FABERNOVEL

GAFAnomics Quarterly ®

- Q1 2021 -

Foreword

Fabernovel is pleased to release the new edition of "GAFAnomics Quarterly" - the report that offers a transversal review of the earnings and strategic announcements of globally disruptive tech giants.

Jean-Christophe Liaubet
Managing Partner
at Fabernovel

The GAFA Q1 2021 earnings season left us with the same combination of admiration, curiosity and anxiety that we faced towards the end April when watching the launch of the ESA's Alpha mission led by our very own national hero (and Instagram master) Thomas Pesquet.

By reporting record-breaking financial results, many big tech (notably the GAFA) companies seemingly defied not only the laws of gravity, but also the conventional piece of wisdom which states that as firms get larger, their growth slows down. Bolstered by pandemic-related shifts in consumer behavior that pushed more people to migrate online for entertainment, shopping and work, they exceeded all expectations on the three key chapters usually scrutinised by the Street: accelerating revenue growth (+25% YoY according to our index), a sharp increase in their operating leverage (EBIT up +74% YoY in median) and cash generation. This clearly reflected their dominance and resulted in the increase of pricing power, returns at scale, and also cost optimisation related to remote work.

However these jarring numbers did not send these tech giants to orbit for another successful "alpha mission" as most of their stocks consolidated in the past weeks.
Rising concerns about interests rates in the US, especially considering Biden's plans to increase corporate and wealth taxes threw a curveball on Wall Street and took a hit on highly valued beta stocks. With their two "alpha generation" engines at a record high level (through earnings and valuation multiples), many tech stocks were valued for perfection, thus offering a less attractive risk-reward.
Dream factors and value optionalities, especially from groundbreaking innovation, also tend to be less easy to identify with, therefore rising not only antitrust scrutiny but also less creative and agile strategies. This was reflected by the buybacks of their shares announced by Alphabet, Apple and Facebook, a use of cash policy usually favoured by mature companies with discounted valuation.

Thus, what if the most attractive innovation equity stories were now in the hands of incumbents that present themselves with both a more affordable valuation proposal and stronger value levers from innovation ? Firms like Disney, Walmart, Nike, L'Oreal, Schneider Electric, Volkswagen or Edenred have started to pave the way for alpha-generative digital transformations. At Fabernovel, we are really keen on supporting the emergence of such new stars, notably in the European stocks index!

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Gafanomics — The Quarterly.

What is this document?

A document published each quarter, two weeks after the financial quarterly publications of some of the largest tech companies in the world.

Who should read it?

Despite being based on complex financial analyses, this document is designed to be understood by anyone with an interest in business in general. Moreover, we believe that it should be of particular interest for people in managerial roles (CEO, CFO, CDO, Project manager...) or individuals connected to various financial markets (investors, analysts, IR,...).

What can you expect to learn from it?

Our goal is to help people understand how today's **Disruptive Tech Giants** (more than $10bn of market capitalization and disruption according to Fabernovel) are performing quarter after quarter, as well as what lies behind their performance. Based on this analysis, we hope to give you the keys to follow their path of success - from the best small quick-win communication practices to larger business model revolutions.

Who is behind writing it?

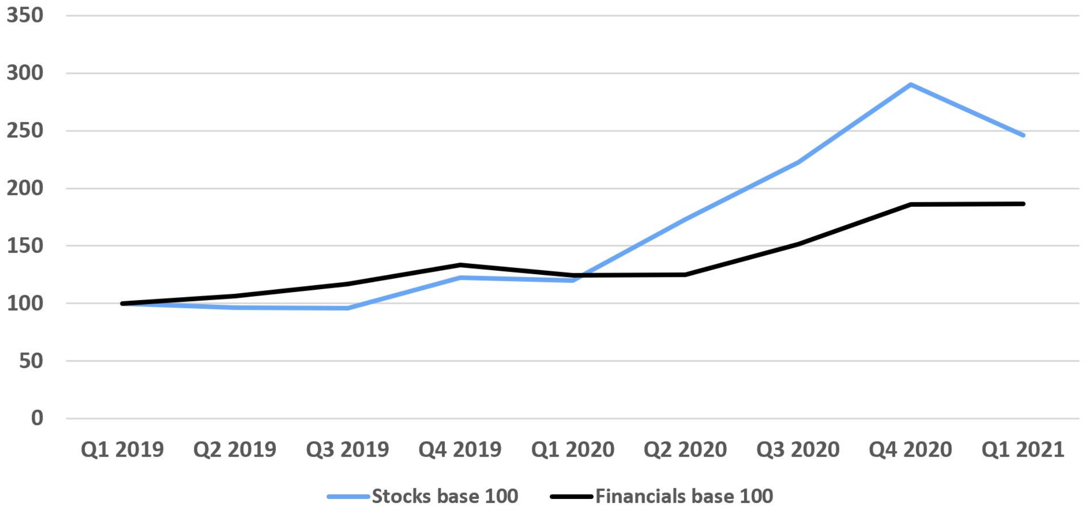
This document is written by a group of financial analysts, strategists, technologists, and designers from Fabernovel, who have combined their expertise to make this document as insightful and thought-provoking as possible with the aim of offering you the best reading experience and inspiration for your own future endeavours.

1

The last 3 months through our eyes.

A consistent growth of both financials and stock over the past few years.

Evolution of the average share price of our Index vs. Sales over time.



Over the last year, especially with the Covid crisis, the Tech stocks of our index have reached extremely **high valuations compared to their financials**.

While it can be correlated to higher expectations for the future, this quarter (Q1 2021) still acted as a **correction** for most companies of our sample.

