today (smart phone or feature phone, China to Brazil). The message is the same and architecture is simple and works. We will not see a replacement for this any time soon.

04 Spaces to watch this year for their innovative approach to messaging include mobile ID using 2-factor authentication and plug & play API/SDK providers.

05 Over the last 2-5 years OTT players saw between 11-15 pc rise in customer retention/acquisition through the use of SMS as a targeted marketing communication channel – we see more enterprises in new sectors embracing SMS to refresh efforts in this space.

The Text Ecosystem_

The text ecosystem can be said to comprise telco players, who provide text through traditional telecoms carrier networks, and what is known as 'Over-The-Top' (OTT) messaging service providers – the likes of WhatsApp and WeChat. WhatsApp is the most popular global provider with 900m active users to September 2015 and Facebook Messenger, another hugely popular text tool was ranked first at the end of 2014 with 30 pc active usership among US mobile device users - all of which has led to text being a ubiquitous and best received mobile communications method of modern times.

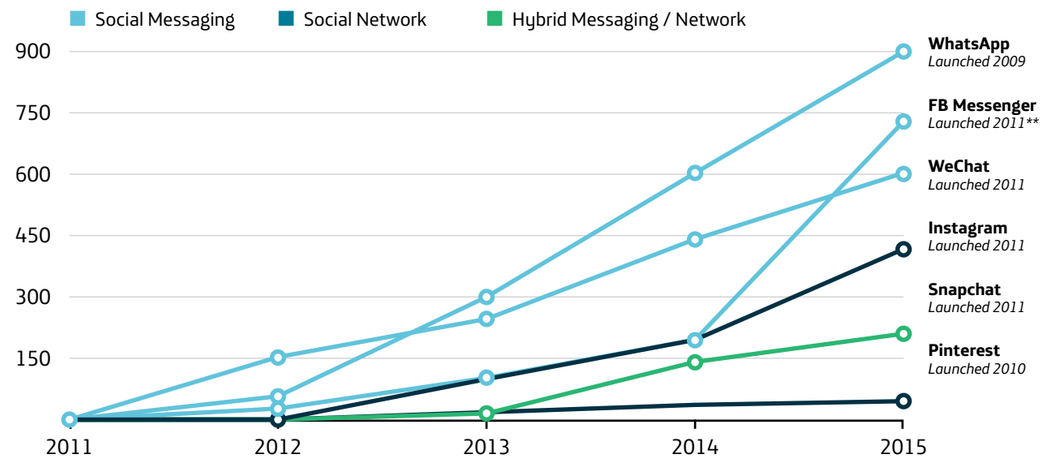
Messaging overall has been the fastest growing online behaviour within the social landscape over the past five years, over-taking social networks in terms of minutes spent using. WhatsApp heads the leader board closely followed by Facebook Messenger then WeChat, Instagram and Snapchat making up the top 5 . Citigroup puts the combined value of these companies at $373.4bn – text then could be said to be a core driver of the so-called digital economy.

It has been a standard offering in every carrier's set of mobile services for the last 20 years with industry studies showing that in the vast majority of cases, text messaging use exceeds voice minutes, especially for younger users who send and receive hundreds of text messages a day and is now also commonly used by business and organisations in customer communications. Events like a flight change, exceeding a bank balance, a shipment delay and appointment reminders are common examples of how companies connect with consumers over text with innovation happening on a daily basis.

The business SMS or Application to Person (A2P) market – which allows organisations to send out mass communication by text, can be said to consist of bulk SMS providers, SMS aggregators, marketers or resellers, SMS gateway providers and of course telco operators.

Messaging has been the fastest-growing online behaviour within the social landscape over the past five years, passing social networks

Growth of Messaging Platforms vs. Network Platforms, Monthly Active Users (MAUs), 2011-2015E*



*Messaging defined as communicating primarily in real time with other contacts; social defined as broadcast sharing of status updates, images, videos, or other content. All data measured from Q2/Q3 of each year.
**Became standalone app in 2014
Sources: Business Insider, Fortune, Mashable, Instagram, AppAnnie, Adweek, Quartz, Yahoo Finance, Experian, TechCrucnch, Forbes, Tech in Asia, eMarketer, Compete, Activate analysis (www.activate.com)

According to a Forrester report on mobile technologies that drive sales , mobiles gold rush continues apace with many new developments thanks to the latest mobile OS releases and text continues to be that connective tissue which, by consumers' own behaviour, shows that it remains the dominant messaging technology of today's digital age – outpacing flashier technologies like augmented reality, sensor based controls, the mobile web, bar codes and apps.

