

WHAT'S UP, WHATSAPP? TRENDS FOR MESSAGING IN 2020



Whitepaper

1.1 Introduction to Mobile Messaging

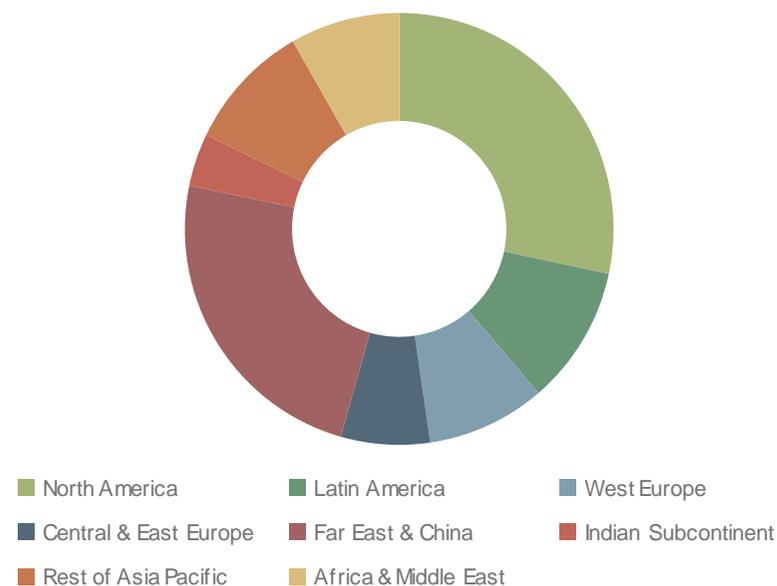
The term 'mobile messaging' encompasses the more traditional forms of messaging, such as SMS, as well as popular OTT (Over The Top) messaging services from providers such as WhatsApp and WeChat. Emerging innovative technologies such as RCS (Rich Communication Services) messaging and in-application AI chatbots are likely to disrupt the mobile messaging market in the near future.

1.1.1 Mobile Messaging: 2020 Market Summary

Juniper Research forecasts that North America will be responsible for 28% of total messaging revenue in 2020. This will largely be caused by the region's adoption of RCS messaging, driven by Google's rollout and CCMI (the Cross Carrier Messaging Initiative). The latter is a joint venture between AT&T, Sprint, T-Mobile US and Verizon to deliver a new messaging application that will support RCS messages. Whilst CCMI will initially focus on the US, the interoperable application developed by the joint venture will eventually be available worldwide. There are currently no indications, however, as to when the solution will be made available to the US market, or international users.

RCS will provide network operators in the region with a new revenue stream, with an opportunity to charge a premium for RCS messages, compared to SMS. The potential for advertising and integrated payments on RCS outweighs the comparatively low investment required by operators, as Juniper Research forecasts that total revenues from RCS traffic in North America will reach \$712.8 million during 2020.

Figure 1.1: Total Mobile Messaging Revenues (\$m), Split by 8 Key Regions – 2020



Source: Juniper Research

In 2020, Juniper Research forecasts that Far East & China will generate \$31.5 billion in messaging revenue. This is driven by the prevalence of OTT messaging service applications in the regions, including Kakao Talk, LINE and WeChat. The latter is particularly popular amongst Chinese users for its omnipotence. WeChat supports many plug-ins that cover all aspects of daily life, including gaming, mobile payments, dating services and ordering of services. Businesses can create an official account on WeChat, using the app to interact with customers either via a customer service representative, or the implementation of a chatbot.

1.1.2 Challenges for Mobile Messaging Stakeholders

i. Increased Competition for Revenues

Mobile operators face a multitude of challenges to maintain revenues, including competition from OTT business platforms and chatbots. Both OTT business platforms and chatbots will take an increasing amount of traffic, and thus revenue, from operator networks. In response, operators are developing new services underpinned by novel business models to stop declining ARPU (Average Revenue per User).

ii. Payment Integration

An increasing number of OTT messaging applications have introduced integrated payments, with transactions completed in the conversational interface. In January 2020, Facebook Pay was introduced in the US market for Facebook and Facebook Messenger. After entering payment information once, users can then use Facebook Pay for goods and services.