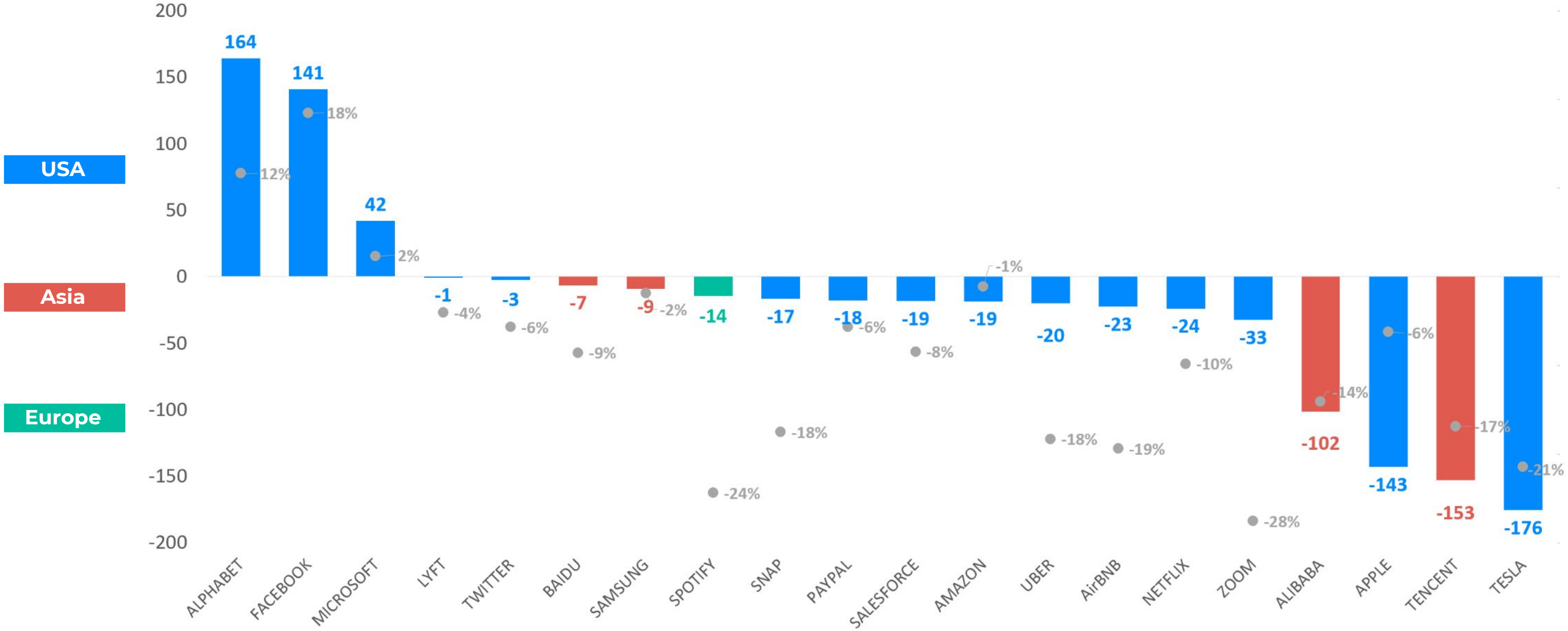
Analysis period: 07/02/2021 - 07/05/2021

1. The last 3 months through our eyes.

A bad quarter on the stock market for most of the Fabernovel Index.

Increase/decrease of Tech Giants' market cap over 3 months.

In $Bn (on the left) and in % relative (on the right) to their own market cap.



Tech Giants

-$431bn
Market cap Change

-9%
Avg share price change

US Tech Giants

-$146bn
Market cap Change

-8%
Avg share price change

GAFA

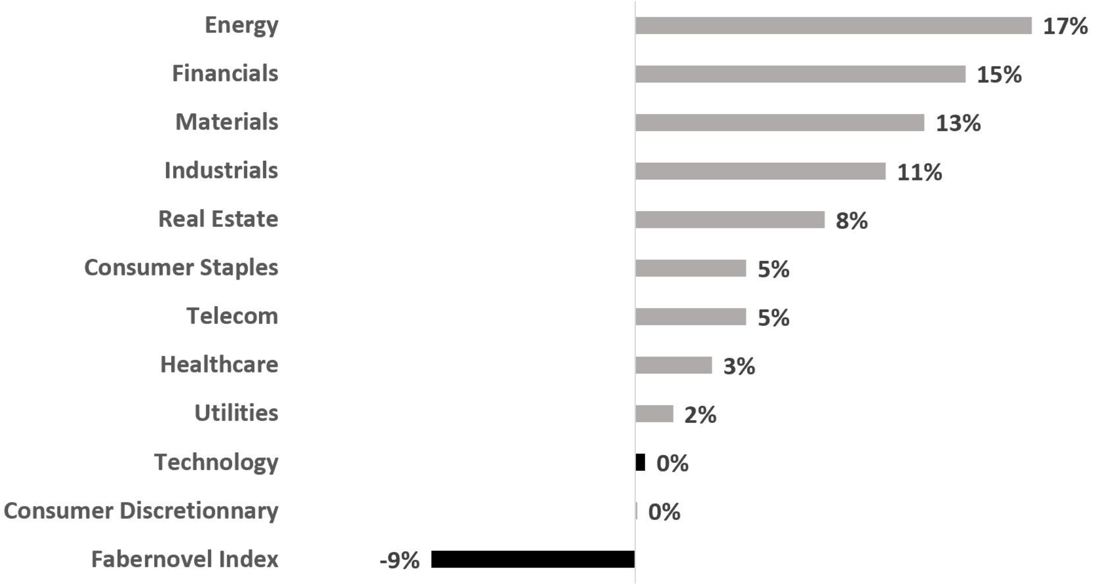
+$143bn
Market cap Change

+6%
Avg share price change

Analysis period: 07/02/2021 - 07/05/2021

An overall positive performance of most sectors in the S&P1200.

3-month performance of all sectors*



How to explain this performance?

1. Once again, many sectors are back in action after the Covid crisis. They remain hopeful for activity to return to a normal pace as well as for stock prices to grow.

2. While Tech is slightly up this quarter, many companies in our sample have underperformed in the S&P1200 as more and more investors are turning towards stable and less "trendy" companies.

Note: The S&P1200 Tech sector is also comprised of semiconductors and other more "traditional" companies, explaining why the sector is up while our sample is down this quarter.

**Source: S&P 1200 Global, as of 07/05/2021*

While Tech Giants' stock performance lags behind, their operational performance is at its best.

