



Università
Ca' Foscari
Venezia

Master's Degree

in International
Management

Final Thesis

Adidas and its reshoring case

How Adidas tried to upset the shoes manufacturing industry

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Academic Year

2019 / 2020

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Introduction

The aim of the work is to study the dynamics related to the reshoring of Adidas, understanding the straightness that pushed to its implementation and the weaknesses which caused its failure.

To reach this target the work starts analyzing the impact of the industry 4.0 in the economic environment, with the tools and features introduced by the new wave of technology development and automation implementation.

The phenomenon had several implications in the industrial field, and one of the most important is the reshoring wave. Innovations and new technologies made the companies bounce back from the Far East, pushing companies come closer to the home country and exploiting the local sources to develop their production processes. In order to prove the reality of the reshoring effect, the work reports seven short case studies, where is stated when and why the reshoring processes had been approached. The companies analyzed, mainly reshored partially the manufacturing processes and most of them bounce back coming closer their home country.

After them, the work focus on Adidas. Firstly, readers will find a brief description of the company, underlining its history, strategy and plans. Then the work focuses on the justifications which sustained the reshoring initiative.

The reshoring process pushed to the creation of two new plants, called “Speedfactory” (in a sense comparable to the Gigafactory of Tesla). These places are characterized by a high level of automation and robotics, supporting then with human skills. The work deeply analyzed the new plants, starting from the new machineries adopted, passing through a brief analysis of the processes and ending with the production phase.

The following step has the aim to understand why Adidas closed these two new futuristic plants, moving back to the Far East, keeping most of the Speedfactory with it.

After that the work analyzes the new strategies that Adidas is ready to follow, to develop, to implement for the Speedfactories in Asia and the future benefits and threats expected.

Starting from the point that the German company is re-approaching the Far East, and mainly China, the reader will find an analysis of the geopolitical landscape Adidas is finding. The core of this section will be the political dynamics, the presence of smart technologies and future goals of the Chinese country. After this the analysis moves towards a new player that suddenly broke out: the Covid-19, better known as Coronavirus. Starting from it, the work will analyze which impact should it have on the fashion industry and if it eventually will collide with the strategies of Adidas.

1. The Background

1.1 Industry 4.0

1.1.1 Definition

Nowadays the term “Industry 4.0” is very present in our everyday life. We can read it in the newspapers or in the websites, we can hear it on televisions or on radios, or see it in advertising banners in the cities.

But what is the real meaning of this expression?

Industry 4.0 derives from the desire of experts to create a sort of temporal continuity with the past. In the 18th century the expression “First Industrial Revolution” was introduced: that period was characterized by the introduction of machines powered by mechanic energy, and the principal actor was steam. At the beginning of the 20th century the main actors were mass production and the assembly line. Electricity, chemical products and oil were introduced, and the expression “Second Industrial Revolution” came out. In the following years, during the ‘70s more or less, a new phase was coming up and experts named it “Third Industrial Revolution”, where industrial robots and computers were introduced. In this period electronic know-how was combined with IT in order to increase the degree of automation in the production process.

In 2011 the German government introduced the expression “Industry 4.0”. It has to be considered as the following steps in human process. The desire is to create a link between physical systems and the digital side through big data analysis and real time adaptation.

“Industry is experiencing a fourth revolution based on new technologies and innovation. The goal is to build industry that is increasingly interconnected and competitive while being ever more respectful of workers and the environment. France has a plethora of assets to help take on this challenge. Industry is undergoing a fully-fledged revolution. New technologies, such as additive manufacturing (3D printing) and artificial intelligence, are turning the industrial sector on its head and bring the whole production model into question. “Industry of the future”, “Industry 4.0” or “smart manufacturing”: these different names represent a single reality, an inter-connected, automated and digitized industrial framework designed for improving factory productivity, the quality of goods and in the working conditions.”¹.

¹ <https://www.businessfrance.fr/discover-france-article-the-industrial-future-a-chance-for-france>

1.1.2 The phenomenon takes worldwide

Industry 4.0 initiatives were strongly appreciated around the world, and the government supported it. It was seen as a strong opportunity of development and had been strongly encouraged with the introduction of economic incentives such as hyper-depreciation on tangible operating assets and super-depreciation on intangible operating assets, a new Sabatini Act, tax credits for R&D, facilitations for SMEs and innovative start-ups.

United States of America

In the United States of America the initiatives related to the Industry 4.0 was labelled as “Manufacturing USA” and it could rely on a public investment of around 0.5\$ Billion. It was finalized to public support and research projects. The initiative also included the creation of a network of institutes and lab in order to spread technology know-how and skills. The main actors were ICT big groups and Universities, and firmly supported by the government. If the analysis goes deeper what would emerge is that there are different areas where Industry 4.0 established and each of them has some specific characteristics. In the USA some clusters emerged: the first was in Arizona, where the technological efforts were related to smart and connected devices, augmented intelligence and advanced transport services. These initiatives were taken with the strong support of government and the ASU (Arizona State University).

Another cluster could be located in Texas, where the government decided to delete the state income tax and made the living costs lower than the national average and the main industries involved were semiconductors and electronics R&D and manufacturing.

In the Pennsylvania State The main actors was the city of Pittsburgh, better known as “steel city”, which is driving the 3D printing processes and additive manufacturing in the US. The processes of R&D was supported by the three Universities: Carnegie Mellon University, the University of Pittsburgh and Robert Morris University.

In Charlotte, North Carolina, several companies invested on R&D. The institutional side is present also this time and it is represented by the University of North Carolina in Charlotte which works closely with regional manufacturers to train staff and is also home to The Center for Precision Metrology, which works with industrial partners on the research, development and integration of precision metrology in manufacturing.

France

In France the initiatives related to the Industry 4.0 was labelled as “Industrie du Futur” and it could rely on a public investment of around 10\$ billion. The project comprehended several initiatives in order to re-industrialization plan and a huge investment in technologies offered by the Industry 4.0 and centrally drove by the government. The main financial plan was on fiscal incentives in order to simplify private investments, facilitated loans for the SMEs, tax credits for research.

Germany

In Germany the initiatives related to the Industry 4.0 was labelled as “Industrie 4.0” and it could rely on a public investment of around 1\$ billion. The action plan was publicly sponsored, involving big industrial and technological players. The main financial plan was centered on financing industrial project and R&D centers and financial support in investments on hi-tech start-ups.

1.1.1 Enabling technologies

In order to translate the ideas of combining the production processes with new technologies, in the last few years several innovations have been introduced in order to implement both work and production conditions. These new tools can be applied in different industries, starting from the agriculture, passing from manufacturing and ending with the most sophisticated sectors.

The most important innovations can be divided in two big groups, one closer to the IT field and one closer to the operative processes: in the first we can find:

- IoT;
- Manufacturing Big data or Analytics;
- Cloud Manufacturing;

In the second we can find:

- Advanced Automation;

- Advanced HMI;
- Additive Manufacturing.

Iot

With the term IoT we are identifying every object able to connect and disconnect with internet, in this way we are giving life to a previous un-animated entity. These objects are able to communicate with other similar ones and share information. For these reasons we call them “smart”.

Manufacturing Big Data or Analytics

Manufacturing Big Data or Analytics can be explained as the desire to gain huge amount of data from the digital world, from sources as social network (Facebook, Twitter, Instagram, LinkedIn), discussion forums and online surveys. These data will be storage and then analyzed. From this analysis companies are able to understand the results of past decisions regarding production and marketing decisions. The efforts are not only focused on the past, but also on the present and on the future. From the analysis companies can try to fix their current decisions. The most important thing is the forecasting possibility. Trying to put an eye on the future allow companies to search for the best solutions in terms of efficacy and efficiency. From the big data analysis several areas of a company will gain benefits, starting the supply chain, passing through the production, ending with the marketing and sales dynamics.

Cloud Manufacturing

Cloud manufacturing can be seen as a support in the operative processes and supply-chain management. With this tool a company can virtually analyze raw materials, costs related to specific process and products.

Robotics and automation

Surely in the last ten years everyone has heard at least one time, discussions about the introduction of robotics and automation systems in companies. In high standardized environment, where routines are the principal actors, robotics and automation will be a real support. With the increasing knowledge in electronics, software and artificial intelligence, standardize processes can be delegated to automatized systems, gaining advantages in production, efficiency and energy saving. The introduction of robots will facilitate the programming and monitoring phase. So, robots have

not to be considered a replacement to the traditional workers, but an implementation of them, a support to the execution of high standardized processes which present an error-tolerance close to the zero. From the company point of view, the acquisition of robot presents both negative and positive aspects. At the beginning the company has to face huge investments to acquire the performances of the robots, but after this expenditure, the only costs related are the energetic ones and the maintenance ones. These dynamics are completely different from the ones related to physical workers, in terms of expenditures, in fact workers generate smaller but continuous costs. The thoughts about costs won't be the only one, because as we know robotics will be choose in high standardized context, and here the integration should be easy. When we move to the customization field, robotics will reveal its weaknesses, due to the impossibility to program automatized processes on a such large scale.

Advanced HMI

In this group we can find the display touch, 3D scanner which have the aim to support the creation of visuals for the augmented reality. In this case we are talking about extremely hi-tech tools able to facilitate processes inside a company.

Additive Manufacturing

This innovation is better known as "3D printing". This can be seen as the most important one. It is able to create a complete product starting from a virtual picture. In these processes can be used several materials (plastic, metals, resins). The 3D printing can be used in different processes such as prototyping, manufacturing, tooling and maintenance & repair.

1.2 Reshoring

1.2.1 Definition

When we talk about reshoring we are unconsciously also talking about offshoring. There can't be a reshoring with a previous offshoring.

Western countries in the last decades heavily offshored partially or completely in the Far East. The reasons behind those decisions were usually characterized by an economic flavor: the dynamics involved were the possible exploitation of cheap labor costs and many fiscal advantages.

Nowadays, with the disruptive development of the technologies, and mainly thanks to what we call “Industry 4.0”, many companies are embracing the idea to come back home, or closer to it. The reshoring dynamics had been involved in several specific studies and had been the main interest of several task force around the World. One of the most important reality in this field is represented by the European Reshoring Monitor project developed by Eurofound. In this platform a reader is able to picture himself a more or less precise scenario. For example starting from a pool of 250 reshoring case², Euromonitor underlined that the 94% (234) of the companies, once decided to undertake the reshoring process, decided also to come back in the home country, while only the 6% (16) reshored in a country which differs from the home one. A fact to underline is that the reshoring process does not mean only escaping from the Far East, or better in the majority of the cases it is correct, but not always. As we can see from the platform cited before, in the 250 total cases, the 60% of the reshoring process means leaving the Asian Continent (mainly China), but we have two other actors: Western and Eastern Europe count for the 30% and Middle and South America count for the 7%.

1.2.2 Drivers

The reasons behind these decisions can be various and heterogeneous, but we can group them into two big macro-areas. Firstly, there is the inside-of-the-company area and secondly there is the out-of-the-company area.

In the first group there are themes like:

The reduction of availability time, in the sense that producers are closer to the consumers and the simply amount of time that they have to wait to have the outputs will be less and in this way company will gain a happier consumer.

The reduction of availability costs, and it related to the shipping costs related to the shipping of the outputs from the producers to the consumers.

Increase in quality control, moving the production closer to the administration will result in a better control over outputs and over other dynamics.