Due to be enforced in December 2020, PSD2 (the Second Payment Services Directive) applies to all online payments in the EU. The directive will ensure that businesses are appropriately authenticating online payments, with higher value payments requiring 2FA (Two-Factor Authentication). As the market moves to a state of conversational commerce, application developers will need to ensure any payment integrations are PSD2-compliant.

iii. Fraudulent Activity

a) Grey Routes

By using grey routes to masquerade A2P (Application-to-Person) SMS messages as P2P (Person-to-Person), fraudsters can create a direct hit to operator revenue. As it is the operators' responsibility to correctly distinguish A2P from P2P traffic, many network operators are implementing traffic control measures, such as firewalls, to identify potentially fraudulent activity and prevent revenue leakage.

b) SIM Box Fraud

Rather than paying to route international messages through legitimate channels, fraudsters can use SIM boxes to connect at a local rate, bypassing higher charges. The use of SIM boxes is particularly virulent in emerging markets and nations with high international and low local messaging charges. To counteract this, operators must implement firewalls to analyse message traffic and detect suspicious use.

c) Reduction of Spam Volumes

The mobile messaging space is perceived by users as 'personal', so they generally receive a lower volume of communication from brands via SMS compared to email. Users are more sensitive to, and less tolerant of, spam received on mobile messaging. Businesses using mobile messaging as part of their marketing efforts must therefore be mindful of the volume of messages sent to users.

d) Phishing

As users become more savvy to traditional phishing of email and telephone conversations, SMS phishing has emerged as a new form of

fraud. With open rates of 98%, SMS messages are the ideal platform for fraudsters trying to trick users into disclosing personal information. Juniper Research believes that as RCS messaging becomes more widely implemented, the number of SMS phishing cases will decrease. Legitimate businesses will opt to use RCS when contacting a customer, as RCS has the ability to verify the identification of a sender. This will increase consumer confidence, and make it harder for fraudsters to use SMS to impersonate businesses.

1.1.3 OTT Messaging Applications

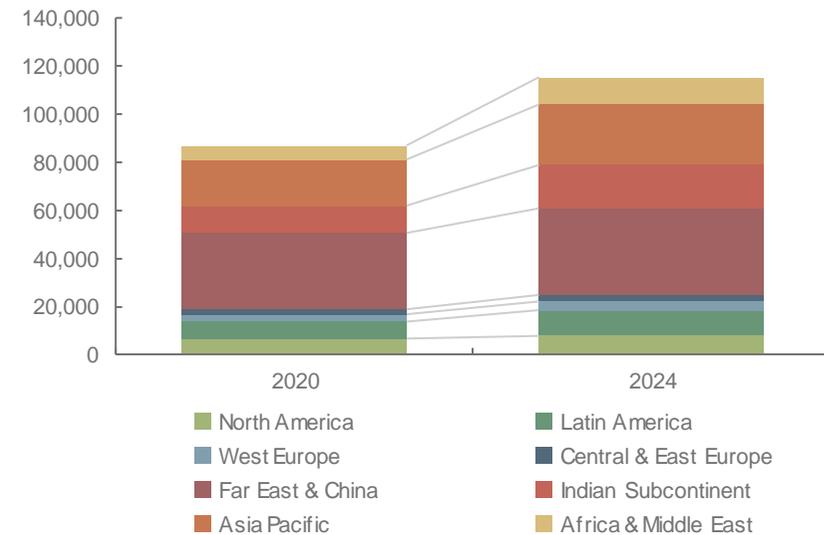
As users move away from P2P SMS, it is unsurprising that a number of OTT messaging applications have permeated the market. WhatsApp is currently the most popular, with 1.6 billion monthly active users; Facebook has an active user base of 1.3 billion and WeChat 1.1 billion users.