Sales	+25%
EBIT	+74%

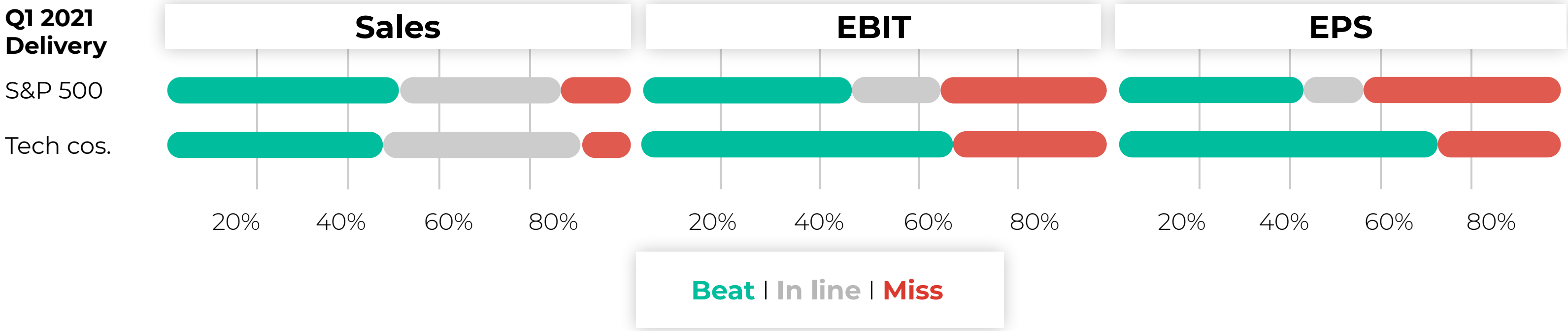
Q1 2021 Median operational growth YoY.

Most of the stocks in the Fabernovel Index have, once again, shown impressive financial results this quarter.
Not only are the sales way higher than last year, the operational result is also growing by 74% on average (for companies showing positive EBIT (13)). Apple and Netflix have more than doubled their EBIT compared to Q1 2020 for example.

Sales	+2.3%
EBIT	+4%

Median 2021e financial revisions.

Following the impressive results of these stocks this quarter, analysts have revised their estimates upwards for 2021 in terms of Sales and EBIT growth.

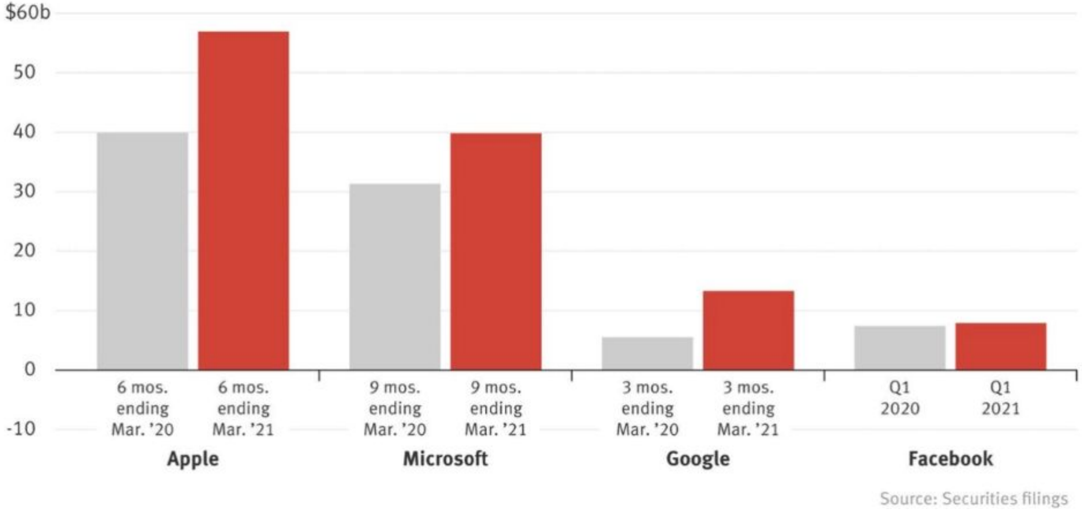


Analysis period: 07/02/2021 - 07/05/2021

Tech Giants are generating more cash than they need.

Cash Geyser

Free cash flow in fiscal year 2021 compared to same period in fiscal year 2020.



Tech Giants are generating more cash than ever, allowing them to buy all that they need (innovative companies for example) in order to keep growing.

Microsoft, for example, bought **Nuance in April for $20bn** and **Google** decided to **buy back its own shares** even though its share price is at a historical level.

Analysis period: 07/02/2021 - 07/05/2021

Tech Giants financial valuation analysis.

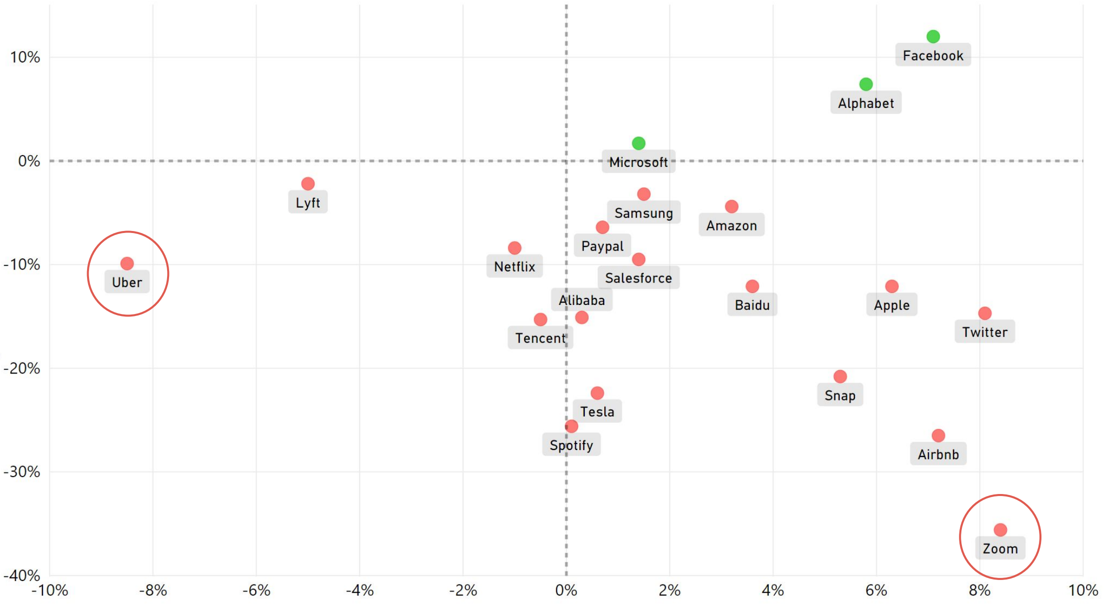
To assess the stock performance of a company, we usually refer to the evolution of its valuation.
The valuation of a company during the quarter and after the publication of its results is driven by two distinct factors:
1. The **evolution of its sales or earnings** expectations;
2. The **expansion of its multiples**.

