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Big corporations: Market saturation and Massive Diversification.

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2 INTRODUCTION

Expansion is one of the main objectives of almost every company worldwide. Their growing strategies can vary from one to another; however, in general, strategies that avoid an unrelated diversification seems to be better that others. According to [1], unrelated diversification is usually associated to business risks and reduced performances. This is particularly truth for "normal" size companies, but sometimes impossible for the Tech giants and multinational corporations: you cannot look at new markets when you already have a global monopoly.

That said, why would Big Tech and other multinationals companies, that already have their "dream" products, are looking to diversify? The answer to that is quite is quite simple: Although for **"normal size"** companies, it is possible to assume that the global market as unlimited and that they can always take new clients from currently unexploited territories and from their competitors; for **"GAFAM size"** companies, it is not possible anymore. Not only their markets are saturated, but also, they face an increasing number of competitors. This can be confirmed by the data presented by Fabernovel [2] that shows a significant slowdown of the Big tech industry.

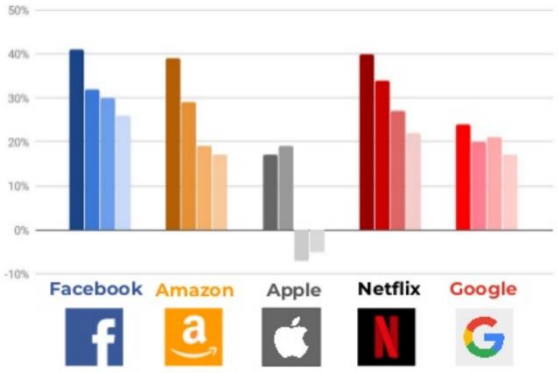

Figure 1 Slowing growth GAFAM [2]

This study focusses in the different strategies used by those firms and how they impacted their business. To make a fair comparison, the impact of this strategy will be analyzed for companies in different domains; it is possible that a strategy works in one domain does not work in another.

The main goal of this work is to answer to the following research question:

Is there a correlation between the growth strategy and the success? Or it is matter of chance and timing? The most probable answer is that it may be a combination of both. But which of them has a bigger impact?

This work will be divided as follow:

In section 3 we are going to describe some of the existing growing approaches and how some companies are using them. Then we are going to define the evaluation criteria.

In section 4 we are going use real data and identify if there is a correlation between the strategies and their rate of success.

Finally, in section 5 and 6, we will discuss the results and the conclusions of this work.

3 GROWING STRATEGY

There are several means to grow a company: vertical and horizontal integration, globalization, diversification and finally by alliances and fusions. Big companies use all of them; not only to growth,

but also to protect their market. Said in other words, Multinational corporations do not have just difficult times growing their own businesses, but also, they must spend a lot of resources to keep market that they have conquered.

In this section we are going to study different expansion methods and how (and which) companies are applying them. At the end, we are going to see if their strategies bring them to grow and control the market or to dig their own grave.

Given the size of the companies that will be analysed, it is possible that they have applied different strategies to different products. Indeed, if we check their product portfolio they have a main product that distinguish from each other: Google is known by its search engine, Apple for their iPhones and computers, Microsoft is known by Windows, Facebook by their social network and, finally, Amazon by their online store. However, if we look their product portfolio, they are also competitors in most of the products that they have. This section is going to focus in finding their prevalent corporate strategy and/or the strategy used in a product.

3.1 VERTICAL INTEGRATION

Vertical integration consists in taking control of the different production steps of the supply chain. A company take control of its suppliers (backwards) or its distributors (forward) [3]. According to [4], this process can be quite risky and difficult to reverse from it. This kind of strategy should be considered only in the following cases:

- the market is unreliable,
- the companies in adjacent stages of your supply chain has more market power that those in your activities,
- the integration will allow you to create entry barrier for your competitors,
- the market is young and needs to be developed.

3.1.1 Success stories

Apple

It provides one of the best examples of a successful vertical integration strategy. They have a limited number of products and emphasized the control of their supply chain: from early stages of R&D to the apple stores.

Apple stores are one of the key points of the success of Apple, but in 2001, when they started, they represented a huge gamble [5]. Their marketing exploit one of the main advantages of vertical integration, indeed, while most brands focus on the product, Apple focus in the user experience. Their added value was not only the fact that the iPod can do the same as an MP3 player, but they also sell a complete user experience. Apple stores is what make the difference between a cheap phone and an iPhone.

Let us now look backwards in the Apple supply chain and see, for example, how they are trying to take control of it. In the past, most of Apple's components (chips) were produced by suppliers like Qualcomm or Samsung. Nowadays, given the strategic importance of those technologies, it seems that Apple is planning to develop their own in-house chips and use them in their computers from 2021 [6].

Netflix

Another success history of vertical integration is Netflix, they started as a DVD company and they evolved to streaming, but they discover that creating their own content was their only way to differentiate from others. The reason why most of us are users of Netflix is because they propose a great amount of content that is not available otherwise.

What is ironic is that one of their major competitors, Amazon, is also one of their strategic partners. Netflix uses the Amazon Web Services to provide their services worldwide.

