

The Digital Transformation Of International Companies: Case Study Of “GAFA” And “NATU”

التحول الرقمي للشركات العالمية: دراسة حالة شركتي "GAFA" و "NATU"

Bakdi Malika

DjilaliBounaama University, Khemis-Miliana, malika.bakdi@univ-dbkm.dz

Cerdoun Mahdia

DjilaliBounaama University, Khemis-Miliana, m.cerdoun@univ-dbkm.dz

Received : 14.04.2023

Reviewed : 25.08.2023

Accepted : 31.12.2023

Abstract:The application of Internet-based digital technologies to produce and trade goods and services is becoming increasingly important in the global economy. The digital economy has major implications for investment. First, the digital economy is likely to transform the international activities of multinational enterprises and the impact of foreign affiliates on their host countries and thus has implications for investment policies. Second, the digital development of all countries, especially the participation of developing countries in the global digital economy, requires targeted investment policies that strengthen network infrastructure, support digital businesses, and promote the digitization of the entire economy. Due to the rapid growth of the digital economy, these companies' especially multinational technology companies have seen their weight in international output increase dramatically in recent decades, a trend that has been even more pronounced in the last five years. From 2010 to 2015, the number of digital companies in UNCTAD's Top 100 Multinationals ranking increased from 4 to 10, while the total number of ICT companies in the ranking increased to 19.

Keywords:digital, company, investment, enterprises.

JEL Classification Codes :F2, F23.

Corresponding author: BakdiMalika, malika.bakdi@univ-dbkm.dz

1. Introduction

Digital multinationals play an important role in the economy of a country. The most popular ones: GAFAM for Google, Apple, Facebook, Amazon, Microsoft and NATU for Netflix, Air BNB, Telsa and Uber. So, these companies are the ten largest American companies in the digital economy. Two acronyms for a stock market valuation comparable to the annual budget of France and an annual turnover higher than that of Denmark with "only" 300,000 employees.

An economic efficiency per employee, an annual growth superior to China's and above all a dominant position on the market that is starting to make the world think about new competition strategies.

These giants of the digital economy alone represent nearly 60% of our daily digital uses. At a time when the whole world is starting to become seriously aware of the challenges of the digital economy, these digital giants have a head start in this new industrial revolution. So, what is the best strategy for digital transformation for industrial companies?

Used in the 2000s, the acronym GAFAM comes from the initials of the companies Google, Apple, Facebook, Amazon, Microsoft. Over the last 20 years, these companies have become major economic and political players with the largest market capitalizations in the world. However, new players have appeared and we also talk about NATU, BATX or FANG.

2. Definition

On Global level, almost all digital products and services are concentrated around the GAFAM, also known as the big five. So, GAFA, GAFAM, and NATU represent a collection of internationally recognized companies.

GAFA meaning Google, Apple, Facebook and Amazon. Microsoft is also one of those companies that have experienced remarkable growth in a relatively short period of time, and has been added to the list; hence the name GAFA becomes GAFAM. Founded between 1975 and 2004 in the United States and listed on the stock market between 1980 and 2012. They are known for their increasingly important share in the global economy.

Google is a search engine then is a computer application used to search for information on the Internet.

Apple is an American multinational company specialized in computers and electronics. The company offers products such as personal computers and its derivatives and computer software. Among the best known are the Macintosh computers, the iPod, iPhone or iPad and the iTunes player.

Facebook is the global social network that allows everyone to follow the lives and activities of others. Along with Google, Facebook has become a global advertising network that allows for the surgical targeting of advertisements with a potential audience of billions of people.

Amazon is an online retail company founded by Jeff Bezos in 1994. Its headquarters are located in Seattle, USA. It employs one million people worldwide. Threatening giants like Wall Mart in the United States.

Netflix, Airbnb, Tesla and Uber are less important, but just as remarkable, forming the class of NATUs. They have made their mark on the current generation and even contributed in large part to changing the daily lives of the population.