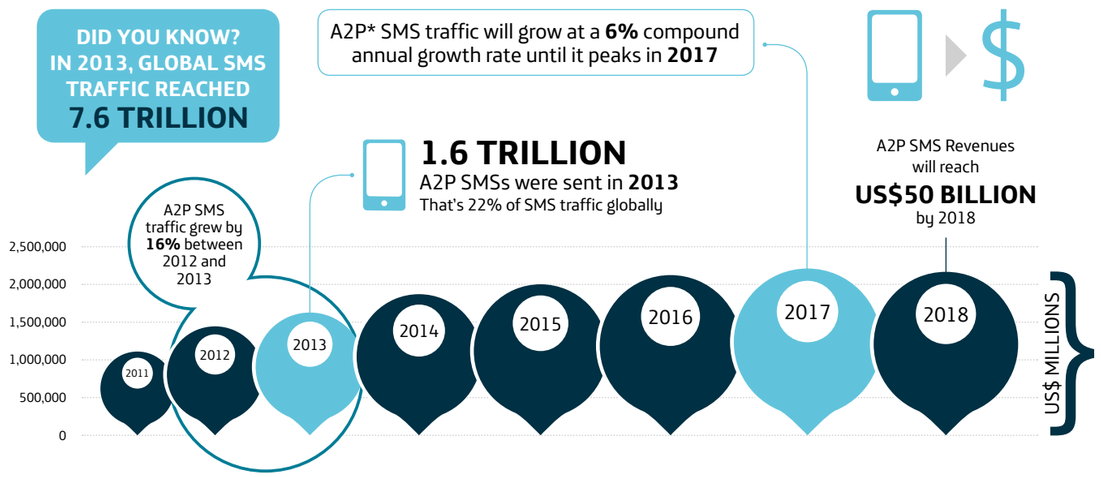
On a regional basis, eMarketer studies indicate OTT messaging apps have shown heavy usage in Asia Pacific, where 58 pc of the world's messaging population lives. Latin America also shows strong usage with 68.1 pc of mobile internet users communicating in this way and the expectation is that this share will increase to 77.4 pc by the end of 2019.
If we look at Asia - as messaging platforms reach scale there, they have launched new first and third party services in order to capture significant messaging revenues. This is because apps built on top of messaging enable users to solve broad problems; messaging then becomes a hub for consuming content, playing games and conducting transactions.

As a result new consumer businesses are being built on messaging platforms and it is a space that is only getting bigger. In the US for instance, low cost of chat means consumer businesses can leverage both SMS and proprietary messaging platforms like Apple iMessage to mop up.

How's that for a decline?

Snaphot: How big is the A2P market?

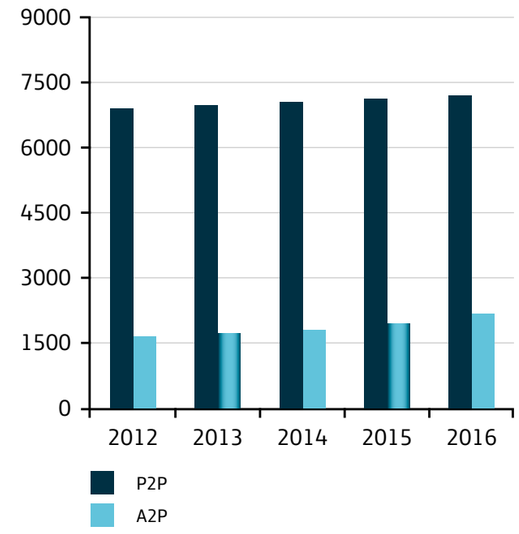
It's growing, and will for the next few years