The equation below uses Sales as a breakdown of valuation and details the meaning of each item.

Valuation		**Sales**		**EV/Sales**
Valuation represents the total value of the assets of a company, or the sum of its market capitalization and its net debt.	=	Sales expectations are anticipated by financial analysts according to market outlook and growth perspectives.	×	The EV/Sales multiple reflects the level of confidence investors have in a company's ability to create future value.

The valuation hurricane has struck most of tech stocks.

EV/Sales 2021e expansion *(07/02/2021 - 07/05/2021)*



Sales 2021e revision
(07/02/2021 - 07/05/2021)

- Share price increase
- Share price decrease

Examples

Multiples contraction.

Zoom

Despite higher than expected revenues this quarter and positive statements about the future for Zoom (many users decided to subscribe to the premium package despite the pandemic's slowdown), Zoom's shares have been consistently decreasing over the past few weeks.
Investors remain doubtful regarding Zoom's future use.

Forecasts downwards revision.

Uber

As the Covid crisis keeps hitting the transportation sector, analysts revised their 2021 Sales estimates for Uber less than 3 months ago. Without altering its core business, the company might suffer even more from the current crisis which is why its multiplier is slightly lower.

Striking facts among Tech leaders.

Google

In January, several **Google** white-collar workers launched the Alphabet Workers Union, a trade union whose prerogatives cover both the US and Canada. This structure's creation was later followed by the launch of the **global union** Alpha Global, which is dedicated to protecting workers' rights and influencing internal and external ethics decisions.

Samsung

Samsung warned it was struggling with a "serious imbalance" in the **semiconductors global supply chain**, which could hamper its mobile division during the Q2. The shortage is due to a rise in the demand for electronics combined with the revival of the global automobile demand. Other tech players are also affected, for instance Apple has delayed part of its MacBook and iPad production.

Microsoft

Microsoft Exchange suffered from a massive **cyber-attack** in the beginning of January. According to Microsoft, Hafnium, a group of hackers backed by the Chinese government, have hacked 60,000 companies mainly in the US. Hackers are said to have targeted scientific researchers, law firms, think tanks, military contractors and NGOs.

Apple

Apple confirms its breakthrough in the advertising field by announcing the sale of **advertising slots** in the "suggested" apps section in the App Store search page, right before the keyword search. It should be noted that they already sell search ads for the App Store that allow developers to pay for the top result following a specific keyword (for instance the 1st result when looking for Twitter is Tik Tok).

Paypal

Paypal became the first foreign firm to hold a license as an online payment processor in **China**. In order to avoid confrontation with Alipay and WeChat Pay, they will focus on providing gateways both for Chinese merchants to sell overseas and for Chinese consumers to pay for foreign goods. That said, PayPal will definitely face severe challenges in terms of price competitiveness.

Most impactful quarterly quotes.

Facebook

Facebook, *"We think that audio is of course also going to be a first-class medium (...). Audio as a medium just allows for longer-form discussions and exploring ideas (...) [It] just a lot more accessible because you can multitask while listening."* **- Marc Zuckerberg** commenting on their audio strategy during an interview with tech journalist Casey Newton. Facebook plans on launching short-form audio clips called "Soundbites", as well as Clubhouse-inspired live audio rooms.

Spotify

Spotify, *"Artists are asking for more clarity, explanations and transparency on the remuneration linked to music streaming and Spotify's contribution"* said **Antoine Monin**, Music Director for Spotify France and Benelux. *"Spotify is not the only player concerned, but as the market leader, it is one of the most challenged. We hear these criticisms and we take them to heart."*

Lyft

Lyft on selling their autonomous vehicle unit to Toyota: *"Not only will this transaction allow Lyft to focus on advancing our leading Autonomous platform and transportation network, this partnership will help pull in our profitability timeline."* said CEO **John Zimmer** in a statement. *"Assuming the transaction closes within the expected timeframe and the COVID recovery continues, we are confident that we can achieve Adjusted EBITDA profitability in the third quarter of this year."*

Snapchat

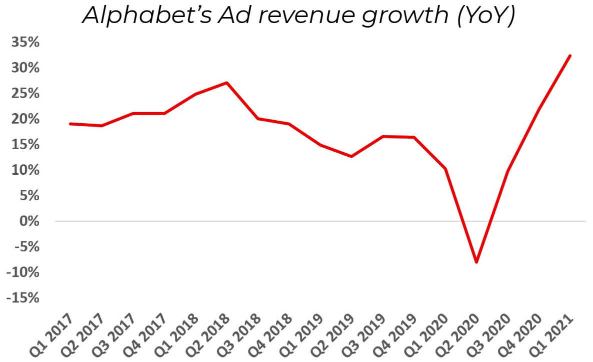
Snapchat, *"We believe that helping buyers find the right size, fit and styles will reduce friction in their online shopping experience, which in turn will improve revenue and margins for our business partners."* said **Evan Spiegel**, CEO of Snapchat. Snapchat is solidifying its position as an AR-powered social commerce platform after strategic acquisitions of Fit Analytics (sizing recommendation), Ariel AI (3D modeling) and Screenshop (outfit recommendation).

Zoom

Zoom is *"moving from being "a killer app company to a platform company"* claimed CEO **Eric Yuan** during a call with Wall Street analysts, before adding *"I think to become a platform company will become a great opportunity for us (...)* We're not only a videoconferencing company any more."

Our TOP - Google stronger than ever after the health crisis.