Netflix is the biggest platform for the distribution of movies and series. It is also a producer and online is likely to blow up the television model. Air BNB is applying the same punishment to the hotel industry by allowing anyone to rent a room or a house with a simple click.

Tesla is revolutionizing energy with the production of new generation electric cars and batteries and also owns SpaceX, a rocket launcher. As for Uber, it is revolutionizing mobility with cabs.

The digital and service sector has undergone great changes over the past decades, as popular one, GAFAM and NATU. In the digital economy, it is easily possible to go beyond the national framework to move internationally. This is what has driven these companies and their social capital. By growing so quickly, they have crushed the competition around them.

2.Let's talk about market

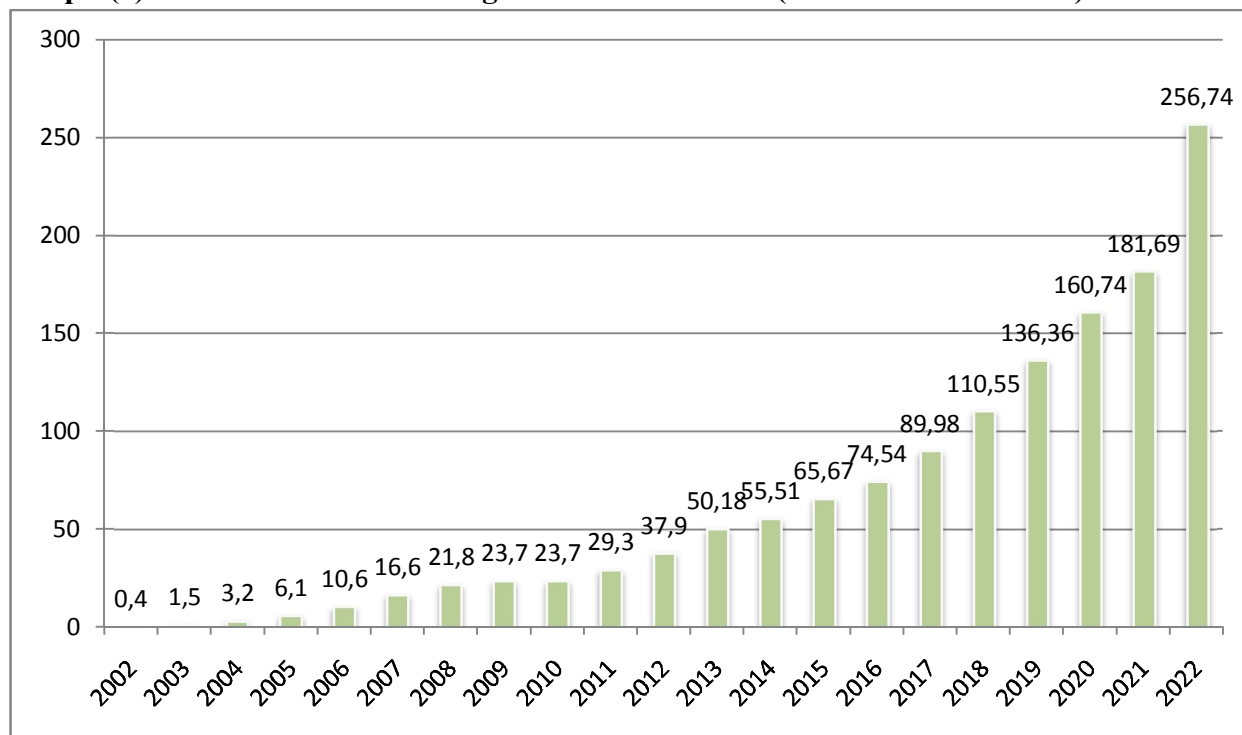
Google alone accounts for more than 90% of all web queries. YouTube, on the other hand, a broadcaster, was bought by Google in 2006 for 1.65 billion dollars. It is now viewed more than all television channels.