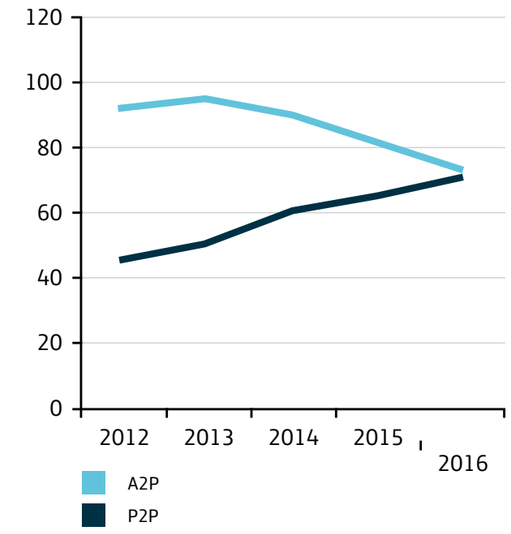
Source: Ovum
*Application-to-Person

The Rising Trend of SMS A2P: An attractive market

SMS P2P vs A2P volume forecast
(in billions SMS)



Worldwide SMS P2P vs A2P revenue forecast
(in billions USD)



Sources: Jupiter research & Portio Research

Value of SMS to Business_

We know consumers love texts. People worldwide will send 8.3 trillion text messages this year alone. That's 23 billion messages per day or almost 16 million messages per minute. So we can be pretty clear on that point. What's more interesting, and unlike what is happening in the app economy where value is shifting away, text is now accepted as a truly powerful business tool and an effective method of bulk one-to-many or A2P SMS communication.

To begin with text, messaging is native to all mobile devices today and consumers are already experienced in its use. It's an effective channel to meet them where they already are – and that is its intrinsic value. Couple that with the fact that for many consumers, text is their "priority" inbox that they open and respond to quickly, there is little doubt of the channel's value to consumers, enterprises and organisations – commercial or otherwise.

Let's look at some figures. According to a feature in eWeek, 80 pc of people are currently using texting for business with over one third of business professionals saying they can't go 10 minutes without responding to a text. 44 pc of consumers polled by Direct Marketing Association said they would rather receive product details and other marketing material through text over any other channel with another study by cloud communications platform OneReach saying 64 pc of respondents would rather text than call for tech support.

Additionally sales prospects who are sent text messages convert at a rate of 40 pc higher than those who are not. The fact is that event notifications trigger a need for customer assistance and it can be a very effective to keep the customer in the same channel to try to resolve the issue. Linking the request for assistance to the originating outbound notification preserves context as well, increasing customer satisfaction and boosting efficiency. This is all good news for business and the text industry.

Public sector also recognises the value. A study by Warwick Business School in the UK said texting patients to say it will cost the NHS £160 if they miss an appointment could save the health services millions. As many as 400,000 missed hospital appointments a year could be prevented using this method – a move that could potentially save the NHS £64 million a year. A poll by SMS services provider MessageMedia showed that when text is used as appointment reminders, attendance failure reduces by 30 pc.

When looking into industries we forecast that banks, retailers & OTT companies will account for more than 60% of total traffic

Industry Share (Volume of SMS in 2017)						
Banking	33%	36%	25%	25%	21%	25%
OTT	15%	15%	17%	14%	32%	24%
Retail	10%	5%	23%	23%	18%	16%
Health and Education	7%	7%	8%	8%	8%	8%
Public Administration	7%	7%	5%	10%	3%	5%
Transport and Logistics	6%	8%	5%	5%	2%	4%
Hospitality and Tourism	3%	3%	1%	1%	0,5%	1%
Home Services	4%	4%	1%	1%	0,5%	1%
Other	15%	15%	15%	13%	15%	15%
Total (Bn SMS)	2,5	6,6	5,5	2,2	19.3	36.2

Source: Accenture

Banking & FS

- Banking & Financial services are the main users of SMS, but telcos success will depend on how operators will integrate SMS service with new mobile solutions and if they win the mobile payments battle

OTT

- OTT traffic is likely to continue increasing and 24% of total traffic is expected to come from these companies.

Retail

- Retailers are heavy users in Europe, using SMS for their marketing campaigns.
- In Latam there is a huge room for growth in this industry that is underdeveloped due to legal barriers

Another example where it's difficult to put a price on but not value revolves around how the Welsh Ambulance Service uses a managed bulk text service to contact trained voluntary first responders that can often get to an incident faster than ambulances. For some patients having someone arrive sooner and be able to send an assessment to the paramedics could mean the difference between life and death.

And further afield, an organisation called Cafédirect Producers' Foundation, run by a company called WeFarm has close to 44,000 users comprising smallholder farmers around the world, many of whom have no internet access that are using simple mobile phones and SMS to connect the offline world. Using this service, farmers in Kenya, Peru and Uganda have sent more than 5.2 million text messages, asked 57,000 questions and received 97,000 answers.