3.1.2 Big fails

Nokia

Let us be clear, it is not possible to say that vertical integration was the only reason to the fall of Nokia. As shown in [7], there are several business studies that try to analyze the case of Nokia and how it lost its dominant position. So, why Nokia fail? It seems that they were aware of the importance of having an eco-system around their products, but, apparently, they put more emphasis to the technical integration and excellence.

In my opinion, Nokia tried to put attention on too many processes of their supply chain, and they missed to understand their limits to build an eco-system, at least one complete enough to compete with, Google's Android and Google Play.

3.1.3 Review and preliminary conclusions

The comparison between Nokia and Apple shows us that the success of a growing strategy goes beyond the choice of Vertical and Horizontal integration. Why Apple, with a smaller market share arrived to do something that Nokia did not: develop their own operating systems and keep their market? It may be explained by the fact while Nokia users were looking for functionality and compatibility with other brands, that was better provided by Samsung and Android. Apple users, in the other side, were already locked in a Macintosh environment, they did not care what was happening outside the Mac world. Said in other words, it seems that the incompatibility of Apple products, combined to their marketing strategies, protected Apple from their potential competitors.

3.2 HORIZONTAL INTEGRATION

Different to vertical integration that tries to take control of as much of the supply chain as possible, horizontal integration aims at takeover of business operating at its own level [8] [9]. It has several objectives that are: creating an economy of scale, increase market power, expand into new markets, increase their differentiation by adding improvement to their services, and, finally, in some cases, just to eliminate their competitors. The last is particularly important for big corporations, but, since they already dominate the market, they try to focus on keep its control of the already conquered, rather that growing it. Indeed, as is it mentioned on the article written by Charles Duhigg in the New York Times, companies like Google are analyzing their potential predators and killing them, even before they become dangerous to them [10].

In general, it seems that Horizontal Integration seems to have several advantages, compared to vertical integration, it allow them to have economies of scale due to the synergies between them and the companies that they absorbed: R&D, marketing, etc.

However, as we saw in some of KLM-Air France case presented in the course, it can bring some problems due to different management styles and the culture in the companies.

3.2.1 Success stories

Coca Cola

One of the best examples of horizontal integrations comes from them, it is easy to see how many brands they owned worldwide. As mentioned in [9], they can buy competitors to increase their product portfolio, but it may be also to take advantage of existing production and marketing structures, and/or in some cases, to kill their competitors and control the market.

Disney

According to [11], since 2005, following the change of its CEO, Bob Iger, Disney has taken an aggressive acquisition strategy. Since his arrival to the company he led four important acquisitions: Pixar, Marvel, Lucasfilm and 20th Century Fox. This allow them to increase their yearly income from $2.5 billion in net income in 2005 to $12.6 billion in 2019. The Disney stock has also grown significantly from $25 per share in 2005 to $140 in 2019.

3.2.2 Big fails and mixed outcomes

Daimler Benz and Chrysler

According to [12], the alliance between Daimler Benz and Chrysler showed how cultural integration issues are often problematic, and convert something that was apparent the perfect union between car makers into a failure. As claimed by, [13] there were two major problems in this fusion: 1) the lack of a clear and logical structure, there was not a natural progression between the segments of the brands and 2) the lack of synergies between the brands, they never share platforms and parts between both of them. In other words, instead of taking advantage of the alliance, they run both companies as totally different entities, as if they were totally different businesses.

Facebook

It is not clear how successful has been the horizontal approach to Facebook and its acquisition of Instagram, Beluga (messaging services) and WhatsApp. According to [14], the company does not communicate about how much each of those acquisitions has contributed to them.

However, according to [15], one thing is quite clear: the outcomes of those acquisitions, even if they are positive from a business point of view, they bring also concerns. First, because the WhatsApp and Instagram brands had been overshadowed, they inherited some of the unpopularity of Facebook. Second, because it brings Facebook more antitrust scrutiny from the Federal Trade Commission of the USA.

3.2.3 Review and preliminary conclusions

At first glance we can imagine that horizontal integration is easier and more beneficial that vertical integration. However, it is not always the case, it might make lose the identity to the companies that we are trying to integrate. What will happen if Apple uses this method and integrates cheap phones to it portfolio? Would you continue buying an iPhone if they bring you a cheaper phone with the same logo? It is difficult to answer that, but based on the value of their brand, it seems that they should continue with a close Apple environment and their "exclusive" marketing strategies.

3.3 GLOBALIZATION: VIRAL MARKETING

There is one thing that all the companies that we are analyzing in this work have in common, they are all available worldwide, and, consequently, the strategies that we will mention in this section might not be useful to increase the market share of their existing products. But it was probably the path that they follow to arrive where they are today. This section will shows five companies successful growing strategies and the methods that they use to go from simple startups to global unicorns [16]:

Dropbox: Viral Loops

The growing strategy that they use is called Viral loops. This strategy consists in letting their existing users to become brand ambassadors and bring new users.

Their business model is based in offering their clients free features (2GB of storages), that can be increased by taking a premium version or by referring Dropbox to others. In other words, they were offering their existing users some "premium" features in change of new referrals.

This method allows them to move from a million users in April 2009 to about 500 million nowadays. To be successful, each of the existing users must bring at least 1.1 new users, what means that each new layer of the pyramid is bigger and growing becomes exponential.