Every day, a little over a billion hours of videos are watched. Facebook, the giant of social networks, now has nearly 3 billion users.

300 billion dollars in net profits for 1,350 billion dollars in sales, such are the stratospheric results of the GAFAMs over the past year (twelve months ended September 30, 2021). Benefiting greatly from the boom in the digital economy since the beginning of the pandemic, the American technology giants are in insolent financial health. Compared to the previous twelve-month period (October 2019-September 2020), their profits have exploded: +43% for Microsoft, +51% for Amazon, +59% for Meta (Facebook), +65% for Apple and +98% for Alphabet.(Tristan Gaudiaut, 22 nov. 2021)

In order to access many services, most users now use their smartphones. Apple has a large share of the market in terms of numbers. It alone accounts for 32% of the global revenue and 66% of the profits in the cell phone industry.

What about operating systems? Microsoft has nothing to fear from the competition. 88% of the world's computers are equipped with Windows, its software or operating system. These few companies are in a monopoly situation and this will not change soon.

Graph (1) :Annual revenue of Google from 2002 to 2022(in billion U.S. dollars)

Source: prepared by authors based on STATISTA

In the most recently reported fiscal year, Google's revenue amounted to 279.8 billion U.S. dollars.

Google's revenue is largely made up by advertising revenue, which amounted to 224.47 billion U.S. dollars in 2022. As of February 2021, parent company Alphabet ranked second among worldwide internet companies, with a market capitalization of 1,392 billion U.S. dollars.

3. Google revenue's

Founded in 1998, Google is a multinational internet service corporation headquartered in California, United States. Initially conceptualized as a web search engine based on a PageRank algorithm, Google now offers a multitude of desktop, mobile and online products.

Google Search remains the company's core web-based product along with advertising services, communication and publishing tools, development and statistical tools as well as map-related products.

Google is also the producer of the mobile operating system Android, Chrome OS, Google TV as well as desktop and mobile applications such as the internet browser Google Chrome or mobile web applications based on pre-existing Google products.

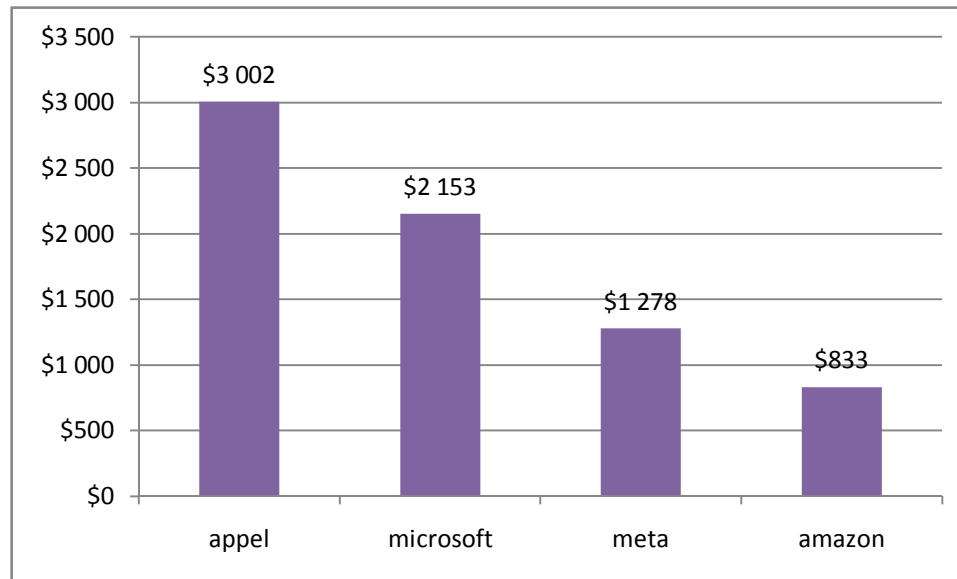
Recently, Google has also been developing selected pieces of hardware which ranges from the Nexus series of mobile devices to smart home devices and driverless cars. Due to its immense scale, Google also offers a crisis response service covering disasters, turmoil and emergencies, as well as an open source missing person finder in times of disaster.

