

# USA and Huawei, the Creation of a Technological Iron Curtain

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## Abstract

*The pace at which technology is developing today is a very accelerated one, which leads to an constantly increasing circulation of information. With this technological evolution, the most developed countries have the most to gain or to lose on the international stage. The recent China-US Trade War tends to take a turn for the worst because of Huawei's recent innovative products and technologies. America has come to the menacing conclusion that China, using its gigantic producer capacities, would try to create vulnerabilities in the American defense system, while intentionally eroding the western capitalist economy. The purpose of this paper is to emphasize the importance of the ordinary technology that we are taking for granted and the effects of it on national and international scale. For this reason a logical explanatory material was composed, through which we can easily grasp the ascending importance of informational technology into an increasingly globalized economy.*

**Key words:** information, technology, iron curtain, trade war

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## 1. Introduction

The information and its distribution are of major importance in the century that we live in. We can say that the information was used the first time humans walked on this earth and the methods of storing and transmitting it are just as old. But with the constant evolution of technologies, especially the modern ones, the whole information environment has undergone complex and profound transformations. Anyone can say with certainty that nowadays, these processes have considerably increased their importance in the social, economic or military field. Within the current international environment, information has become "the most valuable currency", and whoever owns the most sensitive and the largest quantities of it can easily control their adversaires. We are all familiar with the economic conflict between the US and China and the imminence of the outbreak of a new Cold War is evident, which will also obviously be a „war of influence”. It may sound strange but, as we can see nowadays, the strongest economies tend to control the not so economically evolved states, which leads to a huge international influence on the side of the dominant countries. A primary characteristic that it has in common with the other types of wars or confrontations, its represented by the informational aspect which plays a critical role when it comes to winning. In the current clash between the capitalist west and the communist east, great controversy has been risen when the Trump administration decided to restrict Huawei from importing the operating system produced by Google. These actions were put under the pretext that the company in question with the help of the new 5G technology, which was implemented in its mobile networks, could spy on the clients, and the information obtained from them would be handed over to the Chinese government.

Thus Huawei has been blacklisted amongst the American companies, which may or may not lead to its decline in favor of US giant Apple Inc. We can see beforehand that all the fuss is about the american economical prowess, not exactly a strictly security issue. If we look back these types of confrontations and issues between America and China, had been going for quite some time now, which can point to the fact that this will go on for a longer period, or at least until one of these

countries gains world economic domination. Even if none of these actors has the upper hand in all the domains, we can see that the international centers of influence are slowly shifting from one direction to another, but as it moves, different types of changes are happening in other countries. In the end, if they are not careful the simple citizens might be affected in a negative way. (Jia, 2019)

## **2. Theoretical background**

The economic war between the United States and China has produced economic and security-related effects at a global level. As a result of this „cold” conflict, the Washington Administration has decided at the end of 2019 to restrict access of Huawei equipment across the territory of the USA.

According to the Department of Commerce, Huawei still had 90 days to maintain their existing products on the American markets. The license expiry date was due on the 19th of August, 2019, a fact that guaranteed Huawei's continuity in engaging commercial activities with Google, Intel, but also to forward different software-side enhancements for the already existing hardware equipment in America.

Huawei has been a controversial company, because of many situations in which a plethora of other countries and companies were involved: India at the beginning of the new millennium, with Huawei being accused of granting talibans communications equipment for military use; in 2003, Huawei was sued by CISCO for stealing router-programming codes; 2009 – the telecommunications company BT stated that they will stop using Huawei-produced equipment due to security-related issues and weak protection against cyber-attacks originating from China; 2010 – Motorola sued Huawei for industrial espionage, this case being closed as late as 2011; and the list goes on and on.

## **3. Research methodology**

In the following paper, the main method used in obtaining results is an analytical research, correlating already available facts, data and information, analyzing and reaching a subjective standpoint, which can stand as a critical evaluation of the topic.

## **4. The creation of a technological barrier**

In May last year, the United States added the giant technology manufacturer Huawei to the "black list" of companies that cannot do business with US corporations. For some time now Google has begun limiting the provision of software services intended for the mobile technology company Huawei, following a White House ordinance deciding to restrict Chinese company's access to US technology. Google's software systems are used on Huawei smartphones, with applications being pre-installed on all Huawei devices marketed worldwide. Depending on how the US presidential ordinance is enforced, the use of these operating systems may be blocked permanently. For Huawei, the strong impact will be abroad, as Chinese customers already have limited access to Google services in their home country. The countermeasures of the US company will have the greatest effects in areas such as Europe, where the Chinese company has become one of the largest sellers of smartphones. And in the end, as a result, other companies will inevitably follow. Basically, the maneuver generates pressure on Huawei's dreams to expand internationally. (Porterfield, 2019)

The Chinese manufacturer, which has made a much bigger profit in 2018 than IBM, has been accused of using 5G wireless technology, in which is the world's leader, to spy on US citizens in order to gather vital information regarding the security and the critical infrastructures of the United States. America claims that there have been suspicions and even accusations of economic espionage in the past regarding some employees of Huawei and ZTE, which is another major mobile phone manufacturer. According to reports issued by the FBI, Chinese employees of these companies were given large sums of money in exchange for pictures or relevant information regarding the "Tappy" telephone testing technology. This technology was being used by T-Mobile,

a large American telephone company, which only operates on the US territory, and the important thing about this is that it is classified as a "technological secret". Because Huawei was selling phones to this company, theoretically, some employees were able to extract some information from which the Chinese government had to gain. Another rather serious allegation against Huawei, which was brought to light earlier last year, was the fact that it did business with Iran despite sanctions imposed on this country by America. The same as before, this time also the Chinese have dismissed any allegations, saying that Huawei has not done any direct business with Iran, considering these allegations only attempts to slow its ascension into becoming the world number one mobile technology manufacturer. It should be mentioned that in April 2018, the same kind of sanctions, actually identical to those imposed to Huawei right now, were imposed to the aforementioned ZTE company. But a month later, after Donald Trump's meeting with Chinese President Xi Jinping, these sanctions were lifted under the pretext that too many Chinese citizens were risking to lose their jobs. Many experts in the field believe that ZTE has been used as a means of negotiating in the Sino-American economic war, and the same is true of Huawei, only that this company is much more important to China. (Wolfgang, 2019)

But there is another less optimistic view regarding this harsh approach of Donald Trump administration in the conflict with Beijing. I am mentioning this because it risks accelerating the development of two different worlds in the informational technology environment, further isolating about 20% of Internet users worldwide and also adding an extra 30% to this number. China has lost nearly two decades on building a digital wall between it and the rest of the world, a one-sided barrier meant to keep companies like Facebook and Google away, but allowing Chinese rivals to go abroad and expand into the world. But when that barrier was beginning to crumble President Donald Trump further enforced it from the other side, and as an effect in the context of Huawei losing Google, the US-China technological war receives its own *Iron Curtain*. This harsh approach of the White House that threatens to accelerate the development of two technological worlds, further isolating one-fifth of Internet users, only exacerbates the current economic conflict between the two countries. (Sutter, 2017, pp.117)

If China and the United States have really launched a technological Cold War, then the ordinance against Huawei can truly best be perceived as the restoration of the Iron Curtain. But this new Iron Curtain will be more of a technological one, and if we pay close attention to the society that we live in, we can jump to the bold idea that it can have the destructive effects as those which occurred between US and Russia. In this potential outlook on the technological future, China will continue to keep most of the world at a distance. Under this assumption, by contrast, the United States and many other countries will, in turn, block Chinese technology. Strengthening the US position closes many of the ways which were used by both countries to exchange ideas and collaborate in business despite the strict Chinese censorship regime. Closing these doors could have profound effects not only on the technology business, but also on how the world will use and understand the devices and services of the future. However, as we have said before, China's censorship and strict control over the digital activities of Chinese citizens had already isolated one-fifth of the population from using the Internet totally unrestricted, and so it has generated the birth of a generation that doesn't know what a Google search or a YouTube channel means. (Huang, 2019)

But, according to the public opinion, Huawei seemed and still seems to have gained an unstoppable pace, and this one powerful blow from the US may only be just some kind of desperate act. An act which could be used by US to protect the big manufacturer Apple from losing more and more ground in the favor of the Chinese behemoth. But Huawei has predicted this in some way. And this idea can be strongly supported by the fact that seven years ago, the Chinese smartphone maker opened a small research center in Finland, opting for the country in which Nokia's competing engineers know how to build operating systems. Starting with only 20 engineers, Huawei has gradually expanded its activities into Finland, with centers in Helsinki, Oulu and Tampere preparing for the day when they might need an alternative to the Android system, which is currently used on three quarters of the world's mobile phones. This is yet another proof of the adaptability and predictability of the Chinese when it comes to technology. Taking this course of action as an example, it is very difficult for the USA to accept that in the near future it is no longer

possible to be the number one technological producer. If it truly happens it will greatly weaken its world leader status. (Robson, 2017)

The US new aggressive approach will only accelerate this process opening a window to the possibility that one day the citizens of China will only use Chinese phones or devices equipped with local chips and software. The problem is much more complex as many countries in Europe and Asia have adopted and in the near future will openly embrace the new 5G technology distributed by the Chinese. This can lead to bold assumption that soon, many of these countries would be willing adopt 100 percent of Chinese phones and software. At a first glance, many would say that this is not so serious, but if we analyze the situation in a deeper and a more objective manner, the adoption of this particular mobile technology may be the catalyst for an constantly increasing import of Chinese technology into a more and more widespread territory. Due to the distribution of different technologies across the vast territories, China will have access to a vast amount of information that could be used for its own benefit, but not necessarily in a way that would adversely affect other countries. (Xie, 2008, pp.210)

## 5. Findings

Although Huawei has encountered numerous accusations, from intellectual theft to cyber-espionage, none of these incriminations could be proved. To consolidate trust of the other states towards the Huawei company, China has been open to discussions regarding the signing of an agreement through which the latter would take the decision of not engaging in espionage using Huawei products, in the states in which their technology has already been implemented. By November 2019, no agreement was signed.

The Huawei files represent the fight for technological supremacy between China and the United States of America. None of the states seem to assume responsibility for finding a common framework for solving this technological confrontation. China accuses USA for trying to infiltrate the Huawei systems illegally arresting Huawei partners and employees,conduction of cyber attacks against the mobile phone communications company, obstruction business activities through intimidation and denial of visas legitimacies combined with confiscation of equipment. On the other hand Washington accuses the involvement of the Beijing government in espionage activities, intellectual theft and commercial imbalances using Huawei equipment. Solving the frictions at commercial level between China and the USA is vital, not only for Huawei, but for all the companies that use the Chinese equipment. As the negotiations were picked up again, the hopes for ending the commercial conflict are not very high, because the Washington government wants the Beijing one to start implementing changes in their own structure, changes that will probably never be honored.

## 6. Conclusions

Only by implementing 5G technology the information exchange will be done at a speed which has never been seen before , so it is not hard to imagine what would happen if it would be augmented with other informational or technological systems. All these changes of the technological nature that generate an accelerated accumulation of data which can later be processed into information, lead to the creation of a new center of Chinese global influence that has high chances to match the American one. If this would happen, and the chances are high enough, we would have a proper technological Iron Curtain, which due to the pace at which science and technology are advancing, would be almost impossible to remove.

The Trump administration's maneuver is far more complete than many Chinese thought it would be, and it also appeared much earlier than expected. Many people only now realize that it is real. It is unclear whether the Trump administration's decisions will succeed in isolating Huawei from the rest of the world, but according to many experts this will not happen due to the company's immensity, technological advances and China's adaptability to cope with these types of situations. But the greatest advantage for Huawei is the fact that the big Chinese companies, even if they are officially private, have official or unofficial support from the government. As mentioned above, the

attack on Huawei intervenes in the context of worsening the trade conflict, and it leads to the final conclusion that it is only one piece on a larger game board.

## 7. References

- Huang, K., 2019. *Are Chinese companies using Cambodia to evade US tariffs?*, [online] Available at: <https://www.scmp.com/news/china/diplomacy/article/3027242/are-chinese-companies-using-cambodia-evade-us-tariffs> , [Accessed 14 September 2019].
- Jia, C., 2019. *Some US goods exception from tariffs to ease tensions*, [online] Available at: <https://global.chinadaily.com.cn/a/201909/12/WS5d793820a310cf3e3556b14f.html>, [Accessed 13 August 2019].
- Porterfield, C., 2019. *Trump Open to Interim China Trade Deal*, [online] Available at: <<https://www.forbes.com/sites/carlieporterfield/2019/09/13/trump-open-to-interim-china-trade-deal/#172749346101>>, [Accessed 13 September 2019].
- Robson, D., 2017. *Why China's internet use has overtaken the West?*, [online] Available at: <http://www.bbc.com/future/story/20170309-why-chinas-internet-reveals-where-were-headed-ourselves> , [Accessed 19 July 2019].
- Sutter, R., 2017. *US-China Relations: Perilous Past, Uncertain Present*. Washington: Rowman & Littlefield Publishers, Third edition, pp. 110 – 120.
- Wolfgang, B., 2019. *China could crush U.S. military in Pacific*, [online] Available at: <https://www.washingtontimes.com/news/2019/aug/20/china-could-crush-us-military-pacific-report/>, [Accessed 24 August 2019].
- Xie, T. 2008. *US-China Relations: China policy on Capitol Hill*. New York: Routledge Publisher, 200-220.