² <https://www.eurofound.europa.eu>

Reduction in the carbon foot-print, in the sense that moving companies in more developed countries, will help also to reduce emissions. For example, in many European countries or in the USA, the environmental theme is very felt. Companies which aim to be more sustainable will have to face less efforts to pursue this path moving into these countries because they will have a closer control over the dynamics related to production and it can also pay more attention to the environmental rules.

Automation, AI and robotics, in the sense that many companies are starting to embrace the “smart” features, and to see the opportunity to bounce-back to the country of origin through the adoption of several technologies. These technologies should result in a long-term costs reduction that combined with a higher level of output quality, may push the company to invest in new technologies and leaving the outsourcing countries.

Intellectual property risk, also here there must be a geographical differentiation. If in Europe and USA there are many laws that preserve the intellectual property, abroad it is not the same. The prospective of a loss of intellectual property scare a lot every company, and the problem is the possibility to lose the control on a specific product, and its related market. The problems are linked both to the design of products and both to the patented methods of manufacturing.

Easier access to high-skilled employees, with an increase in the automation expenditure a company has to face a new issue: the one related to employees able to exploit the new tools. It is easier to find and train in developed countries than in the non-developed ones.

Supply chain management, this is one of the key aspects, because in this field you can start to create value being a company. If the company is spread all over the world, will be difficult keep several factors together, monitoring and improve them. But if the company has all the processes and phases close to the headquarter, efforts to control and monitoring will result lower and the performances will be better.

In the second group we can find:

Uncertainty related to specific geographical areas, in the sense that when a company outsources, it approaches areas like the Asian ones or the African ones. These are zones where often there are troubles and turmoil. Once you decide to outsource in a specific country, you won't be able to move

quickly and easily from it if some problems start emerging. So being involved in a riot or war, even with a passive role, will damage the company.

Fluctuation of energy costs, these is one of the aspects less capable of being controlled and affects directly the production and also directly the final costs of the output.

Fluctuation of labor costs, some years ago one of the main drivers of reshoring was the lower costs related to employees. Nowadays many laws in order to improve the workers conditions have been put forward. The result is an increasing in the overall labor cost, and when of the main point that push a company to take a decision disappear, it will go back.

Country of Origin effect, one of the main characteristics emerging from this reshoring turmoil is the “Made in” effect, or Country of Origin effect.

The CoO can be identified both before the reshoring, as a driver, both as an output of it.

First of all, a company which decides to pursue a reshoring process, between all its motivations, surely will find a place the desire to keep closer to consumers having the best mind-positioning possible in their minds. Usually the country of origin is associated with the “Made in” labelling. The labelling should become an outstanding marketing tool, because consumers would enabled to choose products not only for the physical characteristics, but also for the provenance.

1.2.3 Reshoring cases

Burberry

When we talk about Burberry our mind immediately picture the iconic “Tartan” theme. The story of the company started in the 1856 in a small English city called Basingstoke. The aim of the founder, Thomas Burberry, was to create clothes in order to protect people from the English weather. The company had been, since the beginning, heavily involved in several expeditions, where it play the role of clothes supplier. In 1955 Queen Elizabeth gave Burberry the Royal Warrant and in 1990 also the King of Wales gave them the Royal Warrant.

Nowadays Burberry can count more than 500 shops spread all over the World and in 2016 Burberry is named from Dow Jones Sustainability Index as leader company in the textile, clothes and luxury goods industries.

Regarding the reshoring process we can state that:

Reshoring announcement date: 3rd of November 2015

Starting implementation date: January 2012

End of implementation: December 2018

Reshored from: China

Reshored to: United Kingdom

Reshored business function: Production

Partial or Total reshoring: Partial

Total investments: 50 millions

Reasons for reshoring: “Made in” effect, risk of brand counterfeiting, unattractiveness of the offshore market.³

Prada

Talking about Prada our mind immediately refers to one of the most charismatic figure in the fashion industry of the '70: Miuccia Prada.

The story of the company began in 1913. It was founded by two brothers, Mario and Martino Prada. The company was related to high quality leather goods and soon become the main player in Milan and in the surrounding areas.

Regarding the reshoring process we can state that:

Reshoring announcement date: 3rd of April 2014

Starting implementation date: January 2014

End of implementation: December 2015

Reshored from: China

Reshored to: Italy

Reshored business function: Production

Partial or Total reshoring: Partial

Reasons for reshoring: “Made in” effect, delivery time, know-how in the home country, need for greater organization flexibility, offshored activities’ control complexity⁴.

³ <https://reshoring.eurofound.europa.eu/reshoring-cases/burberry>

⁴ <https://reshoring.eurofound.europa.eu/reshoring-cases/prada>

Calzaturificio Maritan

Calzaturificio Maritan was founded in 1995 by Giancarlo Maritan and his son Gabriele in Verona. Giancarlo was born in the Riviera del Brenta district, and there he learnt how to design, project and create a shoe. After an experience as manager in a local footwear company, he decided to open a personal shop. He strategically chose the zone around Villafranca. In the following years, with his son he decided to expand their business in Moldavia and Romania, choosing the outsourcing of production as an answer to the increasing number of demand in the domestic market. The company has a positive trend and nowadays produce and distribute shoes for important Italian and international brands⁵.

Regarding the reshoring process we can state that:

Reshoring announcement date: 9th of December 2016

Reshored from: Moldavia and Romania

Reshored to: Italy

Reshored business function: Production

Partial or Total reshoring: Partial

Reasons for reshoring: “Made in” effect, consumer demand for better quality, know-how in the home country⁶.

New Balance

When we hear “New Balance” we immediately think about the sneakers with the “N” on the left side. The trip started in Boston in 1906, when William J. Riley, an English footwear manufacturer, decided to found a proper company. Its first running shoes came up in 1938, and nowadays it became one of the most popular brand in the sportswear and sneakers field.

Regarding the reshoring process we can state that:

Reshoring announcement date: 2019

End of implementation: 2020

⁵ <https://www.maritan.it/produzione-calzature/calzature-maritan/>

⁶ <https://reshoring.eurofound.europa.eu/reshoring-cases/calzaturificio-maritan-spa-0>

Reshored from: Vietnam and China

Reshored to: USA

Reshored business function: Production

Partial or Total reshoring: Partial

Reasons for reshoring: “Made in” effect, local know-how, distance with consumers, 3D printing, government incentives, R&D, under-utilized capacity, import replacement.

Le Coq Sportif

When a consumer purchase a brand like Le Coq Sportif, he is going to wear staff showing a small chicken on it. The company was founded in 1882 by Emile Camuset in Romilly-Sur-Seine in the Aube district in France. The company created a strong image being heavily present during the major sport events, starting from bicycle competition, passing through rugby and ending with football⁷.

Regarding the reshoring process we can state that:

Reshoring announcement date: 8th of October 2017

End of implementation: January 2018

Reshored from: Vietnam

Reshored to: France

Reshored business function: Production

Partial or Total reshoring: Partial

Reasons for reshoring: “Made in” effect

Local know-how

Distance with consumers

What emerged from this short analysis is that:

- Reshoring affects both big companies both smaller company (Calzaturificio Maritan)
- Desire to move production closer to the country of origin.

⁷ <https://reshoring.eurofound.europa.eu/reshoring-cases/le-coq-sportif>

- Rarely the reshoring is extended to the whole processes of the company, but we assist to partial reshoring.
- When a company reshores it usually chooses the “In house” governance mode.
- The reasons can be various and different each other, but they can be grouped in macro-areas such as: implementation of processes, monitoring of costs, reorganization, exploiting local know-how and increasing the consumers care.

2. Adidas and its reshoring project

2.1 History of the company

If you ask a child, a teenager, a manager, a mum or a dad, a grandma or a grandpa which is their first thought when they think Adidas the answer will be surely “Three Stripes”.

The journey of the company started in 1920, when at the age of 20, a football player, Adolph Dassler invented stiletto shoes for athletics. In 1924 Adolf and his brother Rudolf registered the “Gebrüder Dassler Schuhfabrik” and the company started to provide athletes with the best possible equipment.

The relationship between the brothers faced several conflicts and ended up with the split of Adolf and Rudolf. They decided to continue their carriers in an autonomous way: Rudolf founded Ruma (better known with the name of Puma), while Adolph decided to found Adidas.

The company, being partner of an extent number of athletes, gain huge visibility from every kind of sport event, being them Olympic Games, Football World Cup, Basketball World Cup or Tennis Tournaments.

An outstanding fact occurred in 1954 in Switzerland, during the World Cup Final. The German national team faced the unstoppable Hungarian team and won. The mean of that victory had an eco that was extended also outside the simple football pitch. During that game Germans had a huge advantage: they were wearing the new Adidas football shoes, which presented two new features, they were lighter than all other football shoes and also had screw-in studs which could be adapted to every ground condition.

The company faced many changes and had to overcome many obstacles, but thanks to a good organizations it became, and continue to be, the first or the second biggest sportwear and sneakers supplier worldwide.

In 2016 Adidas had a new CEO, Kasper Rorsted, who is in charge to continue the futuristic vision of adidas in the development of fashion and sport apparel, keeping in its center the human being, even if he is an athlete or not.

2.2 Strategy

The strategy of the company is centered on sport, and they think it can help everybody to have a better life. One of their slogans is “Creating the new”, and it is quite significant: they not only have the desire to help consumers in doing sport giving them the best sportswear possible, but they are continuously searching ways to improve their products and as consequence to improve their sport experience. Adidas believes sports should be central in each culture.

Kasper Rorsted said “Everything we do is rooted in sport. The good news is that sport plays an increasingly important role in more and more people’s lives, on and off the field of play, so we operate in a highly attractive industry. We push the boundaries of products, experiences and services to drive brand desire and capitalize on the growth opportunities in sport as well as in sports-inspired casual and activewear. However, the importance of sport goes far beyond that. Sport is central to every culture and society and is core to an individual’s health and happiness. Therefore, we believe that, through sport, we have the power to change lives. And we work every day to inspire and enable people to harness the power of sport in their lives”⁸.

2.3 Strategic plan

They decided to consider as central in their future projects three elements: Speed, Cities and Open Source.

- “Speed” is related to how Adidas delivers. Also giving to consumers a quick service in terms of designing, production and shipping can be considered as a way to improve their experiences with the company and taking care of them.
- “Cities”, they are not considered only as a place where to sell products, but also an element from which the company should gain new ideas, keeping up with new emergent trends and having a better knowledge of customer desire and needs. Adidas identified six main cities where concentrate its efforts: London, Los Angeles, New York, Paris, Shanghai and Tokyo.
- “Open Source” refers to collaboration and innovation. The company thinks that the contamination with athletes, consumers and partners should stimulate the whole system to learn and implement their sports culture.

⁸ <https://www.adidas-group.com/en/group/history/>

2.4 Reshoring

2.4.1 Drivers

Adidas announced its reshoring process on the 26th May of 2016 and started the implementation phase in June 2016. The implementation ended in June 2017.

Adidas was not the only big company which decided to pursue the reshoring process and also Nike followed this direction.

The reasons behind the reshoring of Adidas are numerous:

- Automation of production process, the company in its new speed factories is adding new industry 4.0 machineries, such as robot, 3D scans, 3D printers and laser cutters. To fully exploit all these new features they thought to come back to the home country in order to have better-skilled employees.
- Delivery time, due to the proximity to the most relevant markets, developing and shipping phases will be faster and more efficient, resulting in a better consumers' experience.
- Implementation of strategies based on product/process innovation, with the introduction of new machineries, managers would have to re-organize plants in order to fully exploit new features and gaining an increase in efficiency and efficacy.
- Labor costs' gap reduction, Adidas offshored in 1995, and at that time there were several advantages related the labor costs in the Asian countries. Nowadays in China had been introduced several policies which caused an increase in labor costs. With these changes Asian manufacturing are not so attractive anymore, so they thought that a bounce partially back could had been feasible.

