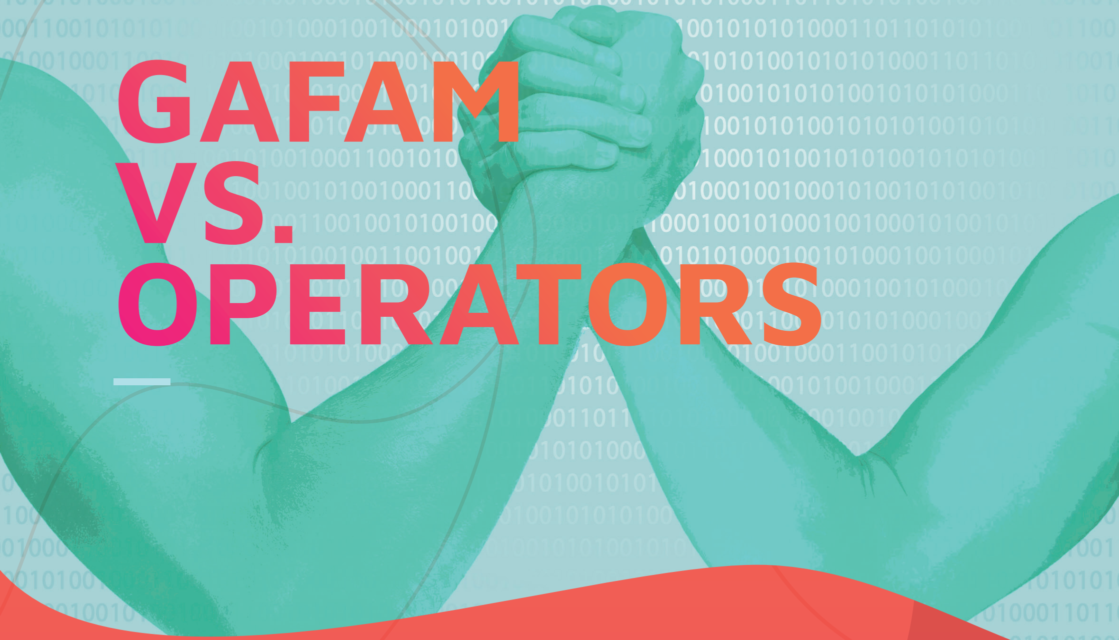
GAFAM VS. OPERATORS



GOOGLE, APPLE, FACEBOOK, AMAZON, MICROSOFT & TELECOM OPERATORS: FRIENDS OR FOES?

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Introducing the challengers

A battle of giants!

To my left, GAFAM:
Google, Amazon, Facebook, Apple, Microsoft. Created less than 50 years ago, these neo-giants are close to having a global monopoly on HARDWARE and SOFTWARES. They shape the world's information media: computers, smartphones, operating systems, browsers, search engines, social networks. The entire chain is controlled. Above that, GAFAM controls the CONTENT and, by the same token, its most lucrative counterpart: advertising.

To my right, telecom operators:
there are many but no less powerful telecom operators. Often century-old, they are the pioneers of global connectivity. These giants are builders of the bridges that bind us together, optic fibre bridges that have connected every individual across borders. Deeply globalised but confined to regional territories by regulation, they have control over INFRASTRUCTURE. Above all, they have control over the raw material essential to any connectivity: DATA. This allows everyone to connect to the internet on mobile phones and creates a huge market.

A fierce game!

Two main forces that shape the world today.