Juniper Research forecasts that the total traffic attributable to OTT applications will grow 33% over the next five years (see figure 1 right). We believe that this traffic's growth will be driven by three key factors:

- The continued migration of P2P traffic from operator-led channels, most notably SMS;
- The continued growth of OTT application user bases

The growth of average traffic per user.

Figure 1: Total Mobile IM Traffic (bn), Split by 8 Key Regions, 2020 & 2024



Source: Juniper Research

Whilst SMS limits messages to 160 characters, OTT messaging applications enable users to send messages with extra features such as emojis, gifs, images, stickers, videos and voice notes. OTT messaging applications are particularly popular in countries where network operators charge premium prices to send SMS messages and make voice calls. Messaging apps such as iMessage and WhatsApp are also end-to-end encrypted, attracting customers who value privacy. Indeed, Juniper Research believes that operators' previous decisions to bundle SMS messages into a monthly contract was often partly motivated by the rise of OTT messaging applications.

1.1.4 RCS

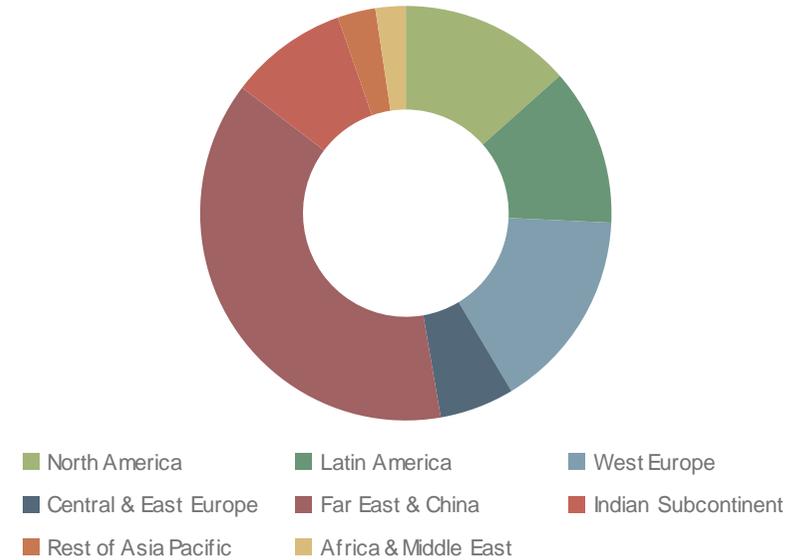
The initial adoption and rollout of RCS was hindered by the lack of an immediate business case. However the emergence of A2P as a key use case leads Juniper Research to believe that RCS is on the verge of disrupting the mobile messaging market.

Whilst the current RCS market is fragmented, Juniper Research suggest that RCS messaging will eventually overcome the issue of interoperability. There is already evidence that RCS will be supported by a wider range of network operators, such as CCMI.

Juniper Research therefore speculates that the announcement of RCS support from Tier 1 US operators will motivate other network operators to consider RCS adoption, leading to a more cohesive environment.

As can be seen from figure 2 right, Juniper Research believes that over 744 million smartphones will have access to RCS services, over 16% of the global installed base of devices. There has been little growth of RCS over the previous two years compared to expectations, however the technology still progresses.

Figure 1.2: Total Number of Smartphones Using RCS services in 2020: 744 million



Source: Juniper Research

1.2 Mobile Messaging: Movers & Shakers



Jim Continenza
mGage
Chairman & CEO

Jim Continenza has a BSc degree in Business Administration from the University of Wisconsin, and a career spanning more than 30 years.

During this career, Continenza has been associated with several enterprises including Teligent, STI Prepaid, Tembec, Neff Corporation, Sorenson Communications, Broadview Networks, Merrill Corporation, Nextel International, Eastman, Eastman Kodak and Vivial.

Continenza is on several boards including Eastman Kodak, Neff Corp, Merrill Corp, Sorenson Communications and Tembec Corp.



Richard Dodds
MessageBird
VP Asia Pacific

After graduating from the University of Otago with a BCOM in Accounting, Marketing & Business Law in 2006, Richard Dodds briefly worked for Roamfree before joining Dialogue Communications in 2009.