Harry's: Milestone Referrals

They used Milestone Referrals to promote their shaving products. To do that, they prepare a prelaunch landing page were people can sing up and receive emails, then they created a referral link to share that became the key to their success. To motivate people to share the link offer rewards to their clients if they share the link to more people. The reward grows according to the amount people that they refer.

Slack: Word-to-Mouth

Used a Word-to-Mouth method to promote their product. This method allowed them to go from 8000 users in 2013 to over ten million today. This strategy is particularly important for new business, since you, as client, will feel safer if a friend already test it before. According to [16], about 83% of Americans will be more likely to try a product if it's a friend who recommend it for them.

Different to the previous strategies, Word-to-Mouth focus in user experience, rather than incentives, to make users spread your product. To do this, you must focus on user experience.

WhatsApp: "When They Zig, We Zag" Approach

How WhatsApp arrive to find a place in an already competitive environment? Like Slack, they focus in provide the client with a great user experience. What they do better is that they did things differently, while Skype, Facebook, and Gmail had complex applications, WhatsApp focus in a free, light, and easy to use app that focus on instant messages. This strategy seems particularly performant in highly competitive market, but it requires a disrupting value proposition.

Tinder: In person outreach

Like what we see with WhatsApp did with messaging, Tinder bring an idea able to disrupt the online Dating. Their developers were aware of the added value of this app. But how to start? How to show the people their added value. Like Facebook, and most of the social apps, a good user interface and value proposition are not enough, their value hinge on their users.

What Tinder did is to sponsor a university party on which any student who wanted to get in had to download the application. Once they come back home, they started using it and matching other people that assisted to that party. Tinder became a phenomenon within the Campus. Few months later, in 2014, Tinder attainted to 14000 users, nowadays the surpassed 500000 users worldwide.

3.3.1 Review and preliminary conclusions

What do most successful, internet giants have in common? They exploit their users' networks; they transform their clients into the architects of their exponential growth. They all started with a rather small group. The principle is simple, if we consider a pyramid of user that doubles at every layer, we will need about 23 layers to reach a million people, 15 if each client brings us 3 more clients. One of the best examples to show this principle is what we are living today with Covid-19, and how in few months it took over the world.

The mainly difference between the strategies mentioned before is how do they transformed their own clients in the carriers of their success. Some of them tock a carrot and stick approach some of them focus more on a great service and a disruptive value proposition. Unfortunately for big corporations, these principles are not useful for them, at least not to their main products.

3.4 DIVERSIFICATION

In previous sections assumed that the grow of the company turns around related products. In the vertical integration we assume that the company increase the control of the supply chain, the horizontal integration assumes that we increase the market share by taking over competitors at in related markets, at the same level of the supply chain, and finally the globalization assumed that there is there are still unexploited markets.

This section focusses on another growing method, that consists in adding new products to the existing portfolio. This section is divided in three different diversification strategies: conglomerate, related technologies, and related markets.

According to [17], a conglomerate is composed by several unrelated business. They are large companies and they are composed by independent entities. In general, a conglomerate should not be the first choice of growing, it is difficult to manage efficiently, and for that reason, their stocks value is usually penalized on around 15% compared to other companies. [18] compares the revenues of

companies with different kinds of diversification: related and unrelated. They found that most of the time, related companies perform better than unrelated diversified companies. Unrelated diversified companies had also liquidity problems, they usually have higher levels of debts.

3.4.1 Success conglomerate stories

Alphabet (Google)

From all the companies mentioned in this work, it seems that Alphabet is one that has a huge portfolio of seemingly unrelated products [19]. Their products go from their search engine and other internet services such as Maps, YouTube, Gmail, and AdSense to "bets" in operating systems (Android), smart home devices (Nest and Google Home), self-driving cars (Waymo) and finally DeepMind. The latter is particularly important, they had spent more than a billion dollars in just three years, but, until now, it brings them few commercial applications and limited revenues [20].

This is the best example of what we mention in the introduction of this work, Google have a large portfolio of successful products. Unfortunately for them, or at least for new stockholders, their products already saturated the markets. The Alphabets growing strategy depends entirely on new success stories, stories that are not always easy to find.

Virgin

In some cases, if used correctly, unrelated diversification can be beneficial for a company. Virgin is maybe one of the successful histories of companies using this kind of strategies. As stated by [21], the success of Virgin turns around their brand and excellence in customer experience. Furthermore, some of their brands like Virgin galactic show how "awesome" and "pioneers" they are compared to their competitors.

3.4.2 Success stories with related technologies diversification

Amazon

Amazon, like other GAFAM, have follow a massive diversification strategy. According to [22], amazon is not only competing with retail giants but also with most of the Big Tech companies such as Apple, Alphabet, Netflix and others.

So, what is the difference between Amazon and Google? It seems that difference between them is that Amazon have a large diversification, but they turn around the same technologies. According to [23], Amazon initially focus on their e-commerce site, and, by doing so, they had to develop all their computing infrastructure to address some scale problems. Amazon exploit this technology to create their Cloud services. Nowadays, the cloud represents about 13.5% of the revenues of Amazon.