Effectiveness of select mobile campaign types according to market professional in 2014

	Very effective/effective	Somewhat effective	Not very effective/ not at all effective	Don't Know
Loyalty	86%	12%	2%	–
Win-back	85%	13%	2%	–
Mobile-exclusive deals	85%	12%	2%	1%
Conversation via keyword	85%	11%	3%	1%
Re-engagement	84%	14%	1%	1%
Mobile welcome SMS	84%	12%	2%	2%
Promoting email subscription via SMS	83%	15%	1%	1%
Holiday or event campaigns	83%	14%	2%	1%
Drive cross-channel engagement	83%	13%	2%	2%

© Statista 2015 Sources: eMarketer; Salesforce.com
Additional Information: Worldwide; Salesforce.com; November 2014; over 5,000; 18 years and older

Reading Support
The statistic shows the effectiveness of select mobile campaign types according to marketing professionals worldwide in 2014. The source found that mobile-exclusive deals were considered very effective by 85 percent of respondents while two percent thought that type of marketing was not very or not at all effective.

Telefonica wholesale business SMS clients are using the technology in branded SMS campaigns to increase sales, improve customer service and reduce operation costs. Here are 3 examples:

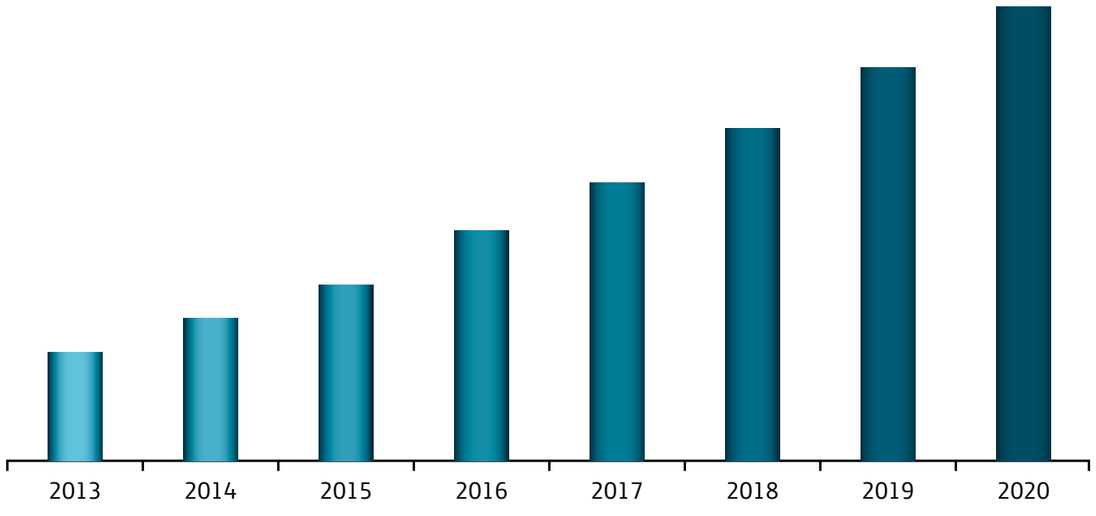
Cortefiel Group – one of the world's largest fashion retailers with presence in 86 countries realising its younger customer base were more likely to buy online was able to increase its New Year's sales by 5 pc by enriching SMS with an HTML link that took customers to Cortefiel's mobile portal.

CEMIG – Brazilian utility company serving more than 8 million customers saved 80 pc of customer service running costs by developing a smart mass messaging channel that enabled customers to access 15 separate services from their smartphone without the need of call centre mediation.

Royal Bank of Scotland – saw a 10 pc increase in load uptake by replacing a paper heavy process with a messaging platform to deliver bespoke communications/instructions from one central hub manned by a small loans provision team.

Digital integration is evidently fuelling growth in this way as SMS integrates with digital communications channels – it provides a simple, effective and always mobile lifestyle of today's consumers.

Multi-Factor Authentication Market (2013-2020)



Source: MarketsandMarkets Analysis

According to Transparency Market Research, the A2P SMS market was valued at $53.07bn in 2013 and is expected to grow at a CAGR of 4.2 pc. This positive growth rate will be fuelled by the growing use of A2P SMS in the web and mobile sector.

There is also the growth of two factor authentication and security via SMS. With the proliferation of mobile devices, more personal data is being transferred over the Web than ever before. To add a layer of security, two-factor authentication has become the go-to method for companies to protect its users.