2.4.2 Expectations

The expectations were various and different and can be grouped into two big groups: the ones related to the creation of a mass customization product and the ones related to the desire to increase the closeness to the final consumers.

In the first group we can find:

Higher quality, employing new machineries means also use new raw materials and new techniques and all these aspects will result in the creation of a better output.

Higher flexibility, the sense of mass customization should be represented by a uniqueness related to each pair of shoes. Having the possibility to create ad-hoc shoes for each consumer requires an extreme level of flexibility in production. The company must be able also to guarantee an agile attitude in machineries and raw materials.

Higher rhythm of production, due to a heavy employment of technology and a high degree of automation the company expect a higher rhythm of production.

In the second group we can find:

- Developing of new products, with the adoption of new machineries Adidas is able to produce new products exploiting new materials and new techniques, gaining competitive advantages.
- “Made in” effect
- Quick reaction to new trends, this aspect is also related to the key variable related to the “cities” as one of the future main points. If the production is located near a lively, energetic and pro-active system, it will be easier to capture new trends, new needs and understand how to solve them.
- Better customer services, the closeness to the final market, also guarantee a better possibility to take care of consumers, helping them to solve any kind of issues or clarify any doubts regarding different products.

2.5 Speedfactories

When Adidas decided to leave the Far East decided to put as the core of the reshoring project the technology coming from the tech-wave related to the Industry 4.0.

The company decided to build two new plants, one in Ansbach, Germany and one in Atlanta (United States of America). In these places the degree of technology and automation was extremely high. Moving to Ansbach meant a sort of back to the basis, closer to the first plant of Adidas. The company decided also to rely on German suppliers for the automation and IT side. Approaching the

North American continent meant to express the desire to establish a plant not only for the production, but also to be closer to the consumers both physically and mentally.

The definition that a reader can easily find while is reading papers related to the speedfactories of Adidas is “smart factories”. As we stated before, the adjective “smart” in such a landscape means the presence of technology which allows the communication between several tools, collecting information useful to implement or start new processes. In these speedfactories Adidas not only used to employ new machineries but also experienced new raw materials and related processes. The idea found an outstanding support from the social medias, newspapers and the industrial world. Some of the most respected realities such as Forbes, Bloomberg, New York Times and Daily Mail expressed their positive thoughts about the initiative.

2.5.1 Localization

Adidas decided to establish its speedfactories in two different sites: one in Ansbach (Germany) and the other in Atlanta.

The causes behind the decision to move into those sites were different.

Ansbach, and so Germany, was chosen to full fill the desire to come back home, and the distance between the new site from the first HQ is less than 50 km. With this choice the wish to create the “made in” effect was satisfied, and the proximity with European consumers and trends increased. The choice to move also the production in USA and more precisely to Atlanta, had been encouraged to the possibility to have a better entrance in the American market, gaining insights on the local and future trends being closer to the consumers.

The choice to have two speedfactories had not been done randomly or unconsciously: Adidas wanted to merge two different cultures, the European on one hand and the American on the other, to create new lines of products resulting the combination of two different cultures and attitudes.

2.5.2 Machineries

The key aspect of the new path pursued by Adidas is the adoption of Industry 4.0 machineries and the choice to put technology right in the middle of its future developments.

It understood that was no more sufficient to put in the market mass products, conceived in order to gain maximum profits from an extreme standardization. The standardization was not only to be seen as related to the shapes of apparels, but it involved also materials and processes. Adidas was moved from the desire to create something new, something able to demolish the common idea of the

company. This willing combined to the upcoming trend related to technology automation create a favorable field where to develop a whole completely new plant, where creating something new with processes never implemented before. To do this adidas faced huge efforts in R&D in order to find out the best opportunities offered in the market in terms of suppliers and machineries.

As stated before the speedfactories were characterized by a high degree of automation, and to implement the project, Adidas needed some specific suppliers.

3D Carbon printing

The company was founded in 2013 by Dr. Joseph and Philip DeSimone, Alex and Nikita Ermoshkin, Edward Samulski, and Steve Nelson, in Redwood City, Los Angeles, California. The company create and implement 3D printers with their key technology, the Continuous Liquid Interface Production.

The main innovation introduced by this company regards the additive manufacturing and the raw materials involved in these new processes.

Carbon3D patented Carbon's Digital Light Synthesis™, a new technology linked to the production, or better, to the printing processes related to soles. It has the ability to combine digital light projection, oxygen permeable optics, and Carbon's programmable liquid resins to produce a sole as output. Many of you can think "Is enough a sole made by new materials to justify such investments?" The answer is "Yes" without any doubts, because if the analysis goes deeper and beyond the superficial thoughts, it will underline many other relevant effects over the new materials adopted. The new sole is able to be customized and to give to the consumer a comfortable sensation never felt before. Every consumers' feet are different, also the posture, the weight and the style of walking. All these elements, with this new technology, are taken in consideration, and doing it, every purchaser should feel comfortable in sport shoes like only athletes could do before. Carbon3D helped Adidas to make the first move in the new era of shoes manufacturing.

Siemens

The company was founded on the 12th of October 1847 by Ernst Werner von Siemens. It was born with the desire to develop and implement the telegraph.

The company since the beginning started to show an ambitious attitude and, in many years, reached a dominant market position. Nowadays Siemens extended the presence in different sectors in order to satisfy the desire of having a differentiated portfolio.

Siemens enriched the Speedfactory project, adding the virtual reality tool to the overall process.

With this tool Adidas is able to figure out virtually an output and studying its characteristics without the need to prototype it.

Siemens did not affect a single process or production line, but it can be seen in the overall production. Implementing a virtual reality such that, the company gain the ability to simulate, test, adjust and implement the process in order to increase its flexibility, quality, efficacy, efficiency and decrease the time-to-market.

The aim pursued by Adidas was to create a digital twin of the Speedfactory, where every process could be simulated, in order to forecast future problems or inefficiencies.

“We can simulate every aspect down to a machine level of how we can optimize the setup and the layout within the factory and therefore the production flow, which ultimately should help us on the one side to cost-optimize, but on the other side to have the quality of the product as well” (Michael Voegelé, Adidas’ chief information officer).

Kurtz Ersa

The company was founded in 1779 in Hasloch, Spessart. The Kurtz Ersa Corporation has developed into an internationally operating group. Since more than 235 years the company time and again realizes important technical innovations that arise from long-time customer relations between partners.

Tools provided by Kurtz Ersa are machineries involved in the particle-foaming processes, which ended with the production of the Boost midsole.

The company was highly involved in the R&D activities, pushed to the aim to develop a safe and repeatable production process with increased productivity and higher energy efficiency.

The company developed ad-hoc machineries for certifying their commitment to Adidas. Kurtz Ersa aim is to simplify the handling, maintenance and monitoring of machines optimizing the complete production process.

Kuka

The company was founded in 1898 by Johann Joseph Keller and Jakob Knappich, in Augusta. In the first years the company focused its efforts in soldering plants and the production of big containers.

In 1949 the company expands its portfolio entering the world of writers and manufacturers. They build the travel-writing machine called Princess and the circular textile machine called Selecta. In 1956 they built the first soldering automated plant and continue to develop new working techniques.

Kuka obtained an outstanding result in the robot-development field. They approached this new environment in 1970, and in few years the company become one of the main players in the robotic industry. In 2007 they develop the powerful robot in the world, reaching a new Guinness world record.

In 2013 Kuka developed the first emotional robot, the LBR iiwa. It helps the company to implement the project related to the “Cobots” (cooperative robots). It can be used both in the industrial mass production both in dynamics and various tasks.

Kuka was not stand-alone star in the processes. It was combined with the Kurtz Ersa’s machineries, and the two tools were cooperating with the aim to produce the UltraBoost midsole.

The physical contribute that the company gave to the Speedfactories was a robot able to inject pre-expanded particle foam into the molds and then steam-heating on the outside.

The previous machineries were focused on the R&D, design and production of the soles, but there are other machineries, and their adoption is central to develop other parts of the shoes, in particular the upper knit.

2.5.3 Production

In speedfactories, Adidas is producing specific lines of production, the Adidas AM4 (adidas made for). These lines are entirely produced in the new plants and are the result of the merging between automation, human abilities and R&D. In this project consumers are playing a key role: the company put them in the center and in order to reach a higher degree of satisfaction, gave to the project an open-source flavor. In the designing phase, Adidas took in consideration needs, preferences and insights coming from both users and athletes. Another way they pursued in order to

become closer physically and mentally to the final consumers, is to launch specific lines for specific cities like London, Paris, New York, Tokyo, Los Angeles and Shanghai.

The first of this series was the AM4LND, launched on the 19th of October 2017, the following week had been launched the AM4PAR.

What emerged from these products is that Adidas not only nurtured the dream of put the consumer at the center of its thoughts looking for his/her highest degree of satisfaction possible. In fact the idea behind the Adidas AM4 goes beyond it, during the designing phase also the environment related to the consumer was analyzed.

Considering the AM4nyc, it has a total-black upper knit and it was not a random choice. It was related to the high level of pollution. Being these conceived as running shoes, Adidas is motivated to think that the specific consumer should have open air runs in the city and the shoes should become dirty, but being black from the beginning the consumer won't be obliged to clean them up after every run.

Again in the AM4tky runners were wondering to have a reflective shoes in order to light them up while they were jogging. The shoes present some reflective stripes on the upper knit, in order to protect and increase the satisfaction degree of their consumers.

For the AM4ldn the grey upper knit took inspiration from the grey streets of the cities, while the light blue stripes and the solar red is related to the city lights and its sunsets.

AM4par is strictly related to the women-runners of Paris and their attitude: what emerged is that women-runners love jogging in group, so in this case Adidas had the aim to supply not only a tool to run, but also a cultural vehicle.

Same desire of create a cultural vehicle, but completely switching the field was the aim behind the creation of the AM4la. To create these shoes, Adidas collaborate with Parley for the Oceans. The desire was to increase the sensibilization around the pollution and fragility of the Ocean. The shoes came up from recycled plastic and the color (light blue) had been chosen in relation with the colors of the sea.

3. The failure of the reshoring

Once the initial fervor passed, some questions started to come out, doubts regarding the long-term sustainability (from a managerial point of view), the division between three continents of the whole production, the necessity to combine automatize machineries with human labor, the research for a know-how in workers that had been offshored for too much time, the fragmentation of the market and the control and coordination costs.

The decision of Adidas to start and implement the reshoring activities had been taken to move closer to the consumers, to reduce the time-to-market and the production time, to have a faster and more flexible production, a small-batch oriented production and a mass customization attitude, loss its strength and started to show the difficulties related to such an ambitious project.

In the late 2019, the decision that changed again the footwear industry and shut up the heroes of the reshoring: Adidas closes its Speedfactories in Ansbach and Atlanta, bringing the production back to Asia.

“Speedfactories have been instrumental in furthering our manufacturing innovation and capabilities. through shortened development and production lead times, we’ve provided select customers with hyper-relevant product for moments that matter. This was our goal from the start. We are now able to couple these learnings with other advancements made with our suppliers, leveraging the totality of these technologies to be more flexible and economic while simultaneously expanding the range of products available”⁹.