Performance Q1 2021	Vs. Analysts expectation	Growth YoY
Revenue **$55Bn**	Revenue **+7%**	Revenue **+34%**
Ad revenue **$44.68**	Ad revenue **+7%**	Ad revenue **+32%**
EPS **$26.3**	EPS **+66%**	EPS **+166%**



What happened this quarter?

1

Soaring advertising revenues.

When the pandemic hit, businesses slashed their offline ad budgets and shifted a part of this amount to online advertising, which greatly benefited Google. Despite an 8% decrease in Google's ad revenues in Q2 2020, Google ad revenues have since been skyrocketing and have reached $44.7Bn in 2021's first quarter (+32.3% YoY). 60% of the group's revenues come from ads on Google's search engine, which jumped to $32Bn during Q1 (+30% YoY).

2

YouTube exceeded expectations.

YouTube benefited from the pandemic: usage grew from 73% of U.S. adults in 2019 to 81% in 2021. Moreover, its commercial potential is being more and more tapped into thanks to advertising, YouTube ads generated $6Bn revenues in Q1, a 49% rise from year ago. YouTube Shorts, a TikTok copycat, should help Alphabet accelerate in the video segment.

3

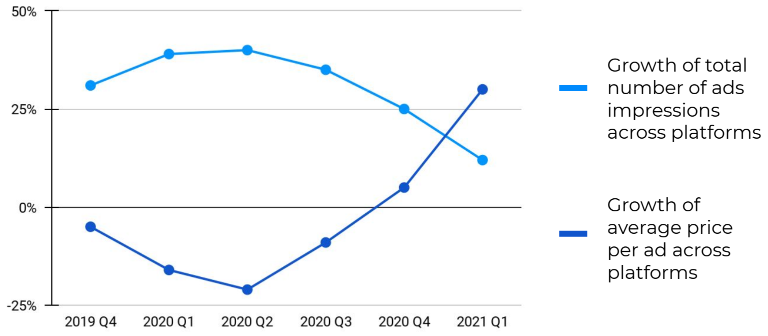
Are Google's moonshot projects undervalued ?

Google also focuses on high-risk and potentially high-reward project such as Waymo (self-driving vehicles), DeepMind (AI), and Verily (lifesciences). Some investors believe that the potential of these projects is not reflected in Alphabet's share price. But the shutdown of Loon and Stadia's game studio underline that these moonshot projects do not always generate the expected results.

Our SURPRISE - Facebook is still attractive.

Performance Q1 2021	Vs. Analysts expectation	Growth YoY
Revenue **$26.2Bn**	Revenue **+11%**	Revenue **+48%**
EPS **$3.30**	EPS **+39%**	EPS **+93%**
Number of MAUs **2.85Bn**	Number of MAUs **+0.035%**	Number of MAUs **+10%**

Advertising revenues are driven by both ad number and price growth



What happened this quarter?

1

The impact of Apple's privacy rules has not been perceived yet.

The number of MAUs across Facebook's social media platforms reached 2.9Bn, a 10% rise YoY that drove ad revenues up. Even though they expect further "headwinds" in 2021 regarding European and American regulatory initiatives, as well as regarding Apple's iOS 14.5 update (which was released in late April), they claimed that the impact of the latter should be "manageable".

2

Strong ambitions in social commerce.

According to CFO David Wehner, during the pandemic, Facebook benefited both from its acceleration in e-commerce and from the consumer demand shift from services to products. The Marketplace attracts more than 1Bn users every month, whereas Facebook Shops, a feature launched in May 2020 that allows brands to create a "store", gathers 250M monthly visitors.

3

An ever-experimenting company.

Facebook is constantly proposing new services in order to become a super app, for instance they are working on live rooms, the cryptocurrency Diem and interoperability between their social networks. Products are not neglected either: a smart watch and a AR headset (following its VR one) are said to be in the making.

1. The last 3 months through our eyes.

Our FLOP - Tencent faces multiple threats.

Tencent 腾讯

Performance Q1 2021	Vs. Analysts expectation	Growth YoY
Revenue **N/A**	Revenue **N/A**	Revenue **N/A**
EBIT **N/A**	EBIT **N/A**	EBIT **N/A**
EPS **N/A**	EPS **N/A**	EPS **N/A**

***Note**: By the time we published this study, Tencent still hasn't revealed its Q1 2021 results. We based our analysis on recent news instead of financial results for Tencent this quarter.*

What happened this quarter?

1

The Chinese government strengthens its grip.

In March, Tencent was fined $75,000 for investing in 2018 in a start-up without the authorities' approval. According to Reuters, China is now preparing a $1.5Bn fine for Tencent for lack of acquisition reporting and anticompetitive practices. Despite correct performances and symbolic fine amounts for now, the stock market interpreted it as a will to regain control over the big tech sector.

2

Concerns regarding fintech ambitions.

In November, Beijing stopped the IPO of Alibaba's financial entity, Ant Group, and ordered its restructuring in order to look more like a bank. Since Tencent is also active in fintech with Wechat Pay, the group seemed to downsize their ambitions in the sector, and the stock market penalized Tencent as it was convinced that they were on the regulators' radar.

3

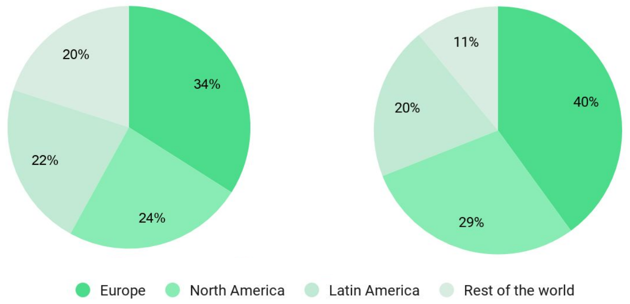
Hurdles in media activities.

Despite a 160% share price increase during its 1st public trading day, Tencent-owned video app Kuaishou shared dull maiden results as a listed company, which sent the shares down by 12%. Moreover, partially-owned Bilibili's (Chinese YouTube) IPO in March served as a disappointment as it is not yet profitable. Tencent also faces growing competition in mobile gaming from ByteDance, which acquired studio Moontoon for $4Bn.

FOCUS - Spotify's value proposition is under question.