3.4.3 Big mistakes and fails of diversification

Google+ (Google)

From all the fails of Google, and they have plenty [24], maybe the one that they will remember as the worst is Google+ [25]. They underestimate their competitors (Facebook).

Virgin

Although we already mention Virgin as a successful history, they had also some failures related to their business strategy [21]. Virgin has followed some fails, such as their Virgin Cola in the mid-nineties. Furthermore, some of their business such as Virgin Money or Virgin Trains are making Virgin to lose the strength of their brand, a brand that was usually directed to a young audience.

3.4.4 Review and preliminary conclusions

The main takeaway of this section is that diversification, if it allows companies to exploit their existing resources, can beneficial. Maybe the best example is Amazon and their seamlessly unrelated portfolio; indeed, they took advantage of their computing resources and found a new business model.

Another thing that we can see is that the companies mentioned as successful histories of unrelated diversification, they were also mentioned as big fails of that strategy. Indeed, unrelated diversification looks more like a gamble that can led to big wins as it was Android (Google) or to big flops as Google+.

4 DATA ANALYSIS

In section 3, we focus observed few examples about the strategy taken by big corporation and what were their outcomes. Although some trends were identified, it is not easy to say that one strategy is better than other.

So, is it possible to identify, in a quantitative way, which strategy gives the best probabilities of success? This section will try to answer that by analyzing the data of the 25 fastest companies of 2019 [26].

This analysis will take into consideration the following parameters:

- yearly growth of the company,
- size of the company,
- growing strategy,
- level of diversification (estimated).

4.1 OBJECTIVES.

The two questions that we want to answer in this section is. First, we would like to know if there is one preferred strategy, and how it relates to their success? Second, we would like to see if there is a correlation between the strategy and the size of the companies.

4.2 HYPOTHESIS AND LIMITATIONS OF THE ANALYSIS.

Although this study is based on trustful data, it has some limitations.

- First, the present study is made up the data with only 25 companies. It means that the results presented in the analysis will show some trends, but they will not be sufficient to take a solid conclusion. Further studies can analyze more data from a larger number of companies.
- There is a limited amount of data to estimate the level of diversification. This study estimates the level of diversification of each company based in the information that they published in

their own web sites. Furthermore, this estimation is quite subjective and based in the advice of only one analyst (the author of this work).

- This study reflects the data of the most successful companies in 2019. It assumes that the growing strategy and its outcomes is similar all the years. Further studies can compare if results are the same on different years.
- The results of this analysis are based on data from fastest growing companies of 2019. The outcomes of this analysis might be different to what we will observe using random companies.

4.3 DATA.

This analysis is based on the data published by Fortune their list of the world's top 100 performers in revenues, profits, and stock returns. The data included in this analysis was:

- The Market Value (2019), the Earnings per share Growth (3 years average) and the revenue growth (3 years average) of the first 25 companies of the list.
- The level of diversification of the companies. This was estimated based on the size of their portfolio, from **No** diversified a startup consisting in only one product, to **Highly** diversified for a company like Amazon.
- The sector of the company.

	COMPANY	BUSINESS	MARKET VALUE 2019 ($M)	EARNINGS PER SHARE 3 YEARS GROWTH	REVENUE 3 YEARS GROWTH	LEVEL OF DIVERSIFICATION
1	Momo	Mobile App	7,423	193%	141%	No
2	Texas Pacific Land Trust	Financials	6,104	95%	85%	Medium
3	Micron Technology	Semiconductors	42,596	173%	38%	Low
4	Corcept Therapeutics	Pharma	1,281	295%	74%	Low
5	Netflix	Streaming	160,6	129%	33%	Low
6	Paycom Software	Software: payroll and HR	13,265	80%	34%	Medium
7	Nvidia	Semiconductors / AI	100,016	82%	35%	Medium
8	Nexstar Media Group	Media	4,655	73%	52%	Medium
9	Triton International	Containers Leasing	2,485	98%	30%	Low
10	SS&C Technologies Holdings	Financials	14,575	71%	44%	Medium
11	Amazon.com	Cloud services, e-commerce	932,294	112%	30%	High
12	Broadcom	Semiconductors	114,59	141%	36%	Medium
13	Weibo	Social network	9,8	148%	58%	No
14	Veeva Systems	Cloud computing for pharma	23,873	63%	27%	Low
15	Innoviva	Asset management	1,474	161%	59%	Low
16	Etsy	E-commerce	7,376	49%	28%	Low

17	Arista Networks	IT Services	19,893	34%	38%	Low
18	Enanta Pharmaceuticals	Pharma	1,66	28%	45%	Medium
19	Abiomed	Medical devices	11,796	64%	33%	Low
20	NV5 Global	Consulting	1,023	34%	40%	Medium
21	MKS Instruments	Measurement instruments	4,234	68%	40%	Medium
22	Facebook	Social network	550,957	65%	45%	High
23	Grubhub	Online Food deliver	7,111	34%	41%	Low
24	Yandex	Internet services	12,412	85%	34%	High
25	Align Technology	Medical devices	21,897	35%	34%	Medium

Table 1 Fortune's 25 Fastest-Growing Companies: Only three Big Tech companies appear in the table

4.4 RESULTS

This part aims at identifying if there is a correlation between different parameters of our dataset. This section will focus in answering three what is the correlation between:

- **Size of the company** vs **growth**. Are smaller companies growing faster than the bigger ones?
- **Level of diversification** vs **growth.** Is diversification slowing down the growth?
- **level of diversification** vs **size of the company.** Is there a correlation between the size and the level of diversification?
- Company **sector** vs **growth**. Is one sector better than others?

4.4.1 Size vs Growth

Figure 2 shows the correlation between the company value and the growth of the revenue of the company.

1) It seems that the growth is quite constant, at least for companies that has a market capitalization above 10 million dollars.
2) A bigger dispersion is observed in companies below 10 million dollars, it may be explained by the fact that some companies are not profitable during their early years and/or their market is not saturated.

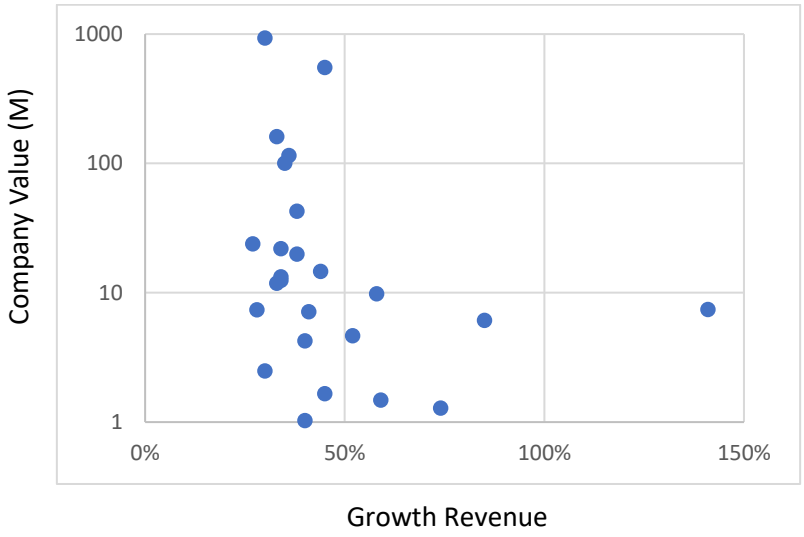

Figure 2 Revenue vs Company Value

Figure 3 shows the correlation between the company value and the growth earnings per share (EPS):

1) Different to what we observe previously in figure 2, EPS growth appears much more disperse that the revenues growth. It can be explained by the fact that this value is influenced not only by the growth of the company but also by other parameters such as risk of the stock, sector, speculative value… Several examples of companies with high value but not yet profitable can be found in Silicon Valley: Uber, Tesla, etc.
2) Other thing that we can observe, is that the variability of EPS seems to decrease when the value of that company increases (i.e. bigger companies are more stable and predictable than smaller companies.

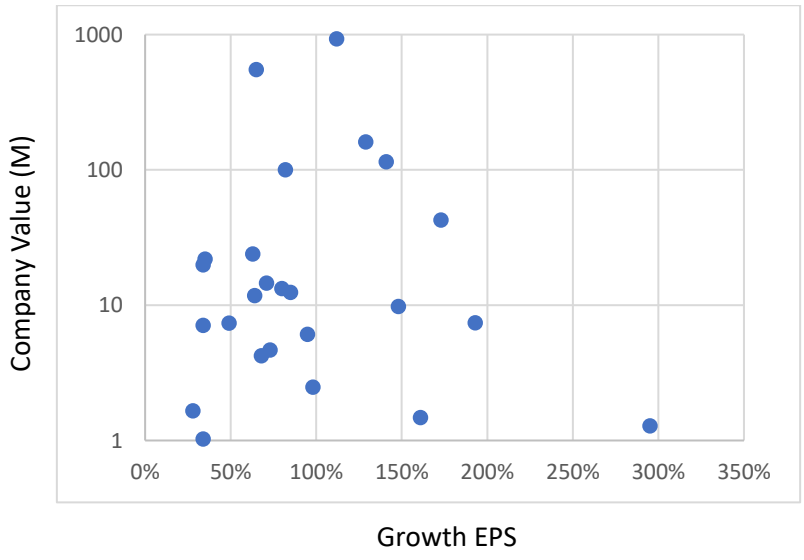

Figure 3 EPS vs Company Value

4.4.2 Size vs Growth

As expected, figure 4 shows that the companies with the highest value are those with the biggest level of diversification. But one of the most important information that we can observe in figure 4 is that out of the 25 biggest growing companies, 20 have a low to medium level of diversification. This means two things:

1) Some level of diversification seems healthy for businesses. This might be explained by the fact that too much diversification can make companies inefficient. However, some level of diversification can reduce the risks and the dependencies of a business in just one product.
2) Companies above of 100 million are more diversified due to market saturation.

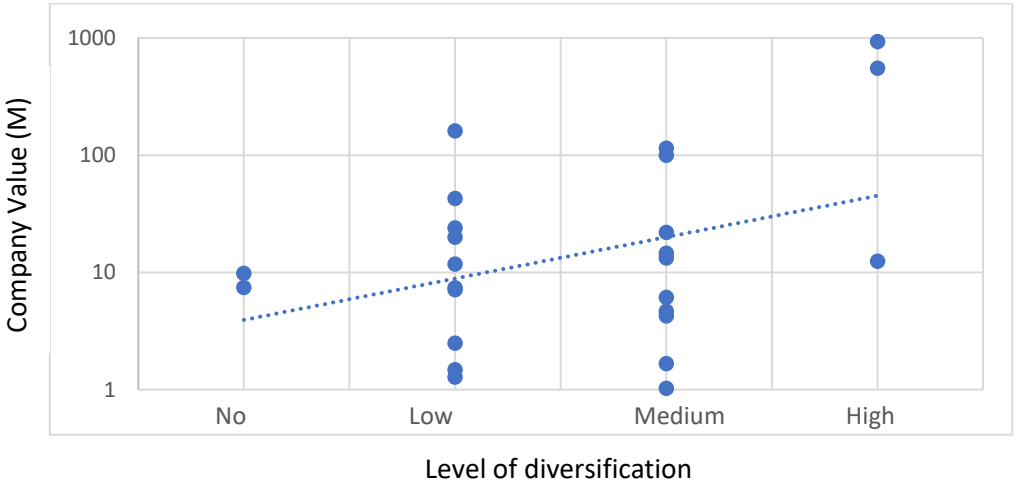

Figure 4 Diversification vs Company Value ($M)

4.4.3 Level of diversification vs Growth

Figure 5 and 6 shows that the level of diversification is inversely related to the growth of companies. This means that if a company has not saturated a market and does not require to diversify, it is better to keep focus and maintain the product portfolio as small as possible.

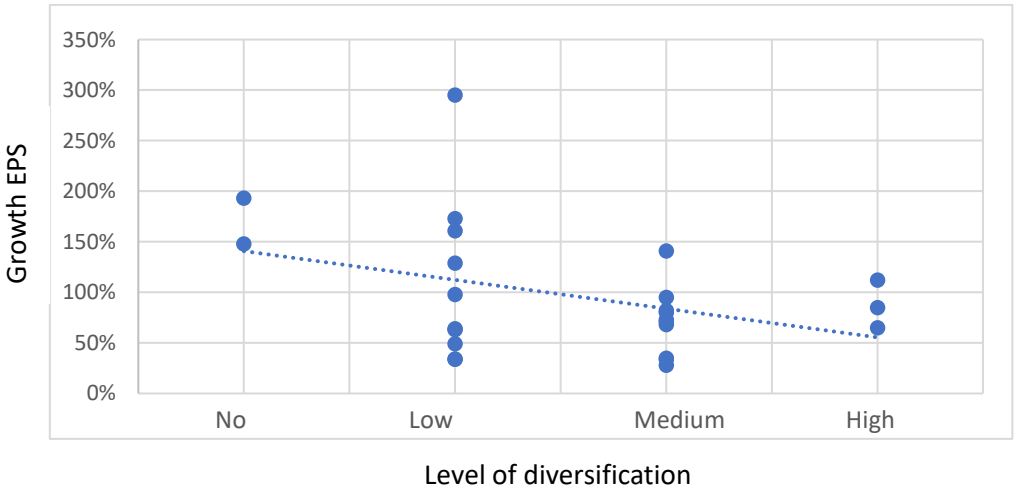

Figure 5 Diversification vs Grow EPS (%)

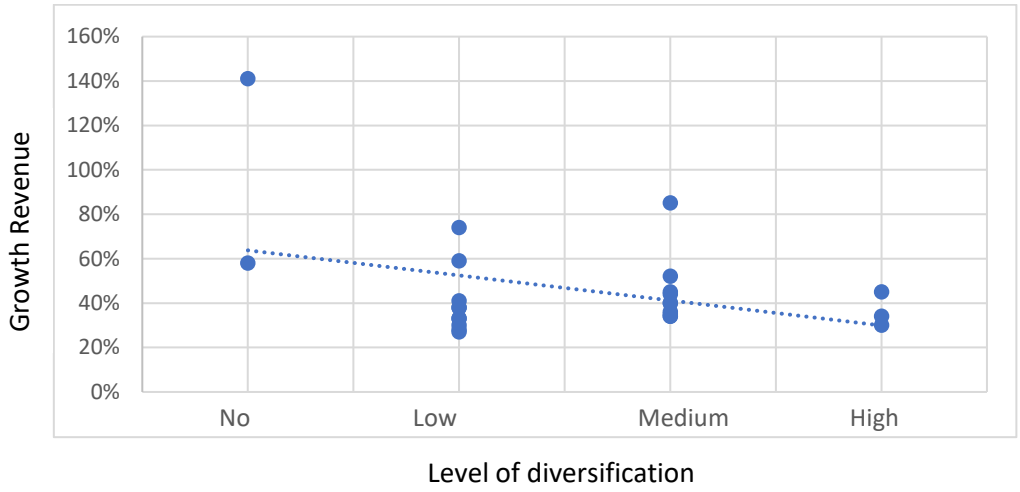

Figure 6 Diversification vs Growth Revenue (%)

4.4.4 Size vs Sector

In figure 7 we can observe that the value of the companies is influenced by the sector. Not surprisingly, companies on the internet and software services are those with the highest values, followed by technology companies (hardware) and in third place pharma. As we mentioned before, this comparison is not representative of the entire market, but representative of the 25 most successful companies. This distribution may change if considered the biggest companies instead the biggest growing companies. Maybe the most representative information is that 11 out of 25 companies are on the internet/software sector. This kind of companies seems to be the most profitable and scalable.

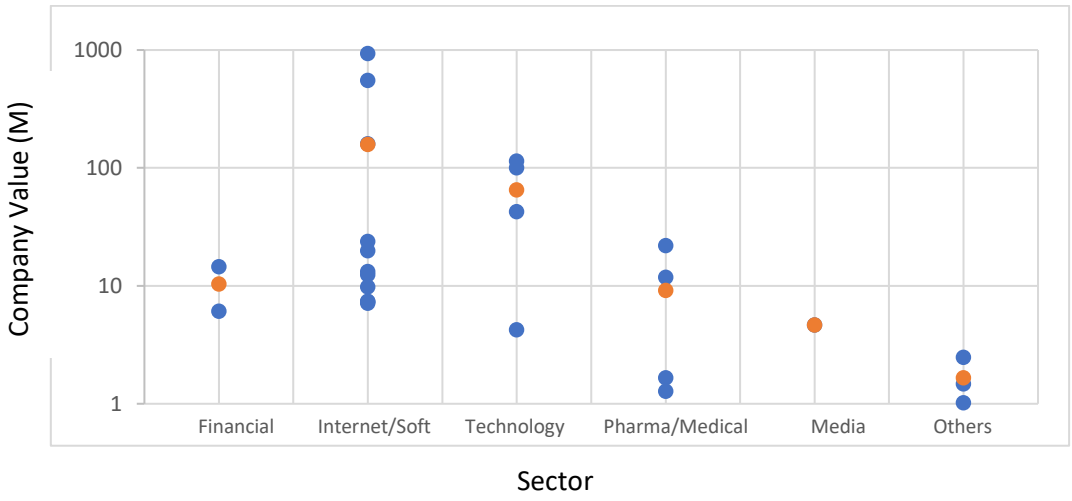

Figure 7 Sector vs Company Value ($M)

4.4.5 Growth vs Sector

To compare the rate of success of companies by sector, we should consider the amount of companies by sector that were inside the 25 most successful companies. as we mentioned before, 11 companies

out of the 25 are on the internet/software sector, 4 in the technological (hardware) sector and finally 4 in the pharma. This numbers show us that almost the half fastest growing companies are related to software of internet services. This kind be explained by the back they are most scalable than others, with a limited amount of resources they can sell their products/services worldwide.

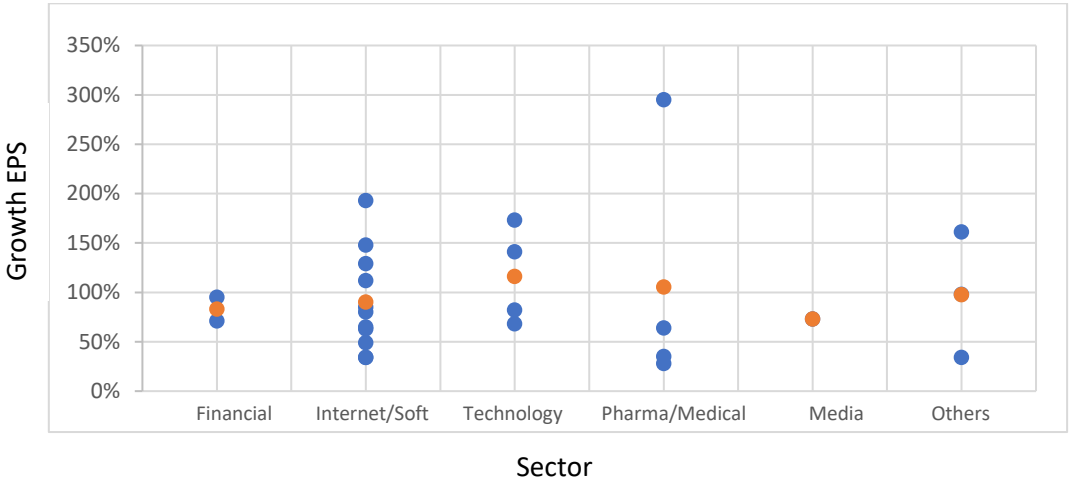

Figure 8 Sector vs Grow EPS (%)

Another thing that we can observe in the figures is the dispersion and the variability between companies. We can observe that the values of the EPS (Figure 8) are slightly more variable that values related to the growth (Figure 9). This can be explained by speculative data or uncertainty. Let take the example of Corcept Therapeutics, their sudden growth of their EPS (almost 300%) might be connected to the results of a clinical study. Another example of how the EPS value can change is the value of an Apple stock before and after an Apple event.

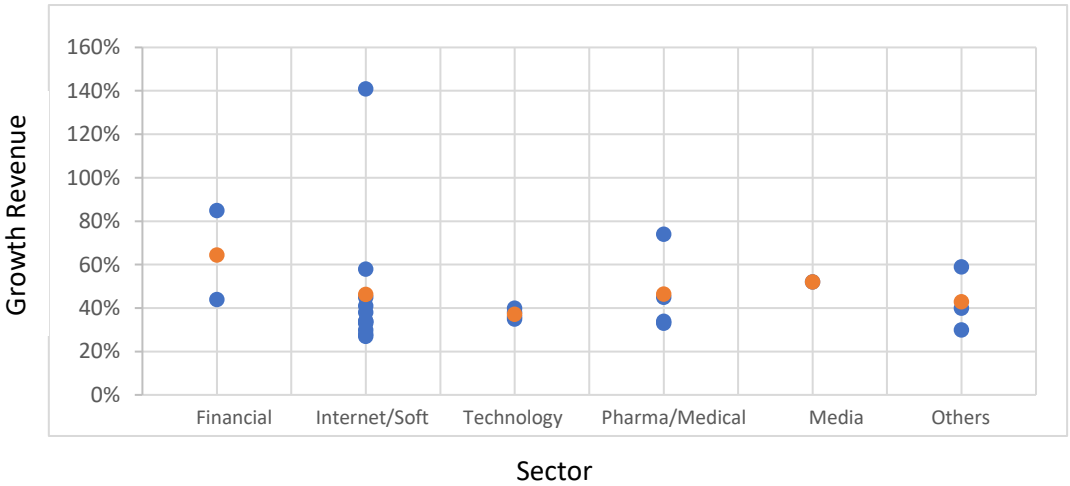

Figure 9 Sector vs Growth Revenue (%)

4.5 DISCUSSION

As it is shown in figure 1 and 6, it appears that the growth of companies has an inverse correlation with their size. This can be explained by the fact that as soon as your market get more and more saturated

it becomes more and more difficult to growth as a company. What is interesting is that there are some exemptions to this hypothesis.

So, what companies like Facebook or Amazon are doing to keep the growth? It seems to me that it can be explained by a smart diversification strategy. Let us see Amazon for example, they arrived to maximize their incomes exploiting as much as they can their resources. According to [27], the online shop of Amazon is not profitable by itself. So, it seems that what makes Amazon rentable is that they use the same servers and their know-how to provide Cloud services, one of their biggest businesses today. This does not mean that other companies are doing bad, it just means that Amazon and Facebook are doing much better. Apple, Google, and Microsoft are not in the list (not even between the 100) of fast-growing companies.

Let us be clear, the data used in this analysis is limited, it is not possible to take any conclusions. However, the results of this work seem to be aligned to those published by [18] in 1990. It means, that although we have a limited amount of data, they arrive to identify the trends and the typical behaviors that are observed in the market.

5 CONCLUSIONS AND PERSPECTIVES

Opposite to what we can imagine, the choice of the growing strategy is not an easy task. There is no recipe for success. However, as it mentions [1] there are very few examples where unrelated diversification can be positive. Even those examples given as a success stories of unrelated diversification where quite fake:

- Virgin's business model turns around the quality of their service, this can be understood as a specific know-how and name that open their doors to a niche of young clients looking for good standards.
- Google business model turns around of their AI knowledge and the access of data. That can explain why Google+ failed, it may fail because their target customer was different. The kind of customer that was already targeted by Facebook.

Another conclusion is that usually smaller companies can grow easier than bigger. They can exploit viral strategies to have an exponential growth and attaint the global market, in the same way that virus get spread worldwide. See again what happen with Covid-19, in just few months went from unknown to something that destroy the global economy.

Out of that, it is complex to take any conclusions, the reason why, vertical integration worked for Apple and did not work for Nokia, was the combination of several parameters: marketing, target client, timing, and competitors. We must consider is that strategies should evolve according to the environment. According to [27], the choice between Horizontal and Vertical integrations moves as a Pendulum. At one moment in the history, horizontal integration took over vertical integration and allowed Microsoft and Intel to focus on specific parts of the supply chain while IBM focus on the entire supply chain. Today things are changing, big tech companies have a lot of capital and are increasingly moving towards vertical integration. Microsoft is making its own computers, and Apple is starting to make their own chips.

Maybe one example to follow is the one from Amazon, it seems that most of their services rely in the computing expertise, and resources. They seem to exploit their resources at the max, using their computational power for their online shop during high seasons like Christmas, and selling those resources when they do not use them. Maybe it does not matter the strategy but how the resources are optimized:

- exploiting brand as much as possible, like Disney, Apple, or Virgin;
- exploiting them know how, like Google or Amazon;
- exploiting their network like Facebook.

The strategy used should be aligned to that.

As mentioned in section 4, several hypotheses have been taken in this word; and therefore, the conclusions should be taken cautiously. Further work can focus on the following questions:

- Did the results find in the 25 biggest growing companies is like the remaining companies of the list? To confirm this, further work should consider a larger set of data.
- Is it possible to quantify the diversification of a company in an objective manner? To do that it will be necessary to define an objective scoring method and quantified data.
- How variable and reliable is the data published in Fortune [26]? To answer this question, it may be interesting to check the evolution of the list from one year to another. Then the data can be compared with another source.

These questions seem interesting and might be give some more insight on the path that a company should follow to have a solid growing strategy. However, it does not matter how far a deep it will go this study, it will not provide any magical solution that can applied to all the cases. If we can take a message from this work is that each company needs its own growing strategy, based on the product and the target population.

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