Starting from Shankland’s words, Adidas will not simply shut down its Speedfactories, but is moving them to the Asian country, more precisely to China and Vietnam. What adidas is exporting does not include only the plant side, which includes several automatize machineries, but also something unphysical, the know-how developed in these years. Not all the suppliers related to the speedfactories will follow adidas in its new adventure, Oechsler stated that their collaboration will continue, but Carbon3D has not expressed its opinion yet.

But which were the causes of the failure of the project?

⁹ Martin Shankland, member of the executive board of adidas ag, responsible for global operations

<https://www.adidas-group.com/en/media/news-archive/press-releases/2019/adidas-deploys-speedfactory-technology-at-asian-suppliers-by-end-2019/>

3.1 Know-how: the main issue

Adidas started to offshore its production in 1995, and from that year the know-how related to the production processes was bordered with the Asian continent. The knowledge in the Chinese factories was increasing years by years, while in the European countries it was simultaneously decreasing. It does not mean that in Europe workers are able to manufacture the overall shoes no more, but in that specific sector, the gap built with the passing of the years grew significantly, reaching the point of no return.

Once Adidas decide to produce a line of shoes in the Speedfactories it had the desire to produce something able to destroy the market and capture consumers' minds. The company decided to fully exploit the automatize machineries in order to build it.

What came out was a completely new shoes, with sole printed exploiting 3D machineries and using new materials such as lattice or recycled plastics. The upper knit was first virtually designed and then automatically produced. The two elements are then combined with the help of workers, who provided the gluing and molding phases.

When the company ended the AM4 production and tried to figure out new lines of production.

What came out is that there was a lack of know-how and this was limiting the forecasting of future processes.

Adidas during the years kept the designing and developing center in the Western Europe, but once the project was sent to the Asian suppliers, they had a check of the project studying its feasibility. Knowledge strongly differs to the know-how, you can develop the first by studying or experiencing new realities, but the specific know-how is only developable by a day by day application, and unfortunately the second one was firmly in the hands of the Asian suppliers.

The company was not able to transfer the know-how, or maybe had some opportunities to pursue this target, but costs were too high.

In order to have an efficient and effective production, know-how is a key element, and the lack of it made the company stagger.

To summarize we can state that the generally the know-how is the core of a company, the tool that allows a company to project, design processes, implement them and end the path with the final output. In our specific case it was fundamental to create the design of new line of shoes, complete the production process (putting together soles and upper knits), contain costs (cheap labor force allow lower price for consumers) and in a near future expand the line of production.

In the speedfactories project the lack of know-how can be analyzed under two different, but related perspective: human capital and technology.

Talking about the lack of know how the first real problem is that after 30 years of production offshored, it is difficult to find specialized labor force to hire and the second is that the shoes manufacturing in Europe and USA is not for mass production, so the costs related to artisans are higher.

Talking about the lack of know-how in the technology field we can underline is that when Adidas taught to expand the lines of production faced the limited abilities of the new machineries and the second problem was the lack of know-how necessary to enrich the features of the hi-tech machineries.

3.2 Technological issue

Starting from what emerged in the previous point the one of the element that emerged was that the star-role in this project was not an exclusive property of the technology as Adidas taught, but it resulted divided between technology and human capital. The main problem was the impossibility to reach the full automation.

3.3 Economic issue

Due to the previously discussed dynamics what emerged is that the German and North-American landscape did not offer the labour force required for a company such Adidas. Costs were not sustainable, or better, in comparison with the ones related to the Chinese market, they were higher.

3.4 Production issue

Super Star and Stan Smith were never considered a possibility for the speedfactories. The speedfactories were not created to have a mass production attitude but limiting the production new lines or experimental ones was not sustainable in a long-term horizon.

3.5 Limited suppliers

What allows a company to perform in an industrial environment is the supply chain.

With the advent of the speedfactories the supply chain of Adidas deeply changed.

The main difference is related to the numbers of suppliers. It is true that to produce the AM4s the company needed less raw materials and so less suppliers, but once the company would have decided to try to expand the production many problems would have emerged.

Being in Asia for more than 20 years, means that not only you as Adidas improved the local know-how in the production processes offshoring them. The company had been a development-engine for the external environment. Many companies decided to exploit the offshoring plants of Adidas to start, or to implement, facilities in order to produce semi-finished goods for the company. In many cases Adidas itself helped to develop companies in order to make them a direct supplier. Critics will state that as you can find laces in Asia, you can find them also in Germany or in the USA. The statement is true, but the keys are price and differentiation. Raw materials and semi-finished goods supplied by Asian countries would result cheaper, and Adidas could find several companies supplying the same good. The company is free to choose using criteria such as price or quality. Suppliers from Germany or USA would result more expensive, and this difference in prices would result also in an increase in the final price.

When you are introducing something new high-hand in the market, consumers would pay more attention to the product itself more than to the prices, and this is the example of Adidas launching in the market the AM4s for 220 dollars. The things would change when consumers find higher prices in traditional products, such as Superstar or Stan Smith. Going beyond the fact that the automated plant would not have allowed the production of these two iconic lines of products, the prices would have been higher and consumers would have not appreciated it.

3.6 Broken Promises

The aspect of the mass customization and the idea of different shoes for different consumers was at the center of the project. Since the beginning Adidas showed some lab all over the World where athletes had to face some tests in order to supply the machineries with personal data in order to fully customize the shoes.

The customization relied on the combination of several physical tests with artificial intelligence and innovative machineries. Everything started from the consumer facing the analysis, the data acquired had to be drawn up and then the production processes through the new machineries should start.

The idea eclipsed in a short span of time, and the aspect of mass customization had been confined

only to the initial stage. What received the market was a new line of shoes only created in an innovative way, nothing more. Nowadays you can find online the Adidas AM4 produced in the Speedfactories, but there is no sign of the possibility to customize them. The selling of the AM4 Speedfactories started online and ended in the major shops worldwide and nowadays some of them are in collector platform such as StockX and Klekt.

The “Made in” effect has its higher value in the high-end products or in niche outputs. Trying to add this aspect to a best-known mass production company was not a good idea. In the last 20 or better 30 years, Adidas moved its production to Asia, and nowadays all consumers know it, but accepted it continuing to buy its apparel, footwear and accessories.

Consumers’ reactions were not the ones expected from Adidas: the new line of shoes did not make as much noise as they expected. Consumers’ noticed them, but they weren’t captured, they saw them as an upgraded ultraboost.

Were the shoes horrendously designed? Were them oddly expensive? The answer is “NO” for both the questions but we have to make a point. They promoted them normally, as a common ultraboost, nothing extraordinary. In this way the heritage of Adidas prevailed, and consumers did not react in the way they expected.

But is the heritage of Adidas an unpassable wall? NOT AT ALL and an example will clarify my answer. Adidas has one of the most hyped shoes in the sneaker scenario. The production processes are nothing extraordinary, but the sole and the upper sole are something new. A huge help had been given by the man behind the collaboration, but they defeated the heritage fully exploiting his popular figure, his power towards social networks, promoting them and using the small batch production attitude. I am talking about Kanye West and the Yeezy Adidas brand.

This aspect had not the value that Adidas expected, they think that consumers would have strongly appreciated this fact, but in our contemporary context consumers can wait to have this kind of products. Different attitude is related to high-end products, where consumers expected to have them in the shortest time possible.

The answer to new trends can be fast even if Adidas establishes plants in Africa, China, in Vietnam or in every other country. If the company wants to be sure to capture all the new upcoming trends it is sufficient to establish several AdiLabs worldwide, routing the information in the headquarter in Ansbach and then moving their realization in the Asian manufacturers.

The Label effect should be re-adapted, maybe from “Made in Germany” they should have adopted “Designed in New York / London / Paris / Berlin / Shanghai” and “Assembled in China / Vietnam”. In this way consumers would recognise a product not completely created in Asia but would have noticed also the contribution of other realities.

The key aspect that emerged during the reshoring of Adidas was the know-how related to the assembling processes, when someone had to put together the sole and the upper part. The initial idea was to complete this step fully automatically, but once the company understood that it was unrealizable, due to the impossibility of the robots to stitch and to complete this step, the integration with human labour force was crucial. They had to search for a solution, deciding to rely on local workers. The difference from the ones available on the Asian supplier factories was outstanding, underlining the differences on the skills and on the costs.

We can understand the relevance of the know-how in the industrial environment showing that Adidas bounced back to the Asian side, where they developed in these years a deep know-how. The decision to move to China and Vietnam was also eased by the fact that the company maintained the largest part of the production there.

What came to my mind is that Adidas’ project of reshoring was only a test in order to understand and study the feasibility to integrate new 4.0 features to their environment and that they knew in advance all the limits and the problems that would have emerged.

4. Back to the future

A question can legitimately rise: “Is China ready to for the technological improvement coming from Adidas?”

Not always an answer can give the exact idea of the scenario, so: “Is Adidas ready to support and sustain the rhythm of technological development in China?”

Many skeptical would turn up their noses seeing Adidas moving its smart factories in a country such as China, remaining anchored to the old interpretation of the country, where mass production reached its highest level while workers’ work conditions and salaries were at their minimum. What Adidas would find moving to China is a different country, which put in its center the desire to become the big fish in the technological development, making outstanding investments in R&D and HR in order to support its project and firmly convinced that technology can shape a better future. In this innovation processes the government is playing a key role, taking part to political and decisional issues.

As previously stated, Adidas decided to leave Germany and USA and come back to China. the decision was sustained by several variables, someone stronger than other, but the central ones were technology, know-how and the dimension of the domestic market. In the Asian continent the degree of technology sharply increased in the last decade, the government is strongly pushing for the technology developments and improvements. This tech-attitude would perfectly fit with the Speedfactory, which put the technology on its core.

Talking about know-how we are surely referring to the one related to the manual steps which help to create a shoe, and it is true. Chinese workers in the last 30 years had been increasing and perfecting their skills and reach a higher, or probably the highest degree of knowledge in a field like this. But the know-how that pushed Adidas to re-embrace China was not the only one related to the manual side of the production. In fact in the recent years China faced huge efforts also to increase and implement the technology presence in citizens’ everyday life.

4.1 A new model of governance

China is rapidly changing its shapes. The process started on the 14th of March 2013, when Xi Jinping became President of the Popular Chinese Republic. Under his leadership China is supposed to become the next Global Leader, in terms of economic domain, market domination and

technology development. The path of Xi Jinping as leader started far away from the role he is playing right now. In his childhood he experienced firstly a good life, being a son of a relevant politic figure. After the tumultuous change in the Chinese society he experienced a poor life, obliged to work as a farmer. All these aspects contributed to the creation and the development of the leaders, called also “President close to the people”, that is driving the Chinese people through a new future. Reading the book “Nella tested del dragone, by Giada Messetti” what emerged is an astonishing scenario. The leader wants that every Chinese citizen feels inside a bigger system, where the political scenario and the social one seems closer each other. For example in China everyone is able to use a unique app which contains all the primary and secondary needs, from public health, to a similar WhatsApp service passing through payments of bills. The desire to create a commons sense of participation in citizens should be represented by an in-app sort of quiz-survey, where Chinese, through their answers, are able to show their appreciation and understandings of the dynamics related to the political scenario. More right answers they obtain, more benefits will gain.