Despite the vast scope of Google products, the company still collects the majority of its revenue through online advertising on Google Site and Google network websites.

Other revenues are generated via product licensing and most recently, digital content and mobile apps via the Google Play Store, a distribution platform for digital content.

As of September 2020, some of the highest-grossing Android apps worldwide included mobile games such as Candy Crush Saga, Pokemon Go, and Coin Master.

Graph (2): net profit generated in seconds by GAFAM in 2021



Source: prepared by authors based on STATISTA

Based on Apple's net profits from October 2020 to September 2021, the Apple firm earned a whopping \$3,000 per second during this period.

A performance that could keep it the most profitable company in the world this year. Next are Alphabet and Microsoft, with respectively \$2,239 and \$2,153 of profits generated every second, followed by Facebook (\$1,278), while Amazon closes the gap (\$833).

4. The risks of these digital giants

We are not far from trusts, monopolies or even cartels. These giants have many assets. They have gigantic cash reserves, they have a 360-degree vision of what is happening in innovation today, they attract the greatest talents and position themselves on the new markets resulting from the digital transformation such as the Internet of Things, robotics, cars, drones....

They diversify their activities and become formidable predators of the traditional economy. Some figures make you dizzy. Google controls 90% of the world's search traffic. Apple has 45% of web traffic from smartphones. Facebook has 75% of page views on social networks in the United States(L'investissement et l'économie numérique, 2017). And if a nugget emerges tomorrow, it is almost certain that it will fall into the lap of one of these giants.

5. Conclusion

Looking back on the last ten years, it seems fair to say that this has been the decade of technology companies. The smartphone boom and the increasing digitization of our societies have allowed companies like Google, Apple, Facebook, Amazon and Microsoft (the "GAFAMs") to reach unprecedented heights.

The internet has become one of the most vital tools for communication, information, and entertainment in today's globalized world.

While technological advances continue to accelerate the digitization of modern life, only a handful of players dominate the digital universe: Google, Amazon, Meta (formerly known as Facebook Inc), Apple, and Microsoft.

Formerly known under the acronym GAFAM, now GAMAM or GAMMA, the five tech giants boast user bases in the billions and a combined market value of almost seven trillion U.S. dollars, making them the largest internet companies worldwide.

With every new product, service, and innovation, the Big Five cement their digital imprint and expand their influence on the global economy. Today, Google, Amazon, Meta, Apple, and Microsoft are among the ten most valuable companies worldwide based on brand value.

International digital companies show stronger growth than companies in all other sectors, with their assets increasing by (65%) and their operating revenues and number of employees by about (30%), while the corresponding figures have changed little in the other multinational companies in the ranking.

6. BibliographyList:

1. ZacharieTazrout. GAFAM: a look back at their AI strategies and acquisitions in 2020. 2020: <https://www.actuia.com/english/gafam-a-look-back-at-their-ai-strategies-and-acquisitions-in-2020/>
(consulted on 14/04/2023).
2. Pirsma-Network. Digital Sovereignty: Gafam, Batx, And ... The European Union?. 2021: <https://prisma-network.eu/our-work/DIGITAL-SOVEREIGNTY-GAFAM-BATX-EUROPEAN-UNION>
(consulted on 14/04/2023).
3. HardikChitroda. Digital 101 – GAFAM – Tech’s Frightful 5. 2018: <https://knolskape.com/blog/digital-101-gafam-techs-frightful-5/>
(consulted on 14/04/2023).
4. <https://www.statista.com/statistics/266206/googles-annual-global-revenue/>
(consulted on 14/04/2023).