Dodds remained at Dialogue until March 2016, when he joined MessageBird as the Vice President of Strategic Partnerships. His title has since changed to VP Asia Pacific.



Dario Calogero
Kaleyra
Founder & CEO

Dario Calogero has experience with international firms like Oracle, Fiat Chrysler Automobiles and management consulting companies like PWC. He also has backed over 30 years' experience in ICT, with expertise in strategy, general management, marketing and sales. A graduate from Bocconi with a research paper on Electronic payments, Calogero initially joined Olivetti as a Strategic Market Planner.

In 1999 Calogero founded Ubiquity, aiming to develop a new market with interactive and multi-channel services for banks and credit card issuers. He led the company to consistent domestic growth in Italy and, after 2016, led the international growth through acquisitions of Solutions Infini, Buc Mobile, and the business combination with Gig Capital.



Silvio Kusic
Infobip
CEO & Co-founder

Infobip founder and CEO, Kusic has been the driving force behind Infobip's growth and the strategic focus on professional enterprise and MNO solutions since 2006.

Having earned an MSc at the University of Zagreb Faculty of Electrical Engineering and Computing, he immediately entered the communications industry, starting with a group of enthusiasts an early project that aimed to enable a municipality to communicate with its citizens. This was preceded by an iconic moment when he decided to leave his first job at a state-run company, on the very first day. After only four hours spent there, he took a lunch break and never came back, which placed him on the path of starting and growing one of the most successful tech start-up companies in Europe.



Robert Gertsmann
Sinch
Chief Evangelist & Co-Founder

Based in Sweden, Robert Gerstmann is the Chief Evangelist and Co-Founder of Sinch.

During Sinch's lifespan (formerly known as CLX Communications), Gerstmann has held a variety of titles including VP Product Marketing, VP Sales & Business Development and Managing Director.

Gerstmann is also a Board Member of the MEF (Mobile Ecosystem Forum), a position he has held since October 2018.



Chris Rivera
Syniverse
CTO

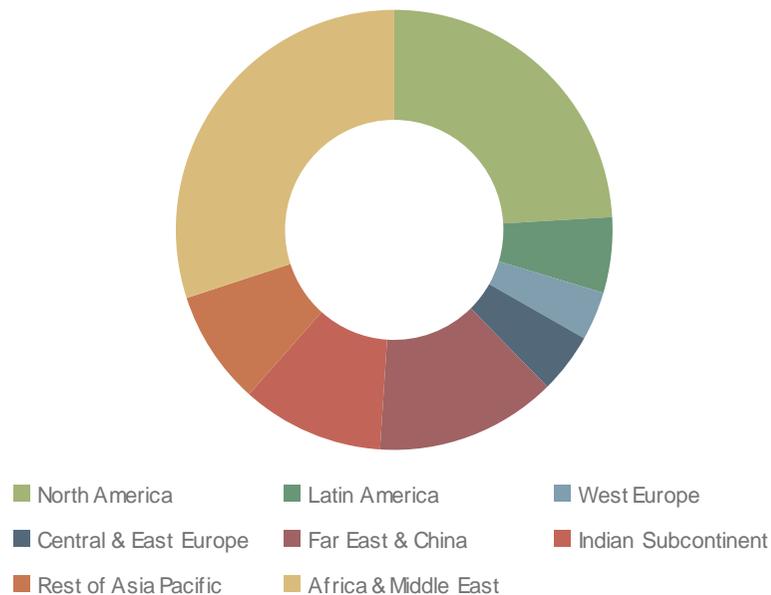
Chris Rivera is responsible for Syniverse's infrastructure and security operation. Most recently, he had a variety of senior roles at Cisco Systems, including Managing Director, CTO, Americas Mobile and Web Providers; Senior Director, Product Line Management, Routing Technology Group; and Director, Product Line Management, Optical Networking.

He began his career as an Operations and Electronic Systems Officer in the US Navy, in which he served for five years and last held the rank of Lieutenant. Rivera has a bachelor's degree from the US Naval Academy and completed coursework at the University of California at San Diego.