4.2 Technology as the core

It seems like the “smart” world in China is finding a prolific field, industries and people are positively embracing this new kind of doing things and the interconnections offered by these new systems. From numbers coming from an analysis supplied by venturebeat.com, Chinese smart market is consistently higher than USA and Europe. “For example in China the 58% of the population has a smart tv against the 35% of USA and 29% of Europe. Or again the 33% of Chinese people has a smart speaker against the 27% of USA or 13% of Europe. Again the 30% decided to adopt a smart home security camera against the 13% of the USA and the 8% of Europe. The 36% of the Chinese population decided to equip their home with smart home safety and security devices against the 21% of USA and 8% of Europe. The 23% of Chinese adopt smart lighting devices against the 10% of USA and 8% of Europe. Last but not least the 16% of Chinese decided to get the support from connected energy control against the 12% of USA and 7% of Europe.”¹⁰

Analyzing these number we have to do an important consideration: the “smart” field in China is strongly supported by the government, which provides several laws and permissions in order to facilitate its development, but a huge help is also given by the domestic market, which

¹⁰ [https://www.lightreading.com/partner-perspectives-\(sponsored-content\)/how-chinas-5g-launch-will-gear-up-the-global-5g-industry-/a/d-id/755768](https://www.lightreading.com/partner-perspectives-(sponsored-content)/how-chinas-5g-launch-will-gear-up-the-global-5g-industry-/a/d-id/755768)

unconsciously cover two key roles: from one side they finance the smart industry and on the other side they are a sparkling testing ground for the development of products and features.

4.3 The Chinese Dream

The politics of Xi Jinping have the aim to build a new China, a country able to compete and dominate the economic world, the global market and the technology development.

The path to this new scenario is articulated in two steps and they are represented by two years, 2021 and 2049.

2021 is not a randomly chosen date, in fact it coincides with the centenary of the foundation of the Communist Chinese party. The desire is to have a sort of new country, moderately prosperous.

2049 represents another significant date in the Chinese history, in fact it coincides with the centenary of the foundation of the Popular Chinese Republic.

What emerges from the Xi Jinping's objectives is completely different from his predecessor.

In a temporary line, ideated by Giada Messetti, we can state that Mao Zedong mainly focused his efforts on the political side, and his politics gave the opportunity to China to rise again after the century of the humiliation. After him, Deng Xiaoping focused his efforts on the improvements necessary to make the Chinese people exit from the poverty line and insert China on the international capitalism. Xi Jinping decided not to limit his zone of competences, he is trying to merge the political and economic scenarios, in order to gain a new geopolitical position.

4.4 Belt and Road Initiative

We defined the attitude of Xi Jinping as "geopolitical", and this definition could not be better explained than introducing the Belt & Road Initiative.

The initial objectives were to construct a unified large worldwide system, create an environment which allows the cultural exchange and integration and pursue innovative patterns with capital inflows. The core of this project were investments in infrastructures, improving the education systems of the players involved (country) if necessary, construction of railways and highways, increase the degree of automation and increasing operations in real estate.

To succeed in these ambitious projects, many initiatives have to take place:

Silk Road Economic Belt, involved regions like Europe, Central Asia, West Asia, South East Asia, South Asia, North Oceania and East Africa.

21st Century Maritime Silk Road, which represents the “Sea Route” and it is comprehensive of South China Sea, South Pacific Ocean and Indian Ocean.

Ice Silk Road, it consists in a corridor in the Northern Sea, which represented an opportunity between China and Russia.

Super Grid, it is an ambitious project which has the aim to develop six ultra-high voltage electricity grids connecting China and the Rest of Asia.

But not all that glitters is gold. The Belt and Road Initiative meets some problems in its development, many experts underline the possible scenario of neocolonialism, in the sense that, for example, in the African countries China will immediately build infrastructures and implement systems to increase the quality of the life, but in exchange they should pretend more than the host country is able to give. In this scenario China would ask for the control of their infrastructures and expand their commercial area.

The second issue regards the ecological side, in fact many figures sustained that the building policies behind Chinese infrastructures are not so clear and transparent, and often they would break the rules.

5. Black Swan alert: Covid-19

In the early January some astonishing news started to come out and some fears started to spread among people.

I was playing tennis and during a water-break I read a news on my phone: “Coronavirus. Hundreds of deaths, but what is this virus?”¹¹.

Nobody at the beginning should know the dramatic consequences related to this black swan, nobody should know the dimension of this phenomenon, how many lives it would have carry out and how it would have changed our everyday life, maybe forever. In a short period of time people became familiar with this entity, someone would have perceived it as scary, someone would have perceived it as not so dangerous and someone would underestimate it thinking it has been described more dangerous than how it is in reality.

Many theories about the born of this enemy spread out, but the discussion is mainly about its nature, whether it was artificial, created by humans, or natural, able to make the “jump” between different kind living creature.

Theories came out also about the voluntariness of its diffusion, someone state and support the theory of its creation on Chinese laboratories and the volunteer diffusion of the virus, in order to change the economic world order. Others thinks that the virus came from USA and started its diffusion during the military game of Wuhan and see behind this fact the desire of USA to kick China out of the market. People are free to believe in everything they prefer and in everything make them feel more safe and sure, but this enemy is affecting every country, every nation, every persons with no distinction of gender or age and the world is called to a huge efforts in terms of collaboration and cooperation in order to fight as a unique entity against a common enemy.

5.1 The event in brief

As we previously stated the news about the spread of the Covid-19 (or Coronavirus, but the virus officially still had not a name) started to come out in the early January, but officially China launched an alert on the 31st of December, 2019¹². Governments and institutions maybe underestimated the dimension of this phenomenon and in some cases had a late response to it in terms of preventive measures.

¹¹ <https://www.melitonline.net/giornale/coronavirus-oltre-centinaia-di-casi-ma-cose-questa-malattia/>

¹² https://www.wired.it/scienza/medicina/2020/03/21/storia-coronavirus-tutte-tappe-contagio-cina-covid19/?refresh_ce=

On the 12th of January 2020 the issue increased its sounding board and became the center of many debates. The phenomenon has officially a name: Covid-19 or Coronavirus.

The landscape around the virus had been foggy for days, many news, and often fake news, were giving not very accurate indications, but on January 21st the news that nobody would have been forced to listen: the virus is able to transmit among humans.

In those days tv shows and newspapers were warning people that a danger was coming, they started to show images of people in hospital intubated, numbers of infected which were increasing day by day and also the number of deaths were sharply increasing. In a certain sense most of non-Asian citizens continued to see it as a far thing, unable to heavily affect the Western side of the world.

The situation increased its seriousness on January 30th, when the OMS (Global Health Organization) declared the global state of emergency.

Governments started to undertake plans in order to protect people, many of them put the health plan over the economic one, decided to save lives over companies. Companies closed down for almost two months, sport events were stopped and individuals open-air activities were prohibited, production was slowed down, people were forced to remain home and had the opportunity to leave their house only for necessities considered as fundamental, as going out to buy food and beverage and medicines.

Despite these efforts the numbers of the virus are dramatic, on the 5th of June 2020 they were: 6,737 millions of people infected, 394.000 deaths, with Brazil (first), USA (second) and Russia (third) to place on such a sad podium¹³. In some countries the spread of the virus is starting to slow down, but the end seems to be so far, the vaccine do not seem to be an element ready to be place on the market right now, and many experts state that it will see the light in the early January 2021. A common solution still results so far, but we can fight with respect and common sense.

5.2 The impact on fashion industry

“The sectors that will be extremely hard hit are the ones that come in the category of non-essential spending. Design apparel and footwear definitely come in this category¹⁴”.

Starting from this statement we can easily assume that coronavirus hardly affected the fashion industry and so the related industry of the sneakers. The effect could be found both on the small reality business and both on the giant of the business. To give some numbers we can state that the

¹³<https://statistichecoronavirus.it>

¹⁴ <https://www.entrepreneur.com/article/350190>

giant Uniqlo Japan declared loss for the Q1 for the 18,1%¹⁵, Nike declared a loss relate to the same span of time of 3.5 billions¹⁶ dollars and Adidas declared that its profit in the Q1 drop for the 90%¹⁷.

5.2.1 Immediate consequences

With the advent of the virus many extraordinary measures had been undertook, like social distancing, the obligation to wear masks and gloves. The fashion industry can be dramatically affected by the consequences of the virus, in terms of direct and indirect consequences.

Fashion Shows

Now which is the most powerful tool available for the fashion companies to communicate to the consumers? The answer is not so difficult to find: Fashion Shows.

Now try to image a fashion show where people can not or freely communicate, everyone wearing masks, with the fear of a virus incoming. Not the best scenario where to show new creations and establish a link with consumers at all.

What happened is that several fashion shows had been deleted or delayed, like the Milan Fashion Show or the Paris Fashion Show. Companies were facing an unexpected scenario and did not know very well what to do and which actions to undertake. In this moment a silent ally came out: technology.

Talking concretely, the Milan Fashion Week is officially going digital, the event will last three days, from the 14th of July to the 17th of July.

“National Chamber of Italian Fashion will propose a digital platform where photographic and video content, interviews and backstage of creative moments will be presented, alternative points of view organized in a calendar with slots dedicated to each brand, with the aim of creating a palimpsest usable for all operators in the sector. The calendar will be enriched with further in-depth content on topics dedicated to operators in the sector (on accreditation), lectio magistralis in live streaming with leading figures of the fashion system and moments of entertainment / live performance by the creatives. With a view to supporting young people, CNMI will support the production of the digital content of emerging brands. In parallel with the presentations of the Milano Digital Fashion Week

¹⁵ <https://fashionunited.com/specials/coronavirus-apparel-industry>

¹⁶ <https://www.highsnobiety.com/nike-3-5-billion-dollar-loss-coronavirus/>

¹⁷ <https://www.cnbc.com/2020/04/27/adidas-q1-2020-earnings.html>

collections, a section of the platform entirely dedicated to showrooms will be activated. An active tool for the entire sales campaign phase to international buyers. "The development of a digital Fashion week is a concrete response to the moment we are living, which gives us the opportunity to continue the path started in February with the 'China, we are with you' initiative", comments the President of the National Chamber of Italian Fashion Carlo Capasa. Milan digital Fashion week will be visible on the digital channels of the National Chamber of Italian Fashion (cameramoda.it; Instagram; Twitter; Facebook; LinkedIn; Weibo; Youtube)"¹⁸.

Conversion of companies

One of the best self-protective tool was considered mask. As we all know at the beginning of the lockdown a big problem linked to masks came out: they were difficult to find, the ones available luckily were given to hospitals. Talking in an economic way, the masks industry represented an unexplored field, and since nowadays it was exploited by a small number of companies. Merging the emergency situation and the economic opportunity, many fashion companies decided to adapt their production processes, involving machineries and human labor force to the production of masks. The efforts were huge and even if companies were not given fix design but they had only to respect some medical standards, they gave an outstanding support to overcome this emergency.

Companies from different sector approached this new reality, for example Mia's, an Italian fashion company working in the jewelry and accessories industries, founded by Gianpaolo Pastore e Alessia Novelli¹⁹, decided to interrupt their usual production to enter this trend.

Another Italian fashion company which decided to re-asset its processes in order to be able to produce masks is Sartoria Ismara. The company is based in Milan and since the beginning is pursuing the goal of merging craftsmanship and business. Raw materials like natural fibers and texture coming from the upcycling are the key element of this project.