Performance Q1 2021	Vs. Analysts expectation	Growth YoY
Premium Subscribers **158M**	Premium Subscribers **+0.6%**	Premium Subscribers **+21%**
Revenues **$2.6Bn**	Revenues **+1.15%**	Revenues **+16%**
MAUs **356M**	MAUs **-1%**	MAUs **+24%**

Total MAUs by region *Premium subscribers by region*



What happened this quarter?

1

Good performances overall.

The music service gained 3 million paying subscribers in the Q1, whereas analysts had forecasted a 2 million increase. Moreover, revenues increased by 16% YoY to $2.6 billion. Spotify and other streaming services fared well during the pandemic as people spent more time at home and could not attend concerts or visit other entertainment venues.

2

But no beat on the MAUs.

However, the company slightly missed its objectives in terms of monthly active users by 1%, which still represents a 3% increase from the last quarter. As a result, investors dropped Spotify's share price by 11.2% following the earnings call. This minor setback on MAUs could foreshadow a potential decrease in the number of subscribers or even a dysfunctioning in terms of customer lifetime value.

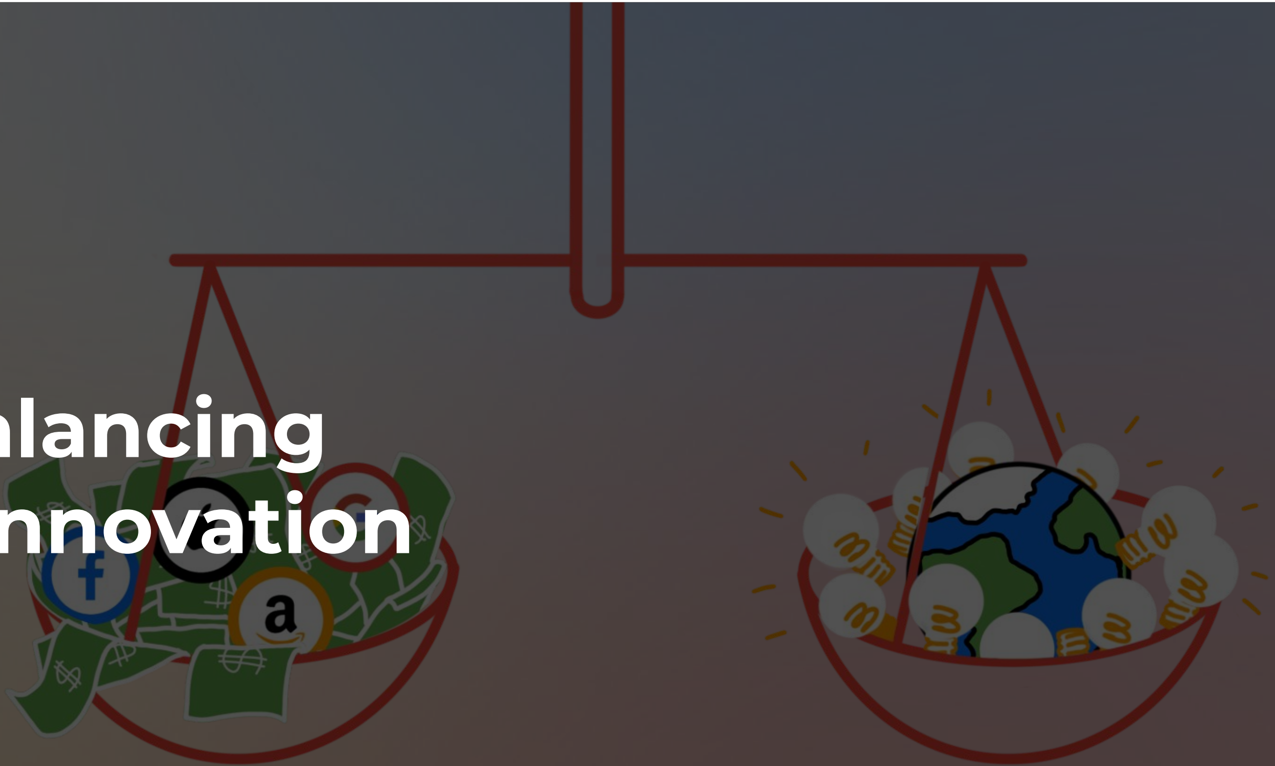
3

Growing beyond music.