Using SMS as an authentication method has been rising in popularity, as a user almost always has a mobile device on them at any given time. Companies using SMS as a step in two-factor authentication (if activated) include Google, Apple, Facebook, Twitter, Dropbox, PayPal and LinkedIn.

It all points to digital identity being the key to future success. Brands that focus on customers' digital identity and then tailor their services to this will succeed.

It's clear then that businesses and organisations should continue to explore the text message and find interesting new ways of approaching an old favourite.

Aggregator's Story_

SMS - Your Customer Experience Tool

Customer Experience or CX is top of the agenda for any enterprise company nowadays – it is a great way to differentiate the offering in a world of commoditized products and services. SMS on the other hand is an almost ancient technology with over 25 years of lifespan and perceived by many as having already past its prime days given the alternatives presented by the instant messaging apps like e.g. WhatsApp and Wechat. So CX and SMS is not the obvious pairing but I believe it is a dream couple!

Let me show you a concrete example to illustrate my claim.

SMS for crowd management by Virgin Trains

Virgin Trains operates long-distance passenger services connecting six of the UK's largest cities; London, Birmingham, Manchester, Liverpool, Glasgow and Edinburgh, which have a combined metropolitan population of over 18 million people. In London they use Euston station, which is one of the busiest railway hubs in the UK. If you go there at rush hour you will observe thousands of passengers waiting in front of the big board listing all train connections and waiting for the platform to be announced. As soon as it shows up a huge crowd frantically starts moving to one platform, while another crowd heads in exactly the opposite direction.

Imagine a big ant hill in which you stepped on against with your foot (by mistake) and you get the picture of Euston's challenge.

For the Virgin Trains passengers this is a scenario of the past! Thanks to a new SMS service run by OpenMarket for Virgin Trains a passenger that registered his cell number when buying the ticket directly from Virgin Trains gets an upfront notice on his phone like this one:

Your 12:40 train to Manchester is nearly ready. Please head to the concourse and we'll text you the platform shortly. To opt out text VTSTOP to 83080

So he can stay in the comfy café instead of standing in front of the board with all the others. And a minute before the information appears on the board, the passenger gets another text message saying:

Alan, your 12:40 train to Manchester is ready on PLATFORM 15. You're in coach J seat 02. Please have your tickets to hand. To opt out text VTSTOP to 83080

This personalized messages improved the customer experience for Alan and all the other Virgin Train passengers a lot and differentiates Virgin Trains' service from other transport options. Plus this is just the beginning: future plans look at suggesting via SMS to change the booked train to a less busy train using 2 way SMS capabilities.

In my view this is a great example of Mobile Engagement between an enterprise and its customers using SMS. The "old" SMS scores here big times with its advantages of complete ubiquity (everybody has a cell phone and no app is required) and the unparalleled perfect attention span it achieves proven by many studies in comparison with email or voice.

For how long will this SMS advantage last? I believe, longer than you think! Please check my blog post "The Future of SMS – What We Can Learn from the Romans and the Space Shuttle".

Giovanni Benini

Pressure Points_

OTT

The biggest headache for SMS revenue of course comes in the form of the free alternatives offered by the OTT players. Mobile phone messaging apps will have been used by more than 1.4bn consumers in 2015, up 31.6 pc on the previous year according to eMarketer's first ever worldwide forecast for these services. A little perspective first: McKinsey experts says that SMS messaging generates 50,000 times more revenue per megabyte, on average, than data average revenue per user; as a result, defensive actions that reduce profitability or self-cannibalize the SMS channel to hold off an OTT threat are expensive and should not be taken prematurely. On a "macro" level, carriers should carefully monitor key drivers of OTT tipping, assess the risk in their market on an ongoing basis, and act accordingly.

Based on lessons learned in markets around the world, McKinsey says carriers should consider constructing a mobile messaging strategy that matches the level of risk inherent in their corresponding market so for high-risk markets, strategies range from accepting OTT messaging will experience strong growth, and working to maximize revenues elsewhere to a more aggressive response of confronting OTT players head-on, a tactic used by select carriers in markets such as South Korea where service providers have launched their own IP communication applications, pre-loaded on handsets with proprietary features, such as privileged access to a carrier's address book.

One this is clear, the growth in popularity of messaging apps is projected to continue, and eMarketer predicts that by 2018, the number of chat app users worldwide will reach 2 billion, representing 80pc of smartphone users.