1.3 Market Summary: Total Number of SMS Business Messaging Traffic

SMS business messaging traffic will reach 3.5 trillion messages in 2020, rising from 3.2 trillion in 2019. This is a growth of 7%, despite the economic impact of COVID-19. SMS business messaging enables brands and enterprises to leverage SMS for use cases such as notifications and authentication messages.

Figure 3: Total Number of A2P SMS Sent in 2020: 3.5 Trillion



Source: Juniper Research

- Despite the collapse of the tourism and aviation industries, the pandemic will directly generate increased demand in other sectors, including healthcare and government agencies, during 2020. Business messaging traffic attributable to healthcare services will grow 10% this year, as healthcare providers leverage the low cost and wide reach of SMS for notifications during the COVID-19 crisis.
- The travel sector uses business messaging for the delivery of booking confirmations and travel service updates; however, the COVID-19 pandemic has greatly reduced this source of demand for business messaging services.
- In addition, the anticipated economic recession arising from COVID-19 will cause long term lower demand from this sector, rather than this being a temporary disruption. Therefore, messaging vendors must broaden the breadth of their subscriber bases to mitigate the impact of the worst affected sectors.
- The ubiquitous nature of SMS amongst citizens and its low cost per message will continue to generate demand in these uncertain times. However, as the pandemic slows, Juniper Research urges mobile messaging service providers to invest in industries that are highly resilient to the impact of COVID-19 to continue growth.
- The banking and online retail sectors are industries expected to be robust against the long-term effects of COVID-19. These sectors are anticipated to account for over 25% of all business messaging traffic in 2020.

Order the Full Research

Mobile Messaging's latest research presents a thorough analysis of the messaging ecosystem. Providing critical reading for stakeholders, it delivers an in-depth evaluation of the challenges facing mobile messaging stakeholders and strategic recommendations for key stakeholders, including mobile operators, messaging platforms and OTT (Over the Top) messaging service providers. The report also provides a regional evaluation of mobile messaging ecosystems and key player benchmarking in the Juniper Research Leaderboard.

Key Features

- **Mobile Messaging Ecosystem:** Evaluation of the mobile messaging market, including an outline of current challenges and opportunities facing stakeholders.
- **Key Stakeholder Recommendations:** Analysis of the current market situation from the perspective of mobile messaging stakeholders. These stakeholders include MNOs, CPaaS Platform Providers and OTT Messaging Application Players.
- **Regional Technological Impact Assessment:** An impact analysis across 8 key global regions of mobile messaging technologies, using measures such as A2P SMS Traffic; A2P RCS Traffic; Mobile Messaging Revenue.
- **Juniper Research Leaderboard:** Key player capability and capacity assessment of 15 mobile messaging platform providers.
- **Interviews** with leading mobile messaging service providers, including Infobip, Sinch and Syniverse.

- **Benchmark Industry Forecasts:** 5 year forecasts are provided for mobile messaging services including SMS, MMS, Instant Messaging, Chatbots and RCS, including adoption, traffic and revenue.

What's in this Research?

1. **Executive Summary & Core Findings** – Top-level report summarising key trends, competitive analysis and market forecasts, allied to a series of key takeaways and strategic recommendations for C-level executives (PDF)
2. **Deep Dive Strategy & Competition** – Strategic assessment of market dynamics, drivers and trends, together with a detailed analysis of key messaging platform providers through the Juniper Research Leaderboard (PDF)
3. **Deep Dive Data & Forecasting** – Mobile messaging market prospects analysis together with 5 year forecasts for key metrics, including adoption and traffic of each messaging service, and operator revenue where applicable (PDF)
4. **Interactive Forecast Excel** – Highly granular dataset comprising more than 49,500 datapoints, allied to an Interactive Scenario tool giving users the ability to manipulate Juniper Research's data (Interactive XL).
5. **harvest Online Data Platform:** 12 months' access to all the data in our online data platform, including continuous data updates and exportable charts, tables and graphs (Online).

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