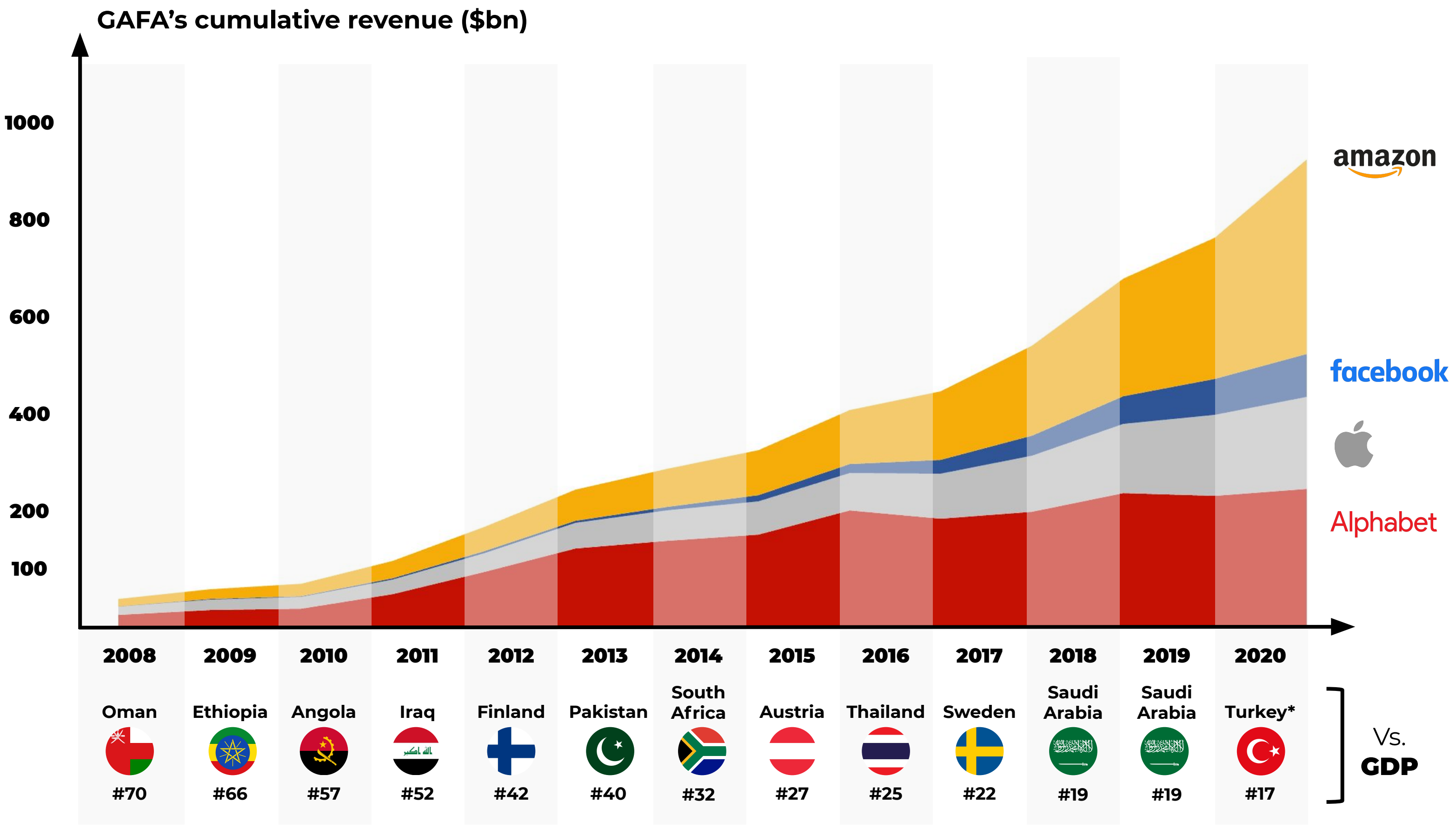
Music streaming has become a complex market: differentiation is limited, artists are questioning the value distribution and Apple's in-app purchase system and commissions limit price competitiveness. As a consequence, Spotify wishes to grow outside of music through podcasts and live audio. In March, the company acquired Locker Room, a sports-oriented rival to Clubhouse.

2

Rebalancing the innovation



Tech Giants are still growing fast, beating expectations.



Source: Factset as of Dec 2020. * Prediction by Fabernovel based on estimates.

How do GAFA companies keep growing: by targeting our habits.

	Be healthy	Be entertained	Consume	Pay	Communicate	Live better Move faster
G	Calico *Google Calico*	YouTube *Google Youtube*	Google Play *Google Play*	Google wallet *Google Wallet*	*Google Hangout*	*Google Car*
Apple	*Apple Healthkit*	*Apple Beat streaming*	*Apple iTunes*	Pay *Apple Pay*	*Apple iMessage*	*Apple Homekit*
Facebook	*Facebook Moves*	oculus *Facebook Oculus rift*	*Facebook Gifts*	*Facebook Credits*	*Facebook Messenger*	internet.org *Internet.Org facebook*
Amazon	amazon marketplace *Marketplace*	twitch *Amazon Twitch*	*Amazon.com*	amazon pay *Amazon Payments*	amazon *Amazon Cloud Drive*	*Amazon fulfillment*

But innovation seems to be coming from them less and less.

While many inspiring projects and improvements for existing solutions are still in development …

WAYMO

Calico

amazon go

… many other solutions are mere replicas (which can sometimes be better than the original).

How Netflix Introduced A Feature To Make Streaming More Like Regular TV

LAURA HURLEY | PUBLISHED: NOV. 6. 2020 3:42 PM

Technology

How Apple uses its App Store to copy the best ideas

Developers have come to accept that, without warning, Apple can make their work obsolete by announcing a new app or feature that essentially copies their ideas. Some apps have simply buckled under the pressure.

Facebook Is Said to Be Building a Product to Compete With Clubhouse

The social network, which has a history of cloning its competitors, has started working on an audio chat product.

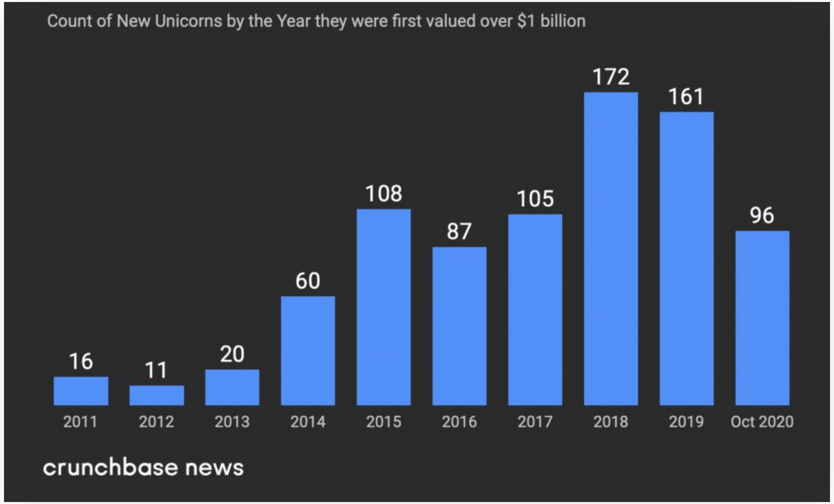
M&A remains one of the best sources of innovation for GAFA.

	Number of deals (over the last 3 years).	Average deal size (over the last 3 years).	A few significant deals.
	29	$485M	fitbit, looker, nest
	11	$237M	next issue
	7	$242M	oculus
	11	$595M	Pill Pack, ring, WHOLE FOODS MARKET

In comparison, a company within the S&P 500 makes only 3 transactions of more than $10M in 3 years.

On the other hand, the rest of the world is still full of innovation, whether it is through new players...

New Unicorns by Year, Globally



The world now has more unicorns than ever - that number being over **600 globally**. Despite a challenging year 2020 (due to Covid-19), the number of new unicorns is 10 times higher than 10 years ago.

Not only are there more unicorns, but they also emerge from everywhere in the world. Startup genome estimates that there is now more than **88 ecosystems** that are home to unicorns, while there were only **4 in 2013***.