Although the mobile messaging app market is crowded, eMarketer has identified WhatsApp and Facebook Messenger—both owned by Facebook—as the two "global powerhouse" apps with significant reach in more than 20 countries worldwide - definitely two to watch.

That said while OTT as a consumer messaging channel with evolve adapting to trends and technologies, business messaging will however focus on trusted, secure and effective messaging channels. SMS has led this channel for 10 years and is gaining momentum.

The Telefonica Text Economy Report
Pressure Points

> Ultimately fraud is a measure of success. The effectiveness of business SMS means that it will be a target. We need to focus on educating & protecting customers

GREY ROUTES

From an A2P business SMS perspective, one threat really comes from the misuse of P2P channels to send A2P bulk messages via International SS7 gateways which is more commonly known as grey routes. These routes are used legitimately by bona fide aggregators to take advantage of consumer routes which exist between many international operators to send large quantities of A2P SMS messages for a price point that is under the official A2P SMS rate..

The "grey" part of the route is usually at the receiving end where the message terminates its journey on one operator's network. The text is often made to appear as if it originated locally through the manipulation of the SMS sender ID having passed from a foreign operator's P2P gateway.

Another similar threat which comes from a very different route is the use of SIM farms by the more unscrupulous SMS vendors. SIM Farms are banks of mobile devices which contain SIM cards and connect to networks just like mobile phones. They typically use PAYG (Pay As You Go) with unlimited SIM deals offered by the networks and commonly associated with senders of junk text and SPAM messages.

The problems arise when underhanded suppliers exploit these routes using SIM Farms and a loophole that stems from the historic practice by telcos of not traditionally charging for incoming traffic because they expected the costs to balance out when the recipient on one network sent a reply back. This allows less honest players to avoid paying any interconnect fees in order to offer unfeasibly cheap message services and it comes at a huge cost to telcos in lost revenue. The unexpected consequence of trying to police this is that telcos are forced to take action to block such channels and it can mean that innocent, completely legitimate SMS messages don't make it through. In this sense it's very important to get assurances from SMS vendors that they only use approved connections.

Ultimately fraud is a measure of success. The effectiveness of business SMS means that it will always be a target. Telefonica expects fraud cases to increase - in this sense we need to focus on educating and protecting our customers – and in our case we are regulated to ensure this happens.

A Message from MEF_

Joanne Lacey, COO MEF

In recent years mobile messaging has seen some dramatic shifts.

Firstly, there is the meteoric rise of OTT messaging, apps such as WeChat, Viber and WhatsApp as consumers increasingly switch to free application based platforms with richer functionality. Growth in other sectors such as mobile banking and mCommerce has also driven the use of messaging as its utility switches from P2P communication platform to an enterprise led practice, beyond direct to consumer marketing, to be increasingly used as the trusted channel for authentication and customer engagement.

Furthermore, the huge appetite for messaging in emerging markets across Africa, Asia and Latin America continues to create new opportunities for the sector. So called mobile-first markets often leapfrog developed markets when it comes to usage with a combination of strong SMS usage and often a dominant local messaging app e.g. WeChat in China, Telegram in Brazil and BBM in Indonesia. However, globally WhatsApp, Facebook and SMS dominate as seen in a global consumer survey carried out on behalf of MEF in Q2 2016 by On Device Research.

When it comes to A2P Messaging then the study identifies that SMS is the channel of choice by enterprises. Finance leads the way overall in terms of usage. 11 of the 12 categories studied were found to use SMS more often than messaging apps for customer engagement. Only employer communications are using apps as much as SMS although this is likely to include the deployment of P2P channels. Interestingly nearly one quarter of consumers have never received an SMS from a business and more than one third of messaging app users indicate the opportunity for continued growth across both channels.

So the future of messaging is bright. Yes - but it is not without its challenges.

It is estimated that fraud is costing the ecosystem at least $2billion annually creating volatility in the market, as well as directly impacting enterprises and consumers leading to uncertainty, slower adoption rates for new services and sectors and lower market growth.

The impact of some types of fraud are plain for all to see, such as those that target consumers directly. The ‘how’ and ‘why’ are reasonably easy to understand: overzealous marketers or a sender pretending to be someone they are not to try and deliver malicious software into a mobile subscriber’s handset for personal gain, or even a legitimate company which has simply not completed the right checks to ensure that a number given to them is correct or that a consumer has given them their explicit consent to deliver marketing messages to them at a later date.