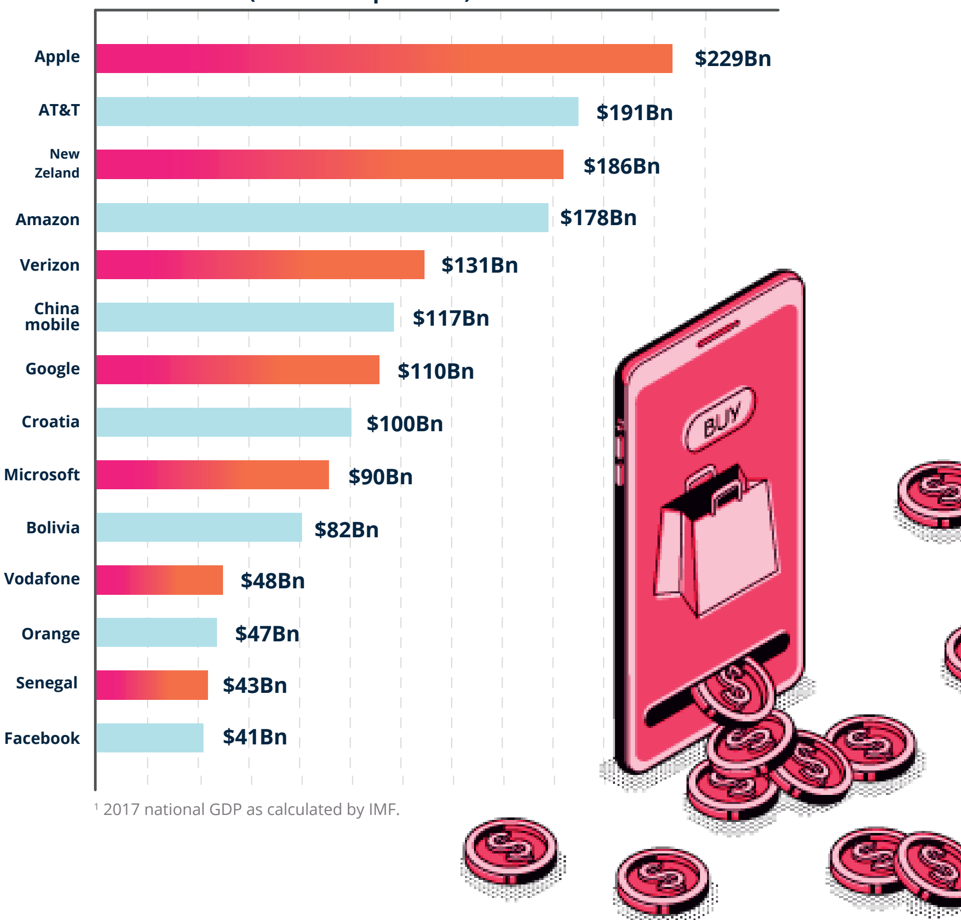
They simultaneously master information and the medium of information, the layout and the content. Two of the greatest forces in global economy. Companies whose annual turnover exceeds the GDP of Croatia, Cameroon or Paraguay.

Telecom operators and new technology giants compete on a global stage. In this era of net neutrality in the United States, one round ends with a heavy blow on operators. While GAFAM seemed to be running the show, another round began.

> **Let us count the scores together.**
> **Is the game close? Who would you bet on?**
> **Is the struggle unavoidable?**

Stronger than a country

2017 turnover (GAFAM & operators) vs. national GDP[1] in 2017



[1] 2017 national GDP as calculated by IMF.

The urgency of innovation vs. infrastructure in the long term

Of course, they do not have the same function or history. Why do our two protagonists seem so far apart? It is above all a question of a state of mind.

Their DNA is programmed in a very different way. GAFAM are built on the basis of constant innovation, a source of growth and competitive advantage that is always renewed. Take for example a young engineer on their first day at Google. One of the first things they will be taught is the rule of «Ten times thinking»: If you have to rethink something, improve it ten times!

In terms of innovation, it must be said that the race seems to have been won for GAFAMs. Rather ask the operators! According to an AsiaInfo study of European and Asian operators, 62% of operators' employees believe that it would take them more than two years to catch up with GAFAM in terms of innovation.

However, is this not an understandable delay? Operators, the custodians of global telecom infrastructure, are developing a long-term vision. Created to last, sometimes difficult to move, they improve the network by carrying out major projects: analogue lines then fibre, 2G, 3G, 4G mobile network and soon... 5G!

62% of operator employ they would take more than 2 y cath up with the GAFAM in ter innovation

Provocations and jealousy

GAFA have gradually developed a world monopoly, only found in China. They can enter all markets without any major barriers and, above all, without creating value locally (through tax optimisation known to all).