¹⁸ <https://www.milanoevents.it/2020/05/27/moda-milano-digital-fashion-week-14-17-luglio/#>

¹⁹ <https://www.elledecor.com/it/lifestyle/a32780427/mascherine-lavabili-artigianali-made-in-italy-piu-belle/>

Another reality which is following in the footsteps of the two companies previously mentioned is Apertricotxxx. The company is best known for multicolor sweatshirt, hats and stuff like that, but in the last period decided to embrace the production of masks.

The conversion of companies in order to support people to stay safe is not only an Italian phenomenon. For example it occurred also in China where, in order to face the emergency related to the spread of COVID-19 many companies, in particularly in the shoe – production district of Putian, started to convert their production. Exploiting the high degree of know-how related to the textile and switching field, in a short span of time they were able to move the production from shoes to masks and in less than one month they reached the production of 200.000 masks per day. “Masks are not a complicated product in technology, but because of a lack of raw materials and specialized equipment it is hard to produce masks in accord with the national standard in large quantities in a short time”²⁰

Economic diseases

With the lockdown policies introduced, not only fashion shows were no more available worldwide, but also shops were closed. The only way to sell products were the online platforms. Many consumers, related to the high-end brand, were not able to exploit the online shops, many of them were discouraged to buy stuff online due to the increase in the delivery time, many did not see the utility to buy clothes in a period like this and preferred to save money. All these aspects had a common result: most of collections remained unsold. The damage affect the mother-company in terms of unsold lines, but also secondary physical shops were heavily affected. The initial idea was to transfer the S/S 20 collection to the S/S 21 one, but it resulted unfeasible, so the collections were available initially online, and when the shops re-opened, they were available also there.

5.3 Future challenges

Coronavirus had an outstanding impact in everyday life, and heavily affect the fashion industry, this is indisputable. But the landscape we would find when this crisis move forward, can be the same of the pre-virus one or shall it be different?

In my opinion the picture related to the fashion industry that we will find should be deeply different in terms of consumers’ attitude, companies process and core characteristics that will make a company more attractive than others.

²⁰ <https://www.shine.cn/news/nation/2002111801/>

First of all, I am expecting exciting changes in consumers' behavior and choices. Probably, as reported by Vogue, the "buy less, buy better" attitude will catch on and have an outstanding impact on the fast fashion industry, bringing down big players such as H&M. In this perspective consumers will pay more attention to the characteristics of the product itself, looking for products which last more than a day, looking for products made respecting employees safety conditions, looking for products which processes of production would have lower environmental impact and so on. To summarize my thought is that consumers won't see the fast fashion as the primary way to do shopping no more, but something is going to change. The fast fashion role is impossible to delete in three months, but it will be reduced.

Another elements that is to be more central than ever will be the country of origin effect and the characteristics of the products. It is sufficient to approach a physical shop near your house to understand many aspects about what I am going to talk about.

Last week me and my family went to a shoes shop near our house. Since the beginning this shop had the peculiarity to combine shoes made abroad from foreign companies, shoes made by Italian companies abroad and shoes made by Italian shoes in Italy. I passed a whole afternoon walking through the boxes of shoes, and thank to the biblical timing decision of my parents I had the opportunity to listen several consumers and I noticed something that I had never experienced before: people were asking information about shoes that normally did not, they were not asking for anything special, but the questions were about the country of origin of the shoes, first, and the kind and quality of materials, second. I am not stating that before covid-19 consumers were buying stuff on randomly chosen basis but were not giving much importance to the origin and quality of the shoes like they are doing right now.

What I wanted to underline is that in a small reality like the one I personally experienced, consumers shyly are taking distance from the big players in favor of smaller, maybe niches, realities.

Now, if we change our role, and start moving from the consumers' side to the company side, which changes shall we register?

First of all we have to take in consideration what emerged few lines before, the country of origin and the quality of the products in order to satisfy market needs, but I have also the keep my competitiveness from an economical point of view in order to retain the market share acquired over the past few years.

Another element that consumers are expecting to be implemented is the sustainability one. Sustainability is able to link with the fashion industry in many ways, from the direct usage of recycled raw materials, and in this way the company itself buy them from suppliers and then turn

them into finished goods, or the company itself provides a system to collect dismissed outputs from consumers, turn them into raw materials and then provide raw materials with new life.

Another element that is strongly emerging is the one related to the online platform. These can be a powerful, or maybe the most powerful, tool in order to establish a link between consumers spread worldwide and the company. Implementing this platform means for example allow consumers to fully examine products introducing 3D vision.

To summarize what is reported few lines before, I can state that the fashion industry is facing some changes after the breakout of the coronavirus and they hit both companies, both consumers. First of all, putting consumers' expectations at the core the most relevant aspects are the desire to buy something that lasts, leaving the fast fashion attitude. Second aspect to be underlined is the desire to know the provenance of the products and the quality of the materials used to create them. Third the sustainability behind a product, and here we can divide it into two big areas: the workers one, in terms of working conditions and safety workplace, the second in terms of environmental impact. Fourth aspect is strictly related to the third one but is something able to go beyond; consumers are winking to the recycle products and appreciate the ability to create recycle raw materials and make them the core of other new outputs. The online presence would play a key role, allowing consumers to be continuously in touch with the company and its products.

On the other side we have the company, which sees the landscape in which they have been operating for several years suddenly changing, making new challenges rise. The country of origin effect which emerged with the new consumers' attitude is make the companies think about the opportunity to move their business closer to the home country. Another change can be identified in the consumers' desire to have better products, maybe paying a bit more, so many changes would occur also along the supply chain.

The sustainability side is an aspect which will be surely implemented, investing in more green-machineries and eco-friendly buildings.

The last aspect that emerged in this analysis is the digital presence, stronger it will be, stronger will be the attention it should gain and stronger will be the transparency adopted by the company in the platforms easier will be the affiliation of the consumers.

Company must no longer implement what they gain and the market position they reached, but they must have the humbleness to understand the needs that are coming out and try to merge them with the realities they build over the past years.

We do not have to forget the core of this work: Adidas and its reshoring processes, its abandonment and the bounce-back to the Asian suppliers. Did you find any connections between Adidas project and the new expectations coming from the market after the spread of Covid-19?

6. What if you were in Adidas shoes

Not considering the advent of the Covid-19, the landscape observed by Adidas was a field where consumers were preferring the fast fashion, if they see new trendy stuff today on social networks, televisions and newspapers they pretend to find it immediately on the shops in the following days, whether they will be online or in the city center. A quick, or better immediate, answer to every kind of new emergent trend was feasible and realizable only by players like H&M, Pull & Bear etc. They prefer to be quick on market instead of providing consumers with comfortable, sustainable and lasting stuff.

They also noticed a low interest on customized stuff, the fast fashion attitude moves the consumers' mindset also in the direction of mass production. Adidas also observed the decisions of their competitors, considering for example that Nike keep its production on the Far East, keeping a notable competitive advantage on pricing policies.

In this scenario Adidas results as an isolated player, which deeply implemented the degree of technology in its processes, like new production path which included new raw materials, 3D reality, high automatized robot and laser cutter. Many companies operating in the shoe-making industry adopted these new features, but many of them were not considered as Adidas competitor.

Considering all these aspects, the strongly oriented attitude to the fast-fashion of consumers, low attention of consumers to the quality of products and their durability, low interest in customized products, Adidas decided to keep every kind of competitive advantage available.

6.1 Before Covid-19 scenario

Adidas as stated before, decided to close its speedfactories in Germany and USA deciding to move them to China. As Martin Shankland stated "The Speedfactories have been instrumental in furthering our manufacturing innovation and capabilities. That was our goal from the start"²¹. Adidas biggest problem related to the survival of the speedfactories in the Germany and USA was linked to the costs related to the know-how. In order to overcome this problem, they decided to come back to China and Vietnam, re-joining again the reshoring dynamics and localizing again the production in a unique country. The project of speedfactories, listening to managers of Adidas is not abandoned, but only delocalized. The reasons behind the decision of the company to leave the Western side were various and different and equally affected both the production, and the company itself, both consumers' attitude. In order to be more concrete, Adidas moved to China because:

²¹ <https://techcrunch.com/2019/11/11/adidas-backpedals-on-robotic-factories/>

- Consumer base, the Chinese domestic market is bigger than the one offered by Germany and Usa as Kaspar Rorsted said “The Asia-Pacific region is one of the company's strategic growth drivers and critical to Adidas' success”²². Adidas operates in about 12,000 stores in 1,200 cities and expects to accelerate its expansion to 2,400 cities. Adidas takes up 19.5 percent of the total market retail value, followed by Nike at 19.0 percent, Anta at 11.1 percent and Li Ning at 6.1 percent.

Analyzing these numbers is easy to understand why Adidas also considered the consumers in its decisional process. Being closer to them will gain more effectiveness and efficacy in terms of understanding consumers' needs and following them in the after sales processes.

- Availability of technologies, in the sense that China is heavily investing in technologies and not only from an industrial point of view, but the government is pushing to make people “smarter”, providing them with the highest possible technology degree in their everyday life. The attempt to introduce technology also in common people in their daily routine show the desire to be ready and able to face the wave of technology that is coming. Considering our case and the speedfactories, not only China should be a fruitful field where to look for employees able to optimize technology like the one employ in these plants, but also the technology effort should be more appreciated by common people.

I am not stating that in the Western World we do not have the knowledge and curiosity to push technologies over their limit, but for countries like Germany and USA, where technology is present since many years, there is a lack of inclination to experience new application. A reader can easily disagree with my words, so it will be better to make a point. What I am saying referred mostly to the industry which is at the core of my work, the fashion and shoe-making industry. In the Western countries we have so many excellences in technologies, starting from the most-known Tesla and ending with Decisyon. My point is that in sectors like the ones mentioned before, there's a sort of competence trap, processes has been the same for many years, the innovation are mainly link with raw materials, so the wave moved by Adidas has been a sort of Black Swan, it represented an attempt to upset to way of creating shoes.

- Know-how, the core element. Starting from the point that in the speedfactories has not been possible to reach the full automation, Adidas had to look for workers to get the job done. The Western labor market related to this kind of activity is mainly linked with high-end

²² <https://www.chinadaily.com.cn/a/201905/21/WS5ce359e8a3104842260bcd7a.html>

manufacturing shoes and this means high costs. An increase in costs related to shoes production means an increase in the cost of the final outputs, and an increase in the cost of the final output should be negative effects on consumers, because they will have to pay prices considered as “premium” because there are higher than the ones they usually pay, on market share, because an increase in costs will push consumers other companies which result cheaper and on their same level of satisfaction and finally on the income of the company because an increase in prices surely will correspond to a decrease of consumers’ purchases.

Adidas is moving its speedfactories to China stronger with these beliefs, but they are not the only ones. Other aspects emerged during the initial phase of the Speedfactories project. One target to satisfy at the beginning was the quickness related to both the quick answer to new trends both to the one linked to the shipping to the outputs. Adidas soon understood that this point was not so relevant. The company decided to move again its business to China also for reason of efficiency and efficacy. Efficiency is linked to the economic side, considering cheaper labor costs, the possibility to have bigger mark-up and to remain competitive on the market keeping costs of final outputs aligned with the competitors’ ones. Another aspect that deserves attention is the one related to coordination costs. Splitting the production over three continents requires huge efforts from the company in order to control and coordinate processes. The production in Ansbach and Georgia was limited only to the Futurecraft lines, while the most worldwide famous Stan Smith and Super Star on the Asian continent. The core point was that implementing new lines of production in Germany and USA resulted unfeasible from a know-how point of view and also from a limited availability of raw materials, while in China the big fish was covered, and the project to implement was the only one related to the speedfactories. The core of this project was the technology and in China there is a fruitful landscape.

Talking about efficacy is easy to think about know-how and raw materials, and in a certain sense the two should be strictly related. In terms of efficacy, a company which is willing to reach it must ensure a correct usage of raw materials involved in the production processes, limiting waste. A high level of know-how should limit the amount of waste produced during the various production processes, resulting in a better usage of several raw materials, creating advantages for the company in terms of expenditures and outputs.

Adidas as we stated before is moving the speedfactories project to China, but not at all. What the company is moving to China is only the production side. The R&D side is scheduled to remain in Germany, or more in general on the Western Hemisphere. The decision shows the desire of Adidas to

not completely abandoned its roots. What Adidas is expecting is to pursue the mass production supported by the Chinese companies, keeping the Western flavor as engine to keep in touch with global trends.

We have Adidas, a worldwide famous company, which tried to come back home, deciding to establish partially the production in Germany and USA with the support of 4.0 technologies. To pursue this target the company created two new plants highly automatized, putting the technologies at the core. At the beginning the enthusiasm was so high to cover the several weaknesses which here behind the corner. With the passing of the months and with the production of the line call “FutureCraft” something was emerging. After this line which should have been the next project? Starting from this question the big problem came out: due to a lack of know-how the speedfactories are no longer able to produce other lines, previously designed, which became the first horse for Adidas. Add to it the fact that the companies did not reach the full automation because the switching phase required the aim of employees and the high costs related to them. The company understood that the country they partially left, the same countries which hosted them for several years, was changing, sharply increasing the technology degree and apparently appeared as a fruitful landscape, also considering the outstanding availability of workforce, which in no longer as cheaper as the previous years, but the economic gap with the Western side is still considerable.

The company moved the new plants in China, deciding to:

- exploit local know-how, which they helped to develop and increase in the past years, helping the born and the survival of local clusters inclined to the shoes production;
- have the whole production concentrated in a unique place, having the production in a unique place means a lower expenditure in terms of coordination and control costs and a more direct and precise monitoring activity on the production processes;
- exploit the domestic market, producing in China means the desire also to stay close to the biggest market of the company, the Asian one, and this closeness can be translated also in a quickness in the answer to new emerging trends and also in the shipping time;
- exploit the tech-attitude, which is strongly encouraged from the government through several initiatives and which has been positively accepted from people.

6.2 After Covid-19 scenario

Things should change with the advent of the Covid-19. The virus is having an outstanding impact on our society, and it affects everyone of us and every institutions.

What I am expecting from this black swan is a change in companies' attitudes, starting from the communication channels, passing through the distribution and selling structure, ending with the aftersales activities in terms of consumers' care.

Keeping Adidas at the core of our thoughts, now I will try to depict what should happen in my opinion.

Starting from the background analysis, I will state that Adidas should re-consider the idea to leave Germany and USA. In order to support my statement, I will consider many changes that will occur, and which should deeply change the whole scenario.

The changes I will underline are:

- Attention for labelling, it should be reflected in changes in consumers' mind. It can be defined as a change in consumers' attitude, they will be less attracted from the "made in china" stuff²³, considering the historical period and all the speculations arose around the virus and its origin. Not only the origin of the virus is the core of the change in consumers' attitude but also the non-transparency policy adopted by the Chinese government on the theme of the Covid-19, in terms of data on its spread and diffusion and its mortality rates on the Chinese population.
- The desire for higher quality in products, and this aspect should be linked to the previous one. Starting from the point that a consumer may prefer to buy a product made for example in Germany rather than one made in China, the buyer will understand a variation of prices if it is supported by a sensible, and most of times tangible, variation in the processes involved in the creation of the output, should they be better raw materials, new techniques or new machineries adopted.
- The quality of products is linked to the next change that I will underline, and I am talking about the death of fast fashion²⁴. We normally link the fast fashion to brand like H&M,

²³ <https://www.forbes.com/sites/andriacheng/2020/06/11/us-consumers-are-less-willing-to-buy-made-in-china-items-in-wake-of-coronavirus-pandemic-study/>

²⁴ <https://theecologist.org/2020/apr/24/slow-death-fast-fashion>

Zara, Pull&Bear and so on, and most of us know that such low prices are sustainable only if the production is offshored to the Asian continent, where the big players are countries like China and Vietnam. If the consumers are going away from these companies, supporting what we stated few lines ago, they will have to move on and approach different shopping realities. Distancing themselves from these fast fashion shops should reflect in different degrees of expenditure, if it is followed by a substantial increase in the quality of the product.

- The next change has just been mentioned during the last few lines of the variable previously cited and I am referring to the likely increase in consumers' willingness to pay. If the motivation that pushes away a consumer from a product labelled "Made in China" is strong enough the consumer's willingness to pay will be higher, and again if the desire for better quality products is sufficiently strong the consumer will accept to pay a bit more.

Now we have to rewind the tape and think again about our core theme: Adidas. We have stated that the big problem was the know-how and the economic issues linked to it. We have stated that in order to ensure the company with the adequate level of know-how during its processes the expenditures should have been much higher than the affordable ones. The cost linked to the know-how and so the human capital is considered in the big group of the production cost. Now is easy to state that an increase in the production costs will have impacts on the final price of the output. Adidas is not operating on a niche market, where the suppliers are limited, and consumers' decision would not be heavily affected by a change in prices. Adidas is swimming in sharks-infested waters, an increase in prices will reflect in a lost in the market share, and in an advantage for competitors that can not be easily recovered. For these reasons Adidas decided to come back to China. Here we have the turning point: the situation described above can be dramatically change if we consider the advent of Covid-19 and all the shifts that follow it.

Stating that an increase in consumers' WTP should occur, the previously defined "Big problem of know-how", would not appear as big as we can imagine. An increase in WTP should allow the company to pay a bit more in order to ensure the adequate level of know-how during the production processes.

6.3 A three stripes serendipity

According to James Heaton “serendipity is a combination of things: actively setting up opportunities, a willingness to go with the flow of events, the ability to see the thing that arises by chance, and finally, being ready to seize the opportunity—prepared both in the sense of being open to the possibility and ready to take advantage of it.”²⁵

The serendipity is defined as the aptitude for making desirable discoveries by accident²⁶.

Making an example in order to clearly defined what is serendipity, we can think about the discover of the penicillin. It was discovered in 1928 by Alexander Fleming by accident. He was having several studies on bacteria and their behavior, and one day he decided to go on holiday with his family. When he came back home he had an outstanding surprise: before leaving his laboratory he left open a Petri dish, and when he came back he noticed a strange mould on it. This element killed all the bacteria used during its experiment and its name was penicillin, which had the ability to kill bacteria without revealing itself toxic for humans. By accident a medicine which would have changed the medical landscape was discovered²⁷.

Staying on the medical side, another crucial feature that now is used in every day’s life had been discovered. We are talking about the X-Ray. In 1895 a German physicist Wilhelm Roentgen was working on a cathode ray tube. Even if it was covered and the room was dark, a screen on the room keep its lights on. He understood that rays were coming from the tube and were reflecting themselves on the screen. He tried to put several things between the screen and the tube in order to stop them, but everything was useless. When he put his hand in this space he noticed that he was able to see its hand-bones on the screen. He tried to put a photographic plate instead of the tube, and the first x-ray image was created²⁸.

Moving an eye on business, the most famous example that we have to take on consideration is the one related to the post-it discovery. Spencer Silver was working in order to find a super-glue able to facilitate the industrial sector routines, but it was failing. The only notable thing he discovered was

²⁵ <https://richtopia.com/effective-leadership/serendipity-meaning-examples-guide>

²⁶ <https://www.dictionary.com/browse/serendipity>

²⁷ <https://newhumanist.org.uk/articles/4852/science-and-serendipity-famous-accidental-discoveries>

²⁸ <https://newhumanist.org.uk/articles/4852/science-and-serendipity-famous-accidental-discoveries>

a weak glue. The peculiar feature of this non-discovery was its characteristic of stick and easy remove, without leaving signs of glue on the surfaces previously stick. After a short period of time he understood the potential of his discovery and started to use this glue on small pieces of paper, sticking them all over its laboratories to “save” his ideas. When this new tool was pushed into the market it immediately revealed its potential and had an outstanding impact in every daily life.

The examples mentioned before are not properly discoveries, but all the creators starting from an idea and reached another result, a greater result but not the one they started their work for. They had the luck to adapt these elements to reach new stuff. The credits are not only related to the scientists, because they only discovered an aspect which was just inside the initial elements.

What adidas tried to do with the speedfactories can reflect a sort of serendipity. The explanation is not immediate, but it is a bit articulate. We have to rewind the tape.

Adidas left China to come back to Germany and USA, prioritizing aspects like the consumers’ closeness, quicker reaction to new trends, exploiting 4.0 new stuff, new raw materials usable thanks to new technologies, keeping an eye on the recycling theme with the collaboration with Parley for the Ocean, the labelling side introducing labels like “Made in Germany” or “Made in USA”. All these aspects have no connection with the concept of serendipity at all. In fact in all these aspects there is nothing related to accidental new discoveries or accidental introduction of new features.

In the last months the scenario deeply changed, a black swan broke in and change the rules of the game, maybe forever.

In the new scenario we are noting changes in consumers’ decisional process, in market dynamics and in production processes.

In this new scenario there are 5 macro fields which are changing:

- The technological degree in companies, during this period of lockdown most of the companies decided to keep in touch with consumers with tech-tool such visual 3D, 3D printing, smart showrooms, virtual catwalk, smart mirrors, virtual try-on and 3D product inspection. So the tech-degree required from the market is sharply increasing, and in this sense Adidas has anticipated times, creating whole technologically advanced plants in order to give to consumers new products, built with new technologies, with high performance and high durability. In addition to these aspects Adidas is offering the virtual try-on service and 3D product inspection.

- Another macro trend that emerged in this period was the online shopping attitude, which had an outstanding growth due to several factors, but the growth is still relevant. Maybe this aspect could be influenced by the restriction due to the coronavirus, but once they had been loosened the trend persisted. Adidas has one of the strongest online platforms and one of the most worldwide famous logos²⁹. The company is ensuring advertising and selling through the online shop, the official app and the social network. These tools are not only used to sell stuff, but to transmit what is behind the product, their core values, the history and cultural and social messages. A strong digital presence will face the digitalization of the fashion industry with less difficulties than others.
- Another element that is going to change is the attention on labelling. As we stated before the labelling “Made in China” is losing appeal, consumers’ buying attitude is changing and due to the spread of the virus, the thoughts about a Chinese provenance of it, and a low transparency on the theme from the Chinese government, the market should gladly accept stuff with different labelling. Adidas was just ready for it with the speedfactories project, in the sense that the company was introducing to the market outputs labelled with “Made in USA” or “Made in Germany”.
- As we previously said, consumers’ behavior is tumultuously changing, and will also change their preferences. We stated that consumers are leaving the fast fashion attitude, are looking for stuff which lasts and are cultivating a desire for a higher quality product. Adidas is offering to the market high-performance shoes, with new raw materials, which are the result of high research and development efforts.
- Another considerable element can be found in the attention for the environment. Social media, television and newspapers are moving consumers’ attention to the environmental side, more precisely on sustainability, for what regards processes, raw materials, waste and solidarity initiatives. Adidas gave large spaces in the last years to the solidarity initiatives, but not directly related to the speedfactories project. An element related to the sustainability strictly linked with the project is represented by the creation of the line Adidas x Parley. In this collaboration Adidas has the target to create shoes directly from the plastic collected by the ocean. These shoes not only are designed and created with a completely sustainable raw

²⁹ <https://www.mobilemarketer.com//adidas-has-most-shared-logo-on-social-media/522825/>

material but are also inside a structure definable as circular economy, in fact they are created working on plastic collected by the sea and then they can be recycled again to create new stuff.