But others such as Grey Routes, Faking and SIM Farms are less obvious to the wider mobile environment, namely, those which occur in the relationships between mobile operators, signalling companies and aggregators. An additional consequence of the efforts by some to gain commercial advantage through the exploitation of network vulnerabilities or manipulation within the routing process is poor quality service delivery which can damage enterprises’ relationships with their customers or even devalue their brand.

In Q2 2016 MEF launched The A2P Messaging Fraud Framework as part of its Mobile Messaging Programme: The Future of Messaging which looks at the two essential drivers of the messaging ecosystem – Market Development and Fraud Management.

The framework developed by a cross-ecosystem international Working Group identified 11 types of fraud affecting the A2P channel today across four sub-groups namely Consumers, Enterprises, Market and Networks. It defines the causes, impacts and affected parties of each of the fraud types and will form the basis of future best practice guidelines to be rolled out during the industry programme.

The 11 Fraud Types:

1. SPAM
2. SMS Originator Spoofing
3. SMS Phishing
4. SMS Malware / Hacking
5. Access Hacking
6. Grey Routes
7. MAP Global Title Faking
8. SCCP Global Title Faking
9. SMSC Compromise Fraud
10. SIM Farms
11. Artificial Inflation of Traffic

The prevalence of fraud in the market will only continue to undermine the A2P channel if left unchecked. Awareness and understanding is not consistent across the value chain and no one stakeholder can successfully address fraud on its own. A cross-ecosystem approach is essential to accelerate the clean-up of the market in order to create a more transparent ecosystem which is free of fraud to ensure a sustainable future of messaging.

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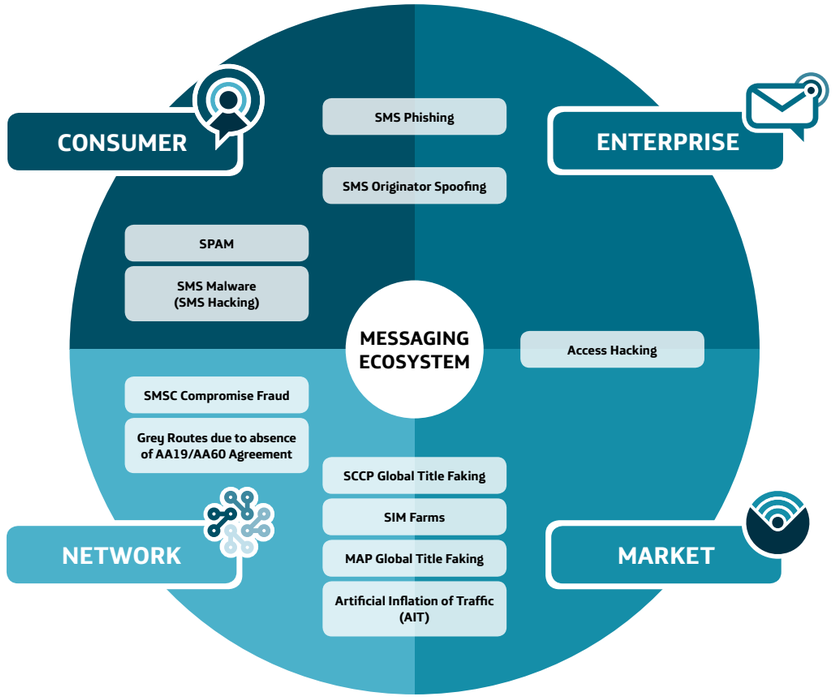
Chart 3 A2P Messaging Fraud Framework
Estimate of cost of fraud: http://www.mobileecosystemforum.com/2016/05/19/the-cost-of-fraud-in-the-a2p-sms-ecosystem-a-back-of-the-envelope-calculation/



Conclusions_

Despite the growth in other communication channels, SMS remains one of the primary channels of communication because it is proven to be the most effective way to reach users with a 90 pc read rate in minutes. So when it comes to timeliness of delivery, SMS maintains the highest engagement rate in comparison to emails and OTT apps.

In effect, if you have any kind of mobile phone – you can receive and send SMS. This makes its global reach soar as there are no pre-existing connections required, such as accepting friend requests or requiring two parties to download the same app.