On the other hand, operators are locked in regional territories, properly bound by their respective regulations. There is increasing pressure for a global consolidation of telecoms. There is a strong temptation especially between European operators. The idea is to be able to fight against major market actors, GAFAM in particular. This results in a certain asymmetry that fuels operators' suspicion of GAFAM.

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As if these differences were not enough, Apple has recently added eSIMs into its iPhones. These are integrated SIM cards that (potentially) allow a user to change operators without any friction. This is a way for Apple to strengthen its negotiating power and send a clear message: «No operator is irreplaceable».

The tussle intensifies!

Will Whatsapp kill the SMS?

Operators are not comfortable with the transition from traditional telephony to instant messaging applications.

The innovative capacity of GAFAM often causes collateral damage. According to all operators, this has had a concrete impact on telecoms: the rise of instant messaging and internet calling applications has reduced traditional calls and SMS messages.

In 2011, Microsoft bought Skype to the tune of $8.5 billion under the very noses of Facebook and Google, who were also interested. Not discouraged, Facebook bought WhatsApp in 2012 for $19 billion, although it had launched its own instant messaging service called «Messenger» in 2011. Google responded to this in 2013 with the creation of Google Hangouts, an instant messaging and video conferencing platform. Users abandoned traditional telephony and were attracted by the promise of free messages and (video) calls, in spite of the reduced quality of communication and, until recently, non-compliance with the rules in force on personal data (fact corrected by GDPR). The opinion shared by most actors is that instant messaging is gradually eradicating SMS and video calling applications are replacing voice calls.

However, this is an idea to be (substantially) tested!

On a global market scale, the number of SMS messages sent per day per user increased between 2011 and 2016, with the rapidly growing number of instant messages.

At the same time, the use of instant messaging multiplied and created a whole new type of conversation, less utilitarian and more conversational. Why this new use? This is partly because of free access and especially more varied formats, for example, group conversations and rich content (videos, GIF, emoticons, stickers, etc.). WhatsApp does not eliminate SMS, it rather created a new use.

On the other hand, the overall volume of voice traffic on mobile phones remained roughly the same between 2010 and 2015, with the decline per capita income compensated by the increase in the number of users. (source: Ericsson Mobility report 2015 Q3). The dynamism of some developing markets and the increasing use of A2P SMS (transactional or marketing text messages sent from web/mobile apps) maintained the global demand for SMS.

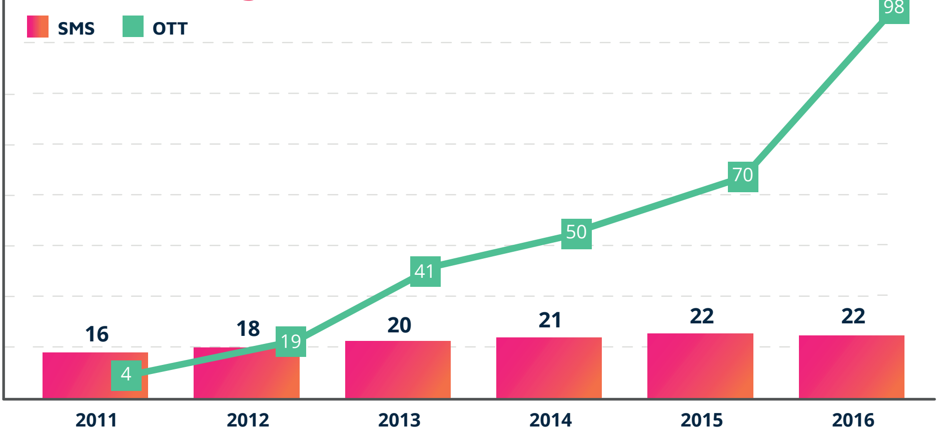
The impact is clearer when focusing on mature markets

All in all, the impact of GAFAM on the voice and SMS market must be tested: it has not been as significant as one can imagine, at least during the first few years. Indeed, the real impact on SMS waited was a 2 step dynamic. A first one at the early stage of instant messaging and one in 2016. In mature markets, the SMS have significantly decreased. In the US for instance, the volume of SMS decreased by 12% throughout 2016, after a 3 years stability.