Sources: crunchbase news, https://startupgenome.com/article/state-of-the-global-startup-economy

… or historical players using Tech to disrupt their model.

L'ORÉAL

Stock price: 350€ (+37% YoY*).

L'Oréal has adapted to the current Covid crisis to develop its brand online. As a consequence, its e-commerce revenues grew by 62% in 2020, reaching 26.6% of its total revenues.
Moreover, their internal Digital Upskilling program trained more than 40 000 people to Digital methods and 40% of Tech teams to Agile methods.

Walmart
Save money. Live better.

Stock price: $141 (+15% YoY).

Walmart has understood how Tech Giants could disrupt its market and, in order to keep a step ahead, has decided to innovate and broaden its scope by launching a Fintech in recent months.
By building on its own strengths, Walmart was able to start verticalizing in order to compete with the GAFA companies and their superpowers.

Stock price: $133 (+50% YoY).

Over the past few years, **Nike** has decided to focus on their customers in order to provide them with the best service and innovation possible. The launch of the House of Innovation in Paris is a good example of this.
This dedication to innovation led to constantly increasing Sales and higher multiples than its competitors (valued 5.6x its sales versus only 2.7x for Adidas and 2.4x for Puma).

YoY: 07/05/2020-07/05/2021

No matter the sector, many traditional companies are now using their digital tools.

Stock price: 209€ (+64% YoY).

Volkswagen, seeing how its own industry is changing, has decided to focus on electric vehicles.
By trying to position itself on the electric market just like Tesla did, Volkswagen can hope to reach higher multiples over the next few years.
This switch is also highlighted as more and more Tech analysts are starting to follow Volkswagen, just as many Tech analysts are following Tesla.

Stock price: 132€ (+64% YoY).

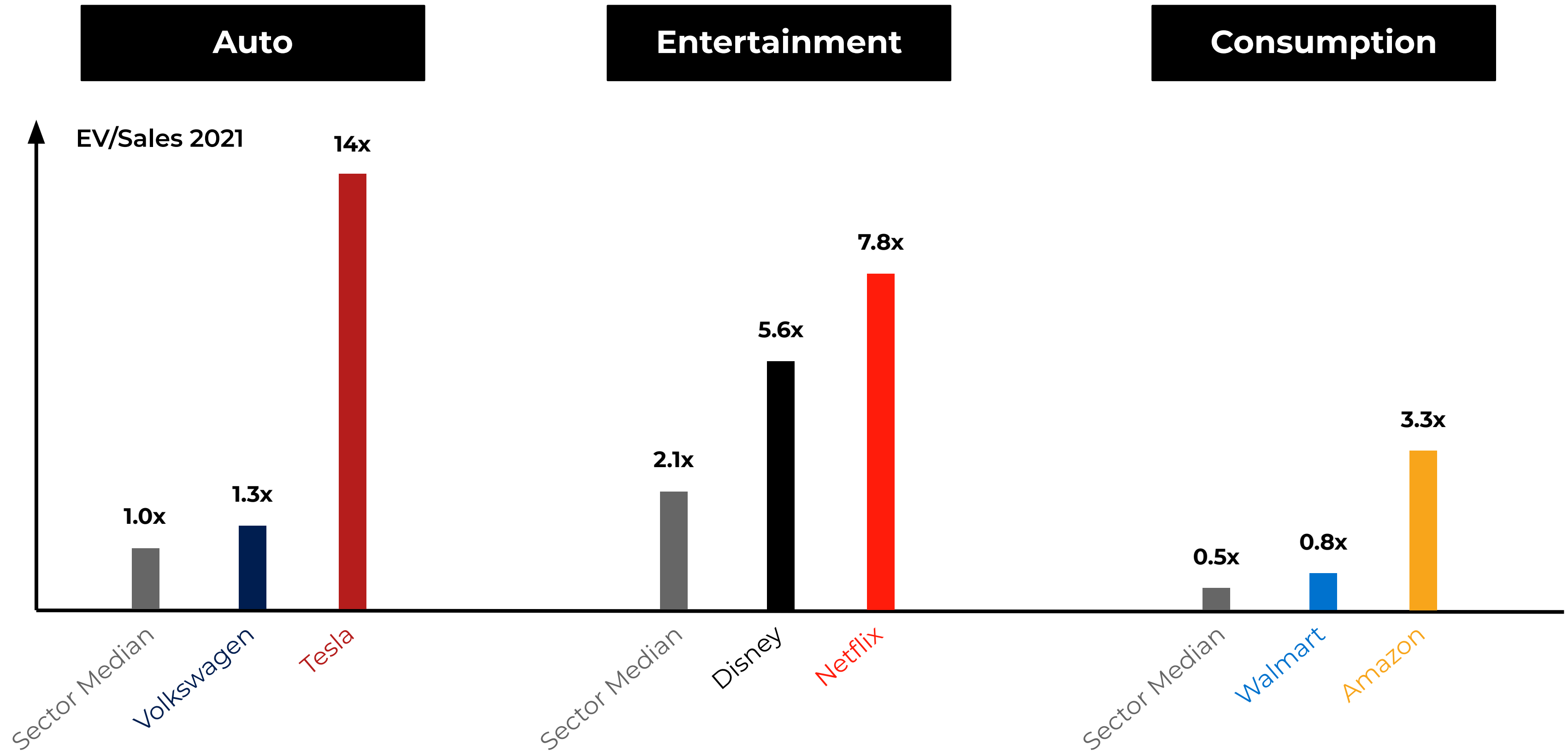
Since 2010, **Schneider Electric** decided to reinforce its position in software applications, critical power and smart grid.
Thanks to a persistent questioning and adaptation, the company managed to outperform most of its competitors on the stock market over the past few years.
Digital innovation is also part of the company's DNA as it helped the company grow and be more effective for its customers.

Stock price: 47€ (+23% YoY).

Edenred has evolved through time by adapting to its user needs and habits (such as through the increase of digitalization).
The company is now offering several transactional services using digital tools thanks to a close relationship with startups.
In 2020, the company made around 30 billion euros in Sales.
86% of these were made thanks to digital solutions.

And there is still room to grow in terms of valuation.

2. Tech Giants are not so disruptive anymore.



Thank you

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