As I stated at the beginning of the paragraph, many readers should argue because there's no traits able to define the initiatives undertaken by Adidas as "serendipity", but we have to make a step behind in order to have a clearer picture. The serendipity effect is not linked to the speedfactories themselves, but to the concept itself.

Adidas undertook several initiatives in 2016, but it would not have known that in 4 years it should find itself in a situation of first mover.

Now with the advent of coronavirus many dynamics are going to change, sometimes only partially modifying the existing rules and sometimes disrupting the existing ones. To be clear, Adidas highly implemented the technological degree in its two new plants (market is asking for higher technological degree), bounced back from China offering product labelled as "Made in Germany" or "Made in USA" (made in China is losing its attractiveness), in the previous years has created a strong digital presence which nowadays make Adidas the most worldwide famous logo (market is asking companies to establish or implement their digital presence), decided to create product with new materials and processes in order to ensure consumers with long-lasting stuff (market is going away from the fast fashion and is looking for new raw materials and stuff which lasts) and finally Adidas is deeply involved in the sustainability cause and to show its involvement established a collaboration with Parley in order to create shoes from recycled plastics collected by the beaches or directly from the oceans (market is asking for more environmental friendly companies). When adidas decided in 2016 to pursue this project was navigating by sight, trying to explore the unexplored and following their intuitions. Nobody inside the board of Adidas should have known that all the initiatives they were undertaken would have become necessary to have a successful company after the spread of coronavirus.

The circle will close explaining that the concept of serendipity finds its reflection just now. Adidas implemented many features starting from 2016 meeting some problems. Now, in 2020 where people are learning to live together an enemy such the Covid-19, all those features previously implemented are becoming essential to have a successful business. Adidas unconsciously moved 4 years before the new market dynamics broke out, so the concept of serendipity related to Adidas is finally cleared: the company undertook many initiatives starting from 2016, but only now, in 2020 they are necessary, from several initial intuitions, Adidas created two plants that nowadays perfectly fit with the market requirements. The company should be able to exploit all the advantages related to the first mover, keeping a competitive edge on its biggest competitors.

A question will surely come out: is still convenient for the company to move its business again to China, after all?

My answer is no. With the changes that are occurring right now for what regards the market dynamics, if I was I Adidas shoes I will keep a branch of business in Germany and USA. The problem of wages and salaries, which result to be higher for what regards the manual side, should be cover with an increase in the consumers' willingness to pay, and the limited lines of production problem should not be seen as an insuperable obstacle but as a stimulating challenge. If the production in the speedfactories results mainly oriented to the future craft, the company should see it as an opportunity more than a restriction. The agility given by the new processes should allow the company to continuously change or adapt the line to the current trends. For example in the last months the "MCU" (Marvel Cinematic Universe) is catching on, and which had been the answer of Adidas? A line of Adidas future craft inspired by the superheroes appeared in the movies³⁰. What I am trying to explain is that even if the speedfactories offers limited leeway, it should not have to be seen as a negative key point, but as a variable to explore. Another aspect that I would like to underline is the labelling side, in the sense that keeping a partial production in the Western countries will not mark Adidas as a "Company that has its whole production in China", trying to climb up positions on consumers' mind.

7. How to move efficiently a business away from China

Global Fashion Agenda is a sort of guidebook which has the aim to help and support the businesses after the shocking impact of coronavirus, trying to underline the key features that must be pursue to have a successful business.

The guide had been realized with the support of McKinsey & Company and several CEO and manager of many worldwide famous. To give strength to its analysis the GFA also added many considerations given by researches and surveys through consumers.

The key point which are underlined are six and at the core there is the focus on sustainability.

7.1 Global Fashion Agenda

1. "Map social and environmental impacts along the value chain": with the sustainability theme which is increasing its centrality in the industrial field day by day, the feature which allows consumers to track where and how the output that they are going to buy is being

³⁰ <https://justfreshkicks.com/adidas-speedfactory-am4-avengers/>

created plays a central role in consumers' choices. Giving them the possibility to track where the products had been created and how it has been refined increase the sense of transparency through consumers. Another important element is that when a company agrees to this feature is also accepting a higher level of monitoring along its value chain in terms of sustainability of raw materials employed, acceptable levels of waste and the respect of the minimal safe and wages conditions of workers. This activity may result expensive in the first span of time, whenever the company has to re-asset some aspects, but will play a key role in the acquisition or in the consolidation of linkages with consumers. This feature will also give the company an amount of data necessary to forecast future decisions or understand mistakes committed in the past. Last aspect that I would like to underline is the competitors one. Being transparent and clear with consumers means also the risk to reveal many key aspects to competitors, but it should not must be seen as a negative aspect, because this condition will affect every players, and this is an outstanding push to collaborate to find the best practices possible, respecting the environment.

2. "Build trust and brand loyalty": with the advent of Covid-19 brands had to face outstanding efforts in order to improve the safety conditions of employees and consumers. Consumers are looking at these efforts and often their decisions are taking account of it. Consumers are looking for brands which are transparent in its practices, starting from the raw materials, passing through production processes and ending with shipping practices (es. Patagonia).
3. "Raise the bar on supplier relationships and shift to equal partnerships": the advent of the virus is giving to companies the possibility to re-design the landscape of relationships between companies and suppliers. The new relationships would have at their core a higher attention to the respect of the human rights and the aim to reduce the transactional costs, which effects would result in a decrease of pollution, generally, and more precisely on the footprint of each output. This eco-friendlier attitude would be heavily appreciated by consumers, so a decision initially undertook between company and suppliers will finish to influence also consumers' decision.
4. "Address stock levels and markdowns by scaling new business models": with the lockdown that took worldwide shops all over the World had been closed and the only shopping channels were the online ones. This huge amount of unsold stuff is an opportunity to reflect on several aspects related to the business models. First of all, for what regards raw materials

involved in the production processes, emerged the opportunity to think about the aspect of the circularity. For what regards the unsold collections, they should be postponed and exhibit during the fashion shows of 2021. A relevant aspect that emerged is the one related to the possibility of recycling old or unsold apparel and create new ones, reducing expenses for new raw materials and reducing the amount of waste. Practices related to the re-skilling processes and new processes are involved in the changes in the business models.

5. “Accelerate the digitalization of business processes”: in this period of lockdown and restriction the fashion industry heavily account on technological features. Smart mirrors, virtual showrooms and catwalks and 3D product inspections are only the first application of high technological advancement in the fashion industry. Consequences of the adoption of massive technological tool in this industry should benefit several points of view, first of all the production side. If everything goes virtual the company is not obliged to produce pilot seasons, in this way reduces waste and save money. A lean and demand-driven business model will ensure an easier effort to predict or forecast future market demand, and the production will result more efficient. The crisis will also offer the opportunity to re-asset the seasonality, re-aligning the season, deleting the mid-season and to reduce the overproduction. From a point of view all these cuts will result in a reduction of expenses, but we are noticing an increase in R&D, necessary to buy, implement and maintain the new tech-tools.

6. “Shape the e-commerce infrastructure of the future”: experts noticed an outstanding increase in online shopping and stated that it would last till September. It must be seen as a tremendous opportunity for companies to build or re-structure their online channels. Building resilient, smart and consumer-oriented platform will make consumers’ affiliation easier. Another element to be considered is the one related to the safety conditions. Buying online will ensure a safer environment, workers in the storages or in the warehouses are protect from policies adopted by the companies.

8. Conclusions

Trying to sum up what I wrote in the previous paragraphs we can depict a picture.

In the landscape we can find the reshoring attitude which pushed several companies to leave their home countries and establish plants far from home, chasing the dream of lower labor costs and a consequential possibility to keep prices low and increase their market share. This is also what Adidas did, embracing the Asian continent, mainly China and Vietnam, in order to exploit cheaper labor costs and a strong attitude to the highly standardized processes.

Making a step forward we can meet another scenario, which is dominated by the advent of new technologies and features related to the industry 4.0. These new technologies gave the basis to Adidas to implement an ambitious project: moving back partially the production, establishing two fully automatized plants in Germany and USA. Something went wrong, the initial purposes of increase closeness to consumers, faster answers to emerging trends and mass customized products revealed themselves not completely sufficient. If from one side the first two purposes were acceptably respected, the idea to produce mass customized shoes faded in a short span of time. The aim to reach fully automatized processes was not feasible because the switching phase required the support, even if in a small measure, from the human capital. After 30 years of offshoring in the Western countries these kinds of activities are lacking, and the available ones are linked to the high-end products, assuming higher costs. The problem linked to the availability of know-how and the costs related revealed itself as an insurmountable mountain and laid the groundwork to the following initiatives.

Adidas in 2019 declared that projects in Ansbach and Atlanta will be not abandoned but transferred again to China. The decision was justified from several point of view like for example the domestic market, which year after year is increasing its relevance in the numbers of the company, the high degree of technology available and its diffusion through both company both people, so they are trying to explore the smart attitude offered from the Chinese market and last but not least the higher availability of workforce, able to guarantee highly standardized processes keeping competitive costs.

Everything was going right, the company read the Western experience as a training exercise, in order to understand the fully potential of industry 4.0 and decided to move to China with a deeper technology bagger.

As usual a black swan never warns about its arrival. The spread of coronavirus changed the rules of the game. What we are seeing is a sparkling landscape where we can depict several changes occurring, like the increasing interest for the environment and for sustainable companies, which must be able to ensure processes respectful in terms of human capital, waste and pollution, the

decline of preference in non-Chinese consumers', a sort of anti-Chinese commercial alliance, the online platform which are no longer relegated to a role of online shopping, but now are required to be the vehicle to communicate the essence of the company and finally consumers are expecting a material adaptation of all the technologies which are catching on.

In this tumultuous scenario Adidas should represent an example of serendipity, being it ready to the new market requirements, considering the strong online presence, considering that the company is on top for what regards the most online-search brand worldwide. The company with the project in Ansbach and Atlanta was ready to introduce to the market products labelled "Made in Germany" or "Made in USA", exploiting the decline of "Made in China attractiveness". The company was also able to implement highly automatized plants, answering to the innovations required by the markets and was also ready for the aspects related to the environment, offering shoes created by the plastics collected by the oceans.

All these aspects should represent a push to Adidas to keep alive the projects in the Western countries, understanding that it moved before everyone else in the market and maybe it was not ready.

Nowadays Adidas should find support from the Global Fashion Agenda, which can offer some essential guidelines to make a business survive away from China, focusing on the most relevant aspects.

Retaining a wobbly business is never the right thing to do, but who in charge to undertake decisions should must his/her mental openness and understand the changes in the market, even if they will arrive with no warns. The consumers' attitude is central, and it must be understood in each of its aspects in order to understand with action to undertake and which not.

Adidas was visionary in establishing two new plants with new technologies at their core. The market maybe at that time should not be ready, but now it more than ready, it required it. The company bring forward its competitors by 3 years, and now would be able to exploit all the advantages related to the figures of the first movers.

In order to not destroy such an intuition in my opinion the company should retain the new plants exploiting the new mega trends emerging from the scenario rose after the spread of coronavirus.

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