Ready to answer!

The telecom operators have thought of an answer. Organized by the GSMA, a new protocol has been developed: the Rich Communication Services. This protocol enable new forms of media in an SMS-like communication: video, group chat, sharing your geolocalization... These SMS 2.0 even have seduced Google who's seeing them as a good opportunity for them to stay in the race. This could the start of an interesting cooperation between GAFAM and operators...

Daily message volume of OTT vs SMS



Source: informa Telecom & Media - Ali Saghaeian


verizon

2 worlds with overlapping interests

Capitalizing on infrastructure

In the 1980s and 1990s, operators built a large canal. They then moved large boats, loaded with voice calls and text messages. One day, mobile internet demanded that access to the canal be given to other boats.

The latter were responsible for DATA. These boats grew increasingly big and numerous and all were flying the American flag.

Operators may feel that they are no longer in command. However, GAFAM are indeed improving investment made in this canal, which is more used than ever before.

In summary, operators provide DATA, GAFAM provides a good reason to always consume more data and therefore invest in more generous data packages. Good collaboration is essential.

GAFAM directs data consumption upwards

Creating demand

Where voice calls and SMS are stagnating or even declining, global mobile data consumption increased from less than 2 exabytes per month in 2013 to more than 140 in 2018. That is + 7000%! (Source: Ericsson traffic measurements Q1 2018)

Thanks to what? If we were to analyse your mobile traffic, what would we find? What would be your thirsty apps?

Let us take the example of the most mature market in the world: the United States. In 2015, the analysis was quickly done: 44% of mobile data was generated by GAFAM apps: Facebook, Google, YouTube (Google), Instagram (Facebook). (source: sandvine)

Since then, the explosion of video streaming has increased data consumption and put Netflix at the top of the list.

However, if we divide the time spent by an American user on apps per publisher, our GAFA takes up 52% of the time spent on smartphones in the United States (source: statista). This is mainly due to the takeover by Facebook on social networks and that of the Google/Apple duo on browsers (77% market share worldwide for Chrome and Safari mobile - Oct 2018 - Source: Statcounter).

*(source : Ericsson traffic measurements Q1 2018 - lien) **Source : statista ***Source : Statcounter

Time spent on applications (per app editor) in July 2018 USA.
Source: statista.

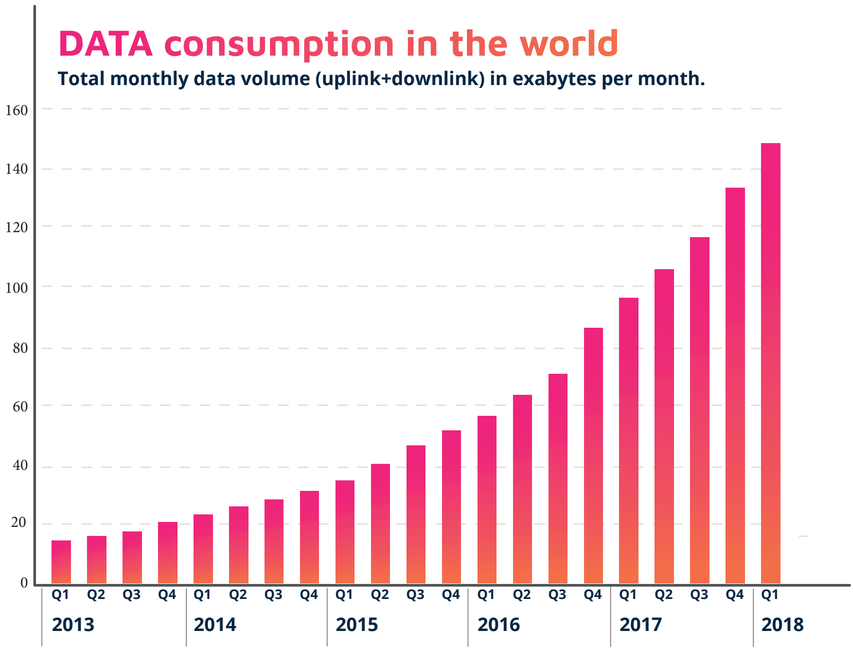
The customer experience paradigm.

