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How to Make a Business Model Sustainable Over Time:

The Combination of Multi Circular Economy Approaches in the Furniture Industry

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To my Family,
Without you none of this would have been possible.
You were with me when no one else was,
And you always made sure that I knew
How much you loved me.

To my Friends,
You have made these three years unforgettable.
Even if our paths are going in different directions,
Know that I will be always by your side.

To Myself,
You are so strong.
I am proud of who you have become,
Never give up on your ambitions
And do not let anyone tell you what you are capable of.
You can do anything.

INTRODUCTION

"There are no passengers on Spaceship Earth. We are all crew." (Marshall McLuhan)

The term Spaceship Earth is not a new one. It has been used for far more than a century by different authors, but it gained relevance thanks to "Operating Manual for Spaceship Earth", a book by R. Buckminster Fuller. The idea is that our planet is like a spaceship, traveling in space. Since we are all together on this spaceship and there is no way to escape from it, we must do everything in our power to protect it.
Later the Canadian philosopher Marshall McLuhan pointed out with this short yet incredibly powerful quote that this spaceship is not one where we get to be the passengers who simply enjoy their journey; we are all part of the crew and our job is to make sure that the ship does not sink.
In order to let our spaceship stay afloat, many things have to change in our way of living. The adoption of Circular Economy could be the starting point of this change.

In this dissertation, we argue that the adoption of multi–Circular Economy approaches can lead companies to not only perform more environmentally sustainable activities, but most importantly to achieve a completely sustainable business model that is capable of tackling all the challenges that climate change is presenting to us.

In the first chapter, we will analyze both the linear and circular economy and highlight their main differences. In particular, regarding the circular economy we will try to understand if it is actually physically feasible to have a completely closed loop.
The problem of waste and its impact on both the environment and society as a whole will be thoroughly analyzed as well in this chapter, together with the different regulations that are being put in place in some of the most important world powers.

In the second chapter, the traditional concept of Business Model and the Business Model Canvas will be analyzed. In particular, we will distinguish between the concept of Business Model and that of Strategy.
This distinction is very important for the second part of this chapter, where we will discuss about Circular Business Models and Circular Strategies. Indeed, different definitions of

Circular Business Models will be given, and we will pay particular attention to four specific strategies, which are Cycling, Extending, Intensifying, and Dematerializing.

In the third and last chapter of this dissertation, we will focus on IKEA, a great furniture retailer that is the ideal example for our analysis.
After providing some data about both the furniture industry and the specific firm we are analyzing, we will focus on the implementation of its circular business model and the strategy combination that according to IKEA is the perfect one to reach all of its 2030 Goals. Moreover, we will present the results of a survey that was performed to understand the customers' perception of two different services that a furniture retailer could provide, namely a Second-hand service (Buy Back in the case of IKEA) and a Leasing Program.
Finally, we will present the expectations for the future of the company.

Chapter I: Circular Economy

1.1. Linear Economy

"Take, make, dispose." These three simple words perfectly sum up the linear economy concept, which is the economy style that we have seen in the past few decades.

It is important to remark that this has not always been the case; the origins of linear Economy can be traced to the period immediately after the World War II, approximately the 1940s, when the concept of mass production[1]started to become popular[2].

Mass production was, in fact, boosted by the exponential increase in demand which was given by the rising wealth of the population; moreover, companies started to understand that the unit cost of a product is inversely correlated to the quantity to be sold of the same product: the higher the amount, the lower the unit production cost.

Since profits are given by the difference between the market price and the production cost, it is very trivial to say that to increase them we need to produce in substantial amounts to drop the costs. This concept naturally led to a more linear economy: from right after the second post-war period up until the end of the 20th century, the only focus is on production and consumption; nothing else matters.

Figure 1
Linear Economy, Take-Make-Waste Approach

Source: Author's own

[1] The concept of economies of mass production refers to the industrial and commercial organization of the modern company: the more is produced, the more the unit cost of products will decrease.

[2] Economists have identified a Kondratieff Business Cycle starting from 1940 and ending in the 1990s. This is the Mass production wave, where large scale industrial & public R&D are extremely popular and there is a mass spread of higher education. The universal & cheap key factors were oil and plastics.

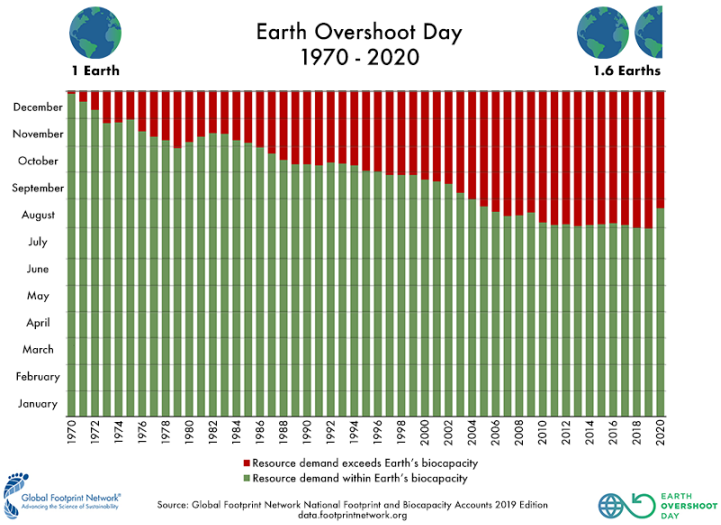
When using a linear economy approach, resources are considered unlimited, and economic benefits are above everything else. Given this definition, it is not difficult to understand why linear business models became the norm.

First of all, using a linear model is highly intuitive: as can be seen in Figure 1, the whole model is a perfect line, a flow that always goes in the same direction; the second reason, and probably the most important one, is that the company does not worry about anything other than profits. If the resources are unlimited reducing waste is not a problem as there will always be more raw materials to produce and thus get profits from.

It is very trivial to see where this approach is wrong, and that is in its very definition: resources are considered *unlimited.* In his Essay on the Nature and Significance of Economic Science, Lionel Robbins defined the very discipline of Economy in terms of scarcity, saying "Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses"(Robbins, 1932).

As we all know, resources are very much limited, especially those used in the "take-make-dispose" approach. Plastics, for example, often used in a "single-use" form, are derived from natural materials such as crude oil and cellulose. All of these materials are not unlimited, especially oil: according to the Statistical Review of World Energy, global oil reserves were 1734 billion barrels at the end of 2019, which means that there is enough oil for 50 years of current production. (Statistical Review of World Energy,2020)

Figure 2
Earth Overshoot Day

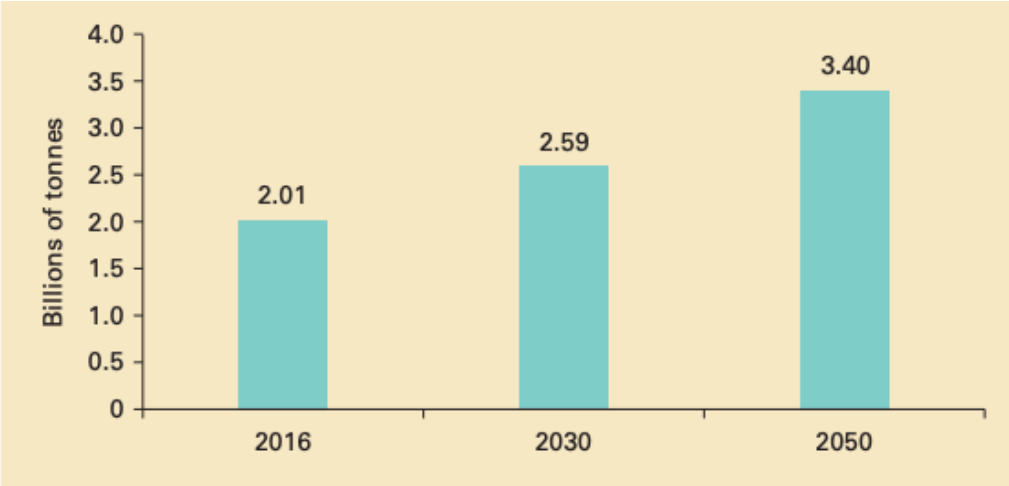


source: https://www.overshootday.org/newsroom/past-earth-overshoot-days/

More in general, according to the data from Global Footprint Network, every year we consume a number of resources that is higher than the amount that the Earth can generate. These data are published through the "Earth Overshoot Day", which calculates the day when humanity has wasted nature's budget for the year. In 2020, as shown in Figure 2, Earth Overshoot Day fell on August 22nd (in 2019 it was on July 29th), a little later than usually given the extraordinary circumstances of the Covid19 pandemic, which "stopped" the world for a few weeks.

The problem of resources is not the only one that linear Economy has caused; in 2016, the global economic activity generated 2.01 billion tons of solid waste. This quantity will rise to 259 billion in 2030 and 340 billion in 2050, as can also be seen in Figure 3.

Figure 3
Global Waste Generation 2016-2050



Source: What a Waste 2.0 report – www.worldbank.org

In the past few years, to counteract the overuse of resources and the enormous quantity of waste, many countries started to encourage a more sustainable economic growth through the "Green Economy"[3]. However, many other countries are still not considering all that linear Economy has caused and keep relying on it for all their economic activity.

[3] "A green economy is defined as low carbon, resource efficient and socially inclusive. In a green economy, growth in employment and income are driven by public and private investment into such economic activities, infrastructure and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services" (UN Environment Programme)".

Our resources are ending and our planet is filled with waste from both factories and households; immediate action must be taken.

1.2 Circular Economy

1.2.1 Theoretical Background

As mentioned before, the linear Economy is not sustainable anymore and it actually never was. There is an urgent need to find a new approach to the Economy that can tackle all the challenges that the past decades have left us: this approach seems to be the Circular Economy.

Despite it being a subject receiving increasing attention in academia, a clear and unifying definition of Circular Economy does not exist yet. Many authors agree on some of the particular features that a circular economy entangles, a series of core principles that have to be considered. According to Kalmykova, Sadagopan and Rosado (Kalmykova et al., 2017) these core principles are:

- Stock optimization, which means maximizing the value of the resources in use. This principle naturally derived from recognizing the limited nature of our planet's resources and was already highlighted in many theories from the late 70s.
- Eco-efficiency is based on minimizing the material flow system's volume and toxicity. Being eco-efficient means generating more value through technology and process change while reducing environmental impact throughout the product's life. On the other hand, according to Ellen MacArthur Foundation, eco-effectiveness is more related to Stahel's Cradle-to-Cradle[4] method: "the goal […] is to generate cyclical, