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Battle Report for battle #1

Steve Jobs VS Bill Gates
Horizon 2020

STEVE JOBS

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Contents

1	Introduction	2
2	Scenario	2
3	Steve Jobs	4
3.1	Good communicator	4
3.2	Listener but not blind follower	4
3.3	Visionnaire	5
3.4	Problem solver	6
3.5	Enterprising	6
4	Bill Gates	8
4.1	High-mindedness	8
4.2	Innovative thinking	9
4.3	Compelling vision	10
4.4	Competence	10
4.5	Ambition	11
5	Reconciliation	12
6	Conclusions	14

1 Introduction

The objective of this report is to illustrate the different aspects that characterize the entrepreneur and innovator's paragon in the technological field. In order to be able to carry out an exhaustive analysis, it is necessary to define the context of the problem both from a social-economical and technological point of view. The former perspective can be seen in the entrepreneurial aspects implicit of the role of innovator, while the latter is embedded in the area of expertise we want to enhance which is incessantly developing.

To better frame our problem, we can ask ourselves how ambitious should an entrepreneur be? How obstinate? What kind of innovation should he pursue? Can we expect the innovator to reliably foresee the future?

As an answer to these questions, the groups have proposed two different individuals.

The first one presents a figure who wants to innovate, no compromise, a figure focused more on the value of a product and the user experience that comes from it rather than on aspects related to the affordability by individuals. The second group, on the other hand, has set itself the objective of presenting a figure who wants to innovate on a large scale in order to make technology accessible to everyone, a figure guided by strong moral and ethical rules.

We deal with the problem by means of a fictitious scenario, explained in detail in 2, in which we have to choose the most suitable candidate for the role of advisor of the European Council.

2 Scenario

The scenario chosen for the battle takes place in 2020, year in which the European Council will launch project Horizon. *Horizon 2020*[8] is the biggest EU research and innovation programme ever. Almost €80 billion project that aims to transform Europe by coupling research and innovation, and focusing on three key areas: excellent science, industrial leadership, and societal challenges. It will lead to more breakthroughs, discoveries, and world-firsts by taking great ideas from the lab to the market. The goal is to ensure Europe produces world-class science and technology that drives economic growth.

The European Council's president needs to choose an advisor who will help him and the entire Council to understand and select the best innovation proposals. The first nomination goes to Steve Jobs, who is still alive in this scenario. He was found on an island within the Bermuda triangle, where he managed to build an idyllic ecosystem. The second nomination goes to Bill Gates, who no longer leads Microsoft and retired to focus more on his charity projects. The fact that both figures are detached from their respective companies ensures that they are willing to devote themselves completely to this important role, leaving aside the position and job they previously held.

For what concerns the allowed topics, we choose to talk about **people and not companies**, because both Apple and Microsoft in their entirety are ir-

relevant when choosing an advisor, as we firmly believe that overall decisions made within a company cannot be attributed to its founder alone. For the same reason we avoid talking about security issues, since it is a huge field, worthy of its own debate, that depends on laws and policy as well, rather than company's founder. Nevertheless, we allow the discussion to touch the **business decisions** taken by candidates, since they reflect the decision-making abilities, useful for a good advisor. Their decisions are significant reflections of how they act and react, showing the underlying procedural rationality[15].

We considered the **innovation factor** as one of the cornerstones linked to the field in which the advisor will operate. We removed the user interface issue because we consider it too technical, but we kept the **aesthetics and user experience** because the presentation of a product and the attention to user needs are important qualities.

Moreover, we also kept **affordability** to counterbalance the advantage of Steve Jobs in the previous topic. Since the focus is on the person himself, there can certainly be no lack of discussion about the **personality** of the two figures. We believe that personality analysis can provide us with valuable insights regarding a person's behavior, reliability, and eligibility for such an important role. For the same reason, and also for the analysis of the link between candidates and people affected by their decisions, we also kept the **ethical stance**, though without focusing on irrelevant legal issues, which are more related to the companies than the persons.

3 Steve Jobs

Steve Paul Jobs is an American entrepreneur and inventor. He is also one of the three founder of Apple computer, together with Steve Wozniak and Ronald Wayne. He is also famous for having presented some revolutionary Apple products such as the iPod, iPhone and iPad. In the next sections we will debate about why he is the right choice for the advisor's position.

3.1 Good communicator

One the best features that can describe Jobs is his ability to present his ideas in a very clear way. During his career, indeed, he has made lots of presentations and most of them were really appreciated by the public. The reason of this success might be found on his minimalist and well-finished aesthetics. Moreover, he is an astonishing speaker, able to stick his ideas into the audience's mind and to make them unforgettable through stories or metaphors. Another example of his ability as a communicator is how he builds his slideshows to be as simple as possible without losing in effectiveness. Jobs hardly ever used words on his slides; he let the image paint the picture while he reinforced it with spoken stories. Then, during his speech he always focused on one idea at a time avoiding bewildering the public. Despite the fact that Jobs is a techie, often speaking to a specialized audience, he never weighted down his speeches with an overload of jargon. He knows that he needs to connect on a human level and speak about what a regular person really wants out of a product, rather than just spewing out impressive specs and features.

In this perspective, the most important skill to be a good communicator is the cleanness of the speech. Jobs rehearsed his speech many and many times before obtaining that relaxed and calm look on the stage which distinguish him.

The way he walks around the stage freely, comfortably and relaxed is a lesson that everyone should learn and follow. You never saw him stationary, holding onto a lectern like many other people performing a presentation often would. Just to give some numbers, from 1997 to 2011 he appeared 4 to 7 times a year to unveil new products during his trademark *keynotes*. In this way he has become one of the best showman in the industry, an icon of the information technology.

As a rationale, being a good communicator will be a useful skill for the advisor's role, as he will need to be able to express his ideas in a clear, convincing, and concise way to a not specialized public, such as the president of the European Council, or even the Council whole.

3.2 Listener but not blind follower

The main purpose of an advisor is to give wise advices. It is thus of utter importance to be aware of his field's state of the art, of the other actors involved and of their perceptions about innovation.

This characteristic is another point in favor of Steve Jobs: he has worked in the technology field for 45 years, and at every step of his career he asked for other

people's opinion, listened to it and then made the right decision independently, according or not to the others.

The most emblematic example can be found in 1997 when Apple hired Steve Jobs as an advisor while trying to foil the threat of bankruptcy, threat that arose after Jobs left the company 12 years earlier. When Steve Jobs began his job of reducing losses and bringing the company at a prominent position in technological innovation, there were far too many projects going on. All projects were interesting, and maybe in some way innovative, but they were so many that none of them was feasible or useful to the company. So he started meeting every development team, asking them why their project should not be closed, in what way it was innovative, and why someone would choose to spend money on it. For what concerns the computer proposal of Apple, after listening to every engineer, technician and developer, of about dozens of computer's project he choose to save just four proposal: desktop and laptop each for common and professional users [11].

This leads to the certainty that Steve Jobs, as an advisor, will make only informed and well-grounded decision that take into account the opinion of experts and people, but are not exclusively lead by them.

3.3 Visionnaire

In the context of planning the future as an advisor in the European Union, the ability to foresee problems, needs and developments of the economy is without a doubt a key function a candidate needs to possess.

Undoubtedly the future is not certain and no one can predict the exact outcome, but the gathering of information through a continuous pursuit of technical knowledge can help in handling the aftermaths. Knowing how to manage this information, having a vision, is the key.

Despite Steve Jobs not being knowledgeable on technical details (he is not an engineer or a skillful developer), his ability in managing and directing his fully-knowledgeed team through his wide vision lets him prepare for the future even better.

One of the biggest and riskiest decision he made, long before other companies decided to do it, was to have a vertical integration of the products sold by his company. Apple is involved in every aspect of its products, from the design to the customers support through its closed environment. This is controversial choice but both the company and the customers benefited from it: the first by gaining the control of every step of the product's creation, and the seconds by having an environment in which user experience is constant, at the same humongous level demanded by Steve Jobs.

His vision can also be seen in his investments in other markets, like in entertainment, with Pixar or iTunes.

In an interview with Rob Campbell, former Apple manager, Jobs is described as a great storyteller, and his vision was the key element that highlighted him from the others: "You couldn't help but buy in." [10]

3.4 Problem solver

For a good advisor it is critical to be able to understand people's needs, in particular the ones that the population does not know to have, because in them one will find the best opportunities of innovations to improve the everyday lifestyle. No matter how good an idea is, no-one will believe in it if they are not convinced they need it. Therefore, the center of every successful innovative idea is to know and understand people's needs.

What Steve Jobs understands is that people can not tell you what they want if they have not seen it before, as he said "It's really hard to design products by focus groups. A lot of times, people do not know what they want until you show it to them."

This approach is also endorsed by Henry Ford with the notorious quote "If I had asked people what they wanted, they would have said faster horses."

To give proof of the ability of Steve Jobs in understanding people needs we can think about the iPod. If people were asked to improve the music listening experience back in a day where CD players ruled, they likely could not have envisioned a discless device. Jobs focused not on what people wanted but on what people needed, providing a genuine disruptive innovation, and following his own instructions: "You've got to start with the people experience and work backwards to the technology. [...] As we have tried to come up with a strategy and a vision for Apple, it started with 'What incredible benefits can we give to the customer? Where can we take the customer?' [...] I think that's the right path to take." [5]

Steve Jobs is not only capable of understanding people's needs, but also of convincing them that they need his solution. His persuading qualities are improved by his knowledge of what sort of things move people emotionally, which of his products' presentations people had trouble understanding, and what elements of the shows had the strongest lasting impact.

Therefore we can say that a good advisor does not ask people what they need, a good advisor has to understand what they need without asking, and Steve Jobs has demonstrated to be the person most able to do this.

3.5 Enterprising

Although this advisor will not obviously do all by himself, it is good for him to possess some enterprising skills, so to better judge the direction and feasibility of the choices he will push for. And Steve Jobs is this and more. Even before founding Apple, he managed to strike multiple deals with Atari, having also been hired there.

When he founded Apple Computers together with Steve Wozniak and Ronald Wayne, he managed to get fundings from an Intel manager. With the success Apple earned, Steve Jobs ended up being one of the youngest person to make it into Forbes list of the nation's richest people, and even more impressive, having done it without inherited wealth. With the introduction of the Macintosh, Jobs took already existing features, and with careful tweaking, managed to turn them

into a revolution that changed the whole personal computer world forever, the mouse and graphical user interface.

After some arguments with John Sculley, Jobs left Apple and founded NeXT, securing funding from billionaire Ross Perot. NeXT launch workstations included an object-oriented software development system, a programming methodology that would permeate the following decades. Possibly thanks to the inclusion of a built-in Ethernet port, scientist Tim Berners-Lee invented the World Wide Web on one of these machines in 1989. The second generation NeXT computers included NeXTMail, an email system that allowed users to include multimedia format in addition to text in their messages, foreshadowing a trend of more-than-just-text that is now given for granted in modern Internet communication, and NeXTSTEP, creating the foundations for Mac OS X. Before being acquired by Apple, NeXT also developed WebObjects, afterwards used to create, between others, the Apple Store and iTunes Store.

In 1986 Jobs bought The Graphics Group from Lucasfilms, renaming it Pixar, and from then the studio proceeded to create the first computer animated feature film along with multiple box-office hits[14]. In 2006 Jobs sold Pixar to Disney for 7.4 billion dollars, well above the 10 million dollars he paid for in 1986.

4 Bill Gates

Bill Gates is one of the world's most sonorous names. It is known above all for being the creator of the Microsoft empire. He is the one who revolutionized the computer concept and was able to spread it worldwide. Furthermore, his numerous career achievements are complemented by the establishment and administration of numerous philanthropic, charitable and educational programmes.

4.1 High-mindedness

Horizon 2020 presents itself as an ambitious programme, and as it turns out the advisor will be a key figure within it, as he will have to lead everything that technology and technological development means.

Integrity is one of the main attributes that an individual capable of fulfilling this role must have. We can see it as a concept characterized by a set of actions, values, and principles. Integrity is a personal choice, a commitment to be followed with intransigence which is based on initiatives that ultimately aim to benefit others. In order to establish whether a person has this quality, it is necessary to observe and analyze the actions, beliefs, and methods carried out over the years and the way in which they have subsequently developed.

Bill Gates turns out to be an ideal figure on which to conduct this kind of analysis, as he is a person who has distinguished himself with his actions, becoming one of the most influential people in the world. One of the points worth mentioning is the financial ethics as the role of advisor implies the management of an enormous amount of money. The aim is therefore to assess the leader's ability in manipulating such funds through a set of actions meant to have a positive impact on others.

After leaving the head position in the company that allowed him to be so successful both from a career and financial point of view, he and his wife dedicated themselves to numerous projects related to philanthropy, charity, and education through the Bill & Melinda Gates foundation[1]. Many of its projects require a huge sacrifice in terms of financial resources, but also management efforts to ensure that the funds are being used in the most appropriate way and in the most demanding environments. Among the various projects, it is worth mentioning the foundation of *Cambridge Scholarship*, which aims to give students from around the world the opportunity to study at Cambridge University. The Gates family is a member of the *Alliance for a Green Revolution in Africa*, which looks forward to improving the productivity of small farms by means of science applied to agriculture. Together with Warren Buffet, the Gates also founded *The Giving Pledge* to encourage wealthy people to employ most of their wealth for philanthropic causes.

We are aware that people may have doubts about this kind of promises and abstract programme, but at the same time, we know that they believe in the demonstration of facts. So it is clear how Gates' integrity makes him an accountable person, able to take his actions with determination.

Another point worth mentioning is the one concerning integrity in decision-making. This is a fundamental requirement for a person who must hold such an important role. Europe is preparing itself for a phase of profound technological change and revolution. A leader must demonstrate his ability in managing the change while simultaneously embracing both success and potential failures. He must demonstrate that he has the courage to experiment and test new things, but at the same time, he must have the necessary skills to create a sentiment of trust in the project in which he believes. Gates has demonstrated all of this over the years in managing his company, leading it from a small ambitious project and by making the right decisions to creating one of the most influential companies in the world.

4.2 Innovative thinking

“Innovation is the application of better solution that meet new requirements or existing market need. The term *innovation* can be defined as something original and more effective and, as consequence, new, that breaks into the market or society”[3].

This is what Bill Gates did with the creation of the operating system Windows, making real his dream of “a computer in every desk and in every home”. He was able to create something that everyone could afford and was easy to use, giving life to a technological revolution that has affected the whole world. But his innovative thinking is not bound only with the creation of Windows; he is also the first who created a Software Industry, Microsoft, whose purpose is to meet the needs of people related to the use of computer. For example the needs whithin office automation have been met by Microsoft Office, an office suite of applications, servers, and services for document management, which became the most used office suite in the world.

He is an innovator also in the philanthropic field. In 2011 he started *Reinvent the Toilet Challenge*, a program with the purpose of promoting the innovations of toilets to help all regions where the population has not an healthy access to the sanitization of toilets. Many countries have contributed to this research, donating funds to universities in these developing countries. With his wife, Melinda Gates, in 2005 he launched *WASH (Water, Sanitation and Hygiene)* a program to improve water sanitation in those countries where water pollution is a big issue but a neglected priority. Better water sanitation is a global need, but despite this it still remains one of the biggest unsolved problems in poor countries.

Bill Gates has always shown that his thought goes beyond the technological sphere, bringing innovation in all areas and improving quality of life all over the world, satisfying new requirements in technological field and new needs arising from more needy environments.

4.3 Compelling vision

A compelling vision is a clear, convincing, interesting and plausible idea of the future that cannot be missed by a good leader. He must be able to see and paint the goals needed to build the future he prefers for himself and his followers. He must also be able to make this vision real, share it, describe it with passion and not consider it just a simple manifesto to amaze members of the public.

As well as possessing this vision, Bill Gates is also capable of targeting it with determination. As scholars of his personality traits confirm: when an objective is set, he starts working on it, finishes it and only then he moves onto another task. This incredible focus is what made him succeeding remarkably in almost everything.

Of course he does not expect to succeed at the first trial, but he knows how to gain lessons from failures, improving himself attempt by attempt[6].

Envisioning the future is not enough for him, as one of his slogan sais “Vision without execution is daydreaming”. According to this approach, in the early 1980s, Bill Gates traveled around the United States delivering lectures to convince the audience how the operating systems of the near future were going to take advantage of graphical user interfaces. Though nobody believed him at that time, he had a strong faith in his ideas and never let difficulties stop him. He started working on Microsoft Windows 1.0 and, the year before its release, the success of the launch of the first computer with graphical interface demonstrated that Gates had the right intuition[4].

Even in his early interviews about Microsoft, Gates demonstrated his vision by saying he always knew he wanted to have more than a single product. From the beginning, he recognized potential for growth and opportunity. His ability to envision goals let him become a technological leader as much as an efficient philanthropist, as can be seen in the Bill & Melinda Gates Foundation[7].

4.4 Competence

Competence is a mandatory prerequisite for a good advisor, a quality that Bill Gates has always shown through his carrer.

He gained his skills through hard work and commitment, ever since his childhood, where he wrote his first line of code at the age of 13 entirely as a self-taught. He distinguished himself to such high extent that the school where he was studying asked him to develop a software for scheduling the students’ classes. A few years later, together with his friend Paul Allen, he managed to develop within a few weeks an emulator and a BASIC interpreter for the Micro Instrumentation and Telemetry Systems’ Altair 8800.

If these demonstrations of skills are still not enough, the foundation of Microsoft will certainly be. The newly born company had to rely almost exclusively on Gates’ skills to develop software that piqued the interest of leading micro-computer companies. With a great visionary project and the right tools to carry it out, Bill managed to bring the power and the utilities of computers to basically every house. This changed forever the way we live, the way we work

and the kind of work we can do: he pulled off one of the greatest innovations ever brought to light.

The activities in which he invested time, effort and money, whether charitable or corporate, have managed to become relevant or even necessary in the global economy. The process of creation and innovation within these has never stopped and keeps growing and evolving throughout the needs of the customers, producing effective and affordable solution for the needs of the market.

4.5 Ambition

Thomas Jefferson once said: “Nothing can stop the man with the right mental attitude from achieving his goal; nothing on earth can help the man with the wrong mental attitude.”

Ambition is an intrinsic feature of a leader who wants to achieve a certain goal. It is a characteristic that distinguishes those who are seeking excellence from those who settle for mediocrity. Many people who are commonly referred to as successful figures have argued that there are no shortcuts in the achievement of a particular objective, and that only hard work and focus can lead to significant results. It certainly cannot be said that Bill Gates is not an ambitious person. His willingness to achieve his targets can be attributed to the period of his childhood. This kind of attitude stems directly from the family environment, where competitiveness was strongly encouraged. As is often the case, competitiveness can turn into obsession, where every action must be done perfectly in such a way as to override others. Gates is certainly not an exception from this rule. However, his passion for programming and love of computers has turned into a positive obsession from the perspective of the skills he has acquired since his beginnings, enabling him to stand out from his peers.

The ambition coupled with the conviction of being able to build something relevant can lead to decisions that are often considered risky by the most common people. In the case of Gates, this can be exemplified by his dropout from Harvard University to accomplish his dream. Without that reckless choice, most probably the reality in which we live would be completely different. However, risky choices must be fuelled by strong determination and courage. These features certainly are not lacking in Gates and they allowed him to convince IBM, which at that time was one of the largest companies in the field of information technology, to adopt the operating system he was working on, allowing him to turn his vision into reality.

Achieving success means that it is increasingly difficult to find a reasonable compromise between work and everyday life. Gates found himself working tirelessly for many hours on a daily basis and for long periods of time. Naturally, these out of the ordinary work pace makes it difficult to carry out activities that are usually conducted by ordinary people.

Those who are willing to sacrifice part of their lives for a greater purpose certainly demonstrate that they are eligible to stand up to the top. Sacrifice is often compensated with the satisfaction that one’s work brings. It is a virtuous circle: more goals achieved more satisfaction is received.

5 Reconciliation

After expressing the point of view of the two groups, making evident the strength of the two candidates, it is now time to juxtapose the qualities in order to decide which person better suits the role of advisor.

The topic on which candidates differ most is the ethics: as stated in 4.1, Bill Gates is undoubtedly a philanthropist and makes lots of efforts to improve other people's life, but what about Steve Jobs? We were not able to find any charity effort from him or, at least, nothing of public domain: he had not even joined the Giving Pledge project. But this lack of information did not surprised us, since Job's personality has been heavily criticized [9] for its individualism, meanness and arrogance. This personality details leads us to believe that Bill Gates will focus more on the social part of innovation, going beyond the pure economic value of innovation products and will aim more at the improvement of the life of a broader pool of users. On contrast, Steve Jobs as advisor would not care about how much expensive the products will be, leading to an elitist innovation.

On the other hand, a huge Gates' weakness is the lack of innovative thinking. Indeed, he has always followed an incremental type of innovation, trying to satisfy the immediate needs of the masses instead of foreseeing their future needs. Jobs distinguished himself more in understanding people needs and by not being afraid to do disruptive innovation. In fact his ideas became new innovative technologies and products which were then copied by many other companies. This characteristic is related with the Causation approach, where an entrepreneur take a particular effect as given, for example the graphical user interface for MS-DOS or the necessity of a new way to use the touchscreen interface, and focus on the means he needs to create that particular effect; indeed, as innovators, they were able to understand the potentiality of these effects, making them a global phenomenon[2].

This kind of inclination, makes us believe that Gates is not a visionnaire as much as Steve Jobs, since he is not very good at foreseeing the wildest possibilities the technology can be used for. We can see this behavior clearly illustrated in Bill Gates insistence to provide a stylus for touchscreens, while Jobs had already understood that it was an obsolete gadget. Other examples can be found in the following quotes by Bill Gates [16] "I see little commercial potential for the Internet for the next 10 years" said in 1994, and "spam will be a thing of the past in two years' time" said in 2004.

On the other hand a huge weakness of Jobs lies on his selfish way to design his product, which is focus on needs of many but affordable by few, while Gates is better at understanding the evolution of the market and to make his products affordable to all the population, even if it means sacrifice the quality of the product. In this sense, looking for an advisor who should think to develop innovation in an entire continent, take into account all the community instead of just a niche of people is a main focus.

One more characteristic that has been underlined during the debate, is the attitude of the two figures to follow or not mass opinion. We have seen how

Gates can take into account other's opinion and he does not behave like a dictator. In this way he can understand when he is proposing something too weird or probable something that will not have success and be appreciated by the market. On the other side Jobs follows his own ideas without taking into much account others opinion. We think that in a such important role, a person should listen to others very carefully, but that the final decision is his own duty, so both attitudes can be seen as a virtue.

The ability to express and transmit an idea is also important for an advisor since he still has to convince people about what decisions are worth investing into. We have already seen how Jobs was able to communicate even the most specific of concepts to the less specialized audience and how he managed to involve people into it and create interest. Can we say the same about Bill Gates? We think not: even if he talks with passion and has a compelling vision, he has a too technical stamp. Despite the fact that he creates a more authoritative aura and that this is the best in certain environments, he lacks a basic feature: he is not able to transmit the message to a generic audience. We can see this as a metaphore for the duality of ready made science and science in making[12]: Steve Jobs presents his concepts as black boxes, he does not spend time on inner details presenting just the easily understandable interface, while Bill Gates talks a lot about how his products work, letting you know tons of technical details and numbers about them.

As far as the figures' competences is concerned, we can say that Gates has a huge advantage over Jobs because he has been an active developer and programmer for many years. The familiarity with the technological market would be a wonderful skill for the role of advisor, since that office needs to be able to understand if an idea can be converted into a real technology or not, avoiding waisting time on unfeasible ideas. On the other side Steve Jobs is able to understand in advance people's needs without asking them, or to rise the need where there is none. This way he can predict which areas of development are the ones worth investing in.

However the best and most essential characteristic that an advisor must have is the will to achieve big things. According to Black Swan's theory[13] the only way in which a single person can change the world is being extraordinary. We can say that both Steve Jobs and Bill Gates are compliant with the Black Swan definition since they had an unpredictable success with a massive effect in the technological field (their companies are leaders in the sector) and hordes of journalists, economists and competitors have tried to no avail to discover the secrets of their success and replicate it. This characteristic is highlighted in the ambition shown by the candidates, and allows both of them to be resolute and not to let the complexity of a task stop them. Therefore without a doubt they will be pleased to cover such an interesting and important role as the one of advisor for a big project like Horizon 2020.

6 Conclusions

We argued a lot about who would be the best advisor, an entire battle actually, and the first result we achieved was becoming aware that we live in a highly ambiguous world. We can not know in advance the rules of the game, i.e. what kind of proposals would the advisor face; and that the other actors, for example the European's Council's President, can change the rules at any time. Unsurprisingly, talking and speaking we were not able to analitically detect the preferred qualities to be a good advisor for Horizon 2020, so we tried to envision a scenario for each of the two outcomes.

Firstly we imagined a scenario in which Bill Gates is the advisor of the European's Council's President in the context of Horizon 2020, and while his lead might guarantee a more widespread diffusion of his ideas, it still lacked the innovation factor that we consider mandatory of this project. So we agreed that this solution is not the best. Then, we consider the scenario in which Steve Jobs won, which on the countrary, excels on the innovation side, both reusing known and existing technologies or coming up with new ideas, but not taking into consideration how these can be spread to the masses. We again agreed that this is also not the best solution.

This lead us to conclude that only a combination of the two figures is an acceptable solution, as they complement eachother, giving the council a complete rose of opinions to choose from, according to their beliefs of what will benefit Europe more.

Outside of the metaphore, we cannot identify a single paragone for an entrepreneur and innovator, since that depends too heavily on a very abiguous environment and different qualities can have different meaning and potential in different situations.

References

- [1] Bill & melinda gates foundation. <https://www.gatesfoundation.org/>.
- [2] Introduction to causation and effectuation. <https://update.eitdigital.eu/x/wQymi1>.
- [3] What is innovation. <https://www.igi-global.com/dictionary/innovation/14682>.
- [4] Wasson A. Bill gates 11 traits of personality. <https://www.businessalligators.com/bill-gates-personality-traits/>.
- [5] Apple. Apple worldwide developers conference, 1997.
- [6] Staff author. Bill gates personality traits. <https://healthresearchfunding.org/bill-gates-personality-traits/>.
- [7] Staff author. Leadership qualities of bill gates. <http://www.centerforworklife.com/leadership-qualities-bill-gates/>.
- [8] European Commission. What is horizon 2020? <https://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020>.
- [9] D. Coursey. Steve jobs was a jerk, you shouldn't be. <https://www.forbes.com/sites/davidcoursey/2011/10/12/steve-jobs-was-a-jerk-you-shouldnt-be/#696adebd4045>.
- [10] C. Gallo. Steve jobs and the power of vision. <https://www.forbes.com/sites/carminegallo/2011/01/18/steve-jobs-and-the-power-of-vision/#1cb67098172b>, January 2011.
- [11] Leander Kahney. *Inside Steve's brain*. Penguin, 2009.
- [12] Bruno Latour. *Science in action: How to follow scientists and engineers through society*. Harvard university press, 1987.
- [13] Nicholas Taleb Nassim. *The black swan: the impact of the highly improbable*. NY: Random House, 2007.
- [14] Pixar. our story. <https://www.pixar.com/our-story-1>.
- [15] Herbert A Simon. From substantive to procedural rationality. In *25 years of economic theory*, pages 65–86. Springer, 1976.
- [16] M. Weinberger. The worst things bill gates ever said. <http://www.independent.co.uk/news/people/the-worst-things-bill-gates-ever-said-a6990046.html>.