Finally, an interdependence is established. To keep users, GAFA needs to provide the best possible customer experience. They always need more data to provide a better experience. They therefore need operators to provide customers with a larger connection. This will come full circle.

For example, what will 5G bring to the social, video streaming or content world in general? Who will be the great winners? One can hope that this will be a shared victory between users (with new services), GAFAM and operators.

DATA consumption in the world

Total monthly data volume (uplink+downlink) in exabytes per month.



Source: Ericsson trafic measurement Q1 2018 - Ericsson Mobility Report June 2018

GAFAM cannot internalise telecom expertise

The giants of Silicon Valley have constantly expanded their offer with a great deal of R&D and acquisition, both by horizontal and vertical integration.

Alphabet explores all horizons, from home to autonomous cars, with more than 230 products to date. Apple manages the entire value chain of its iPhones since the expansion of its Apple stores.

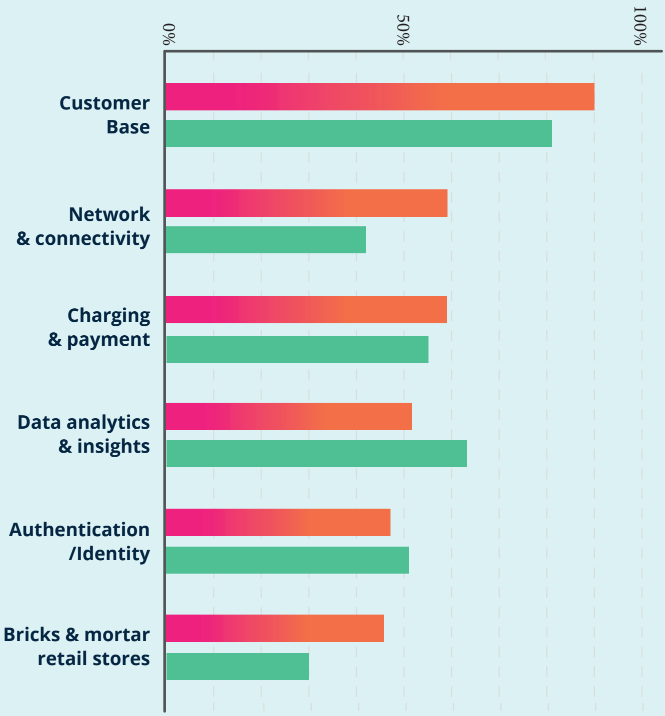
But it seems that GAFAM are not about to integrate telecom infrastructure or know-how. The path seems too long. Even today, they still rely on the expertise of operators for specific skills such as authentication, payment or programmable voice.

All operators can draw on two strengths: their telecom and regulatory expertise (specific to each country), and their knowledge of the local market. Known advantages! This is illustrated by the AsiaInfo study, carried out on a panel of European and Asian operators. When asked about the advantages to be promoted in their digital partnerships, operators highlight: their customer base, their knowledge of the network and connectivity or their payment mechanisms. This observation could therefore be extended to possible partnerships with GAFAM.

Operators have a local ex that they can share with the GAFAM: network kno SMS sourcing, customer

Operators forces

the question «which are the most important assests that telcos bring to digital partnerships?» has been asked to a panel of operators employees in Europe and Asia.



Source: Digital Partnerships Benchmarking Study conducted in late 2016 by STL Partners and sponsored by AsiaInfo

xpertise

owledge,
base...

Ready to share?
Let's debate.

One conclusion is clear: it is time to start the conversation! LCollaboration between operators and GAFAM is essential for free information, enriched experience and lively innovation.

To participate in this dialogue (which is our daily reality as operators) we offer two things. Firstly, we invite you to discuss on social media using **#GAFAMvsOPERATORS**. You will also find articles and events on this subject in the future. Secondly, in order to collect everyone's opinions, we created an interactive questionnaire. It should allow us answer new questions.
Who knows? Perhaps the match could end with a handshake.

Give your opinion

Participate to our survey here

#GAFAMvsOPERATORS

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