The lower barriers to communication let users receive messages quickly, making it ideal for sending short, time-sensitive content. The one-size-fits-all solution makes anybody with a mobile number reachable and the technology for sending and receiving SMS is not reliant on high speed internet, essentially making anyone in modern society accessible.

OTT messaging apps function only while connected to the Web. Different apps also require different hardware and software compatibilities, excluding out users with feature phones or smartphones that the OTT app doesn't support. SMS does not discriminate in this way.

But it is true nonetheless that SMS use continues to drop and is becoming less and less important as a revenue stream for mobile carriers however and by total contrast A2P volumes are predicted to continue to rise over the next few years, generating far more revenue for mobile carriers than data messaging traffic.

According to GigaOm , the next few years "will mark a golden age for A2P SMS," with the number of worldwide A2P messages increasing from 1.4 trillion in 2013 to 2.19 trillion by 2018." SMS then serves as an ideal platform for A2P messaging – another reason why the SMS is here to stay for the foreseeable future.

Additionally disruptions in the A2P sector make a global telecom network more accessible with a new breed of cloud communication platforms making the technology easily-deployable and available to more companies – especially start –ups – the new growth engines of the digital economy.

Today, SMS may be viewed as antiquated technology – but the reality is it that SMS plays a key role in connecting most modern technologies. From its high user engagement rate to its disruption in the A2P sector, we won't see SMS disappear anytime soon.

[i] Additional research from Felix Sanz Justel, Project Manager & Caroline Hamilton, Finance Analyst Telefonica Global Advertising, Natalie Homer, Telefonica, Global External Comms
[ii] Steve Easterbrook, President and CEO
[iii] OneReach
[iv] Business Insider, Fortune, Mashable, Activate.com
[v] Facebook ($213bn); WhatsApp ($21.8bn); Snapchat ($20bn); WeChat ($83.6bn); Instagram ($35bn)
[vi] Source: WhatsApp; Engadget
[vii] GlobalWebIndex
[viii] Business Insider, Fortune, Mashable, Activate.com
[ix] Facebook ($213bn); WhatsApp ($21.8bn); Snapchat ($20bn); WeChat ($83.6bn); Instagram ($35bn)
[x] 2015 Forrester Research Inc. For eBusiness & Channel strategy professionals – Mobile Technology that Drives Sales
[xi] Pew Internet
[xii] Velocify
[xiii] research.gigacom.com

Glossary_

A2P Application to Person, where an SMS message is sent from an application — typically a web app to a mobile subscriber.

APP A self-contained program or piece of software designed to fulfil a particular purpose; an application, especially as downloaded by a user to a mobile device.

Apple iMessage An instant messenger service developed by Apple Inc. that allows end users to send texts, documents, photos, videos, locations, contact information and group messages over networks.

Eventbrite Considered the world's largest self-service ticketing platform.

Facebook Messenger Facebook's proprietary messaging application.

Grey Route In telecom (especially VoIP) defines a route that is legal for one country or the party on one end, but illegal on the alternative end as it typically avoids paying an interconnect fee to one of the networks involved.

OTT Over-the-top refers to the method used to deliver of audio, video, and other media over the Internet without the involvement of a multiple-system operator in the control or distribution of the content.

MMS Multimedia Messaging Service is a standard in mobile messaging use to send a message from one mobile to another that can include not just text, but also sound, images and video.

P2P Person to Person messaging is a two-way SMS or MMS messaging. For example, anonymous conversations between two users are considered to be P2P messaging.

SIM Farm A small device, about three times the size of a smart phone, which is connected to a computer and programmed to send out often spam text messages. Used by shady operators who cobble together groups of SIM cards in order to send bulk SMS.

Square A financial services, merchant services aggregator and mobile payment company based in San Francisco.

SMS Short message service - also known as texting or text messaging.

SMS Aggregator Provides connectivity with cell phone carriers by offering an effective gateway to both send and receive messages and other multimedia or digital content.

SMS Gateway Provider Another term for an aggregator.

Snapchat A mobile app that allows you to send videos and pictures, both of which will self destruct after a few seconds of a person viewing them.

Telco Short for telecommunications company.

Twitter An online social networking service that enables users to send and read short 140-character messages called "tweets".

Uber An American international mobile ride request company.

WeChat A mobile text and voice messaging communication service developed by Tencent in China.

WhatsApp A cross-platform mobile messaging app which allows you to exchange messages without having to pay for SMS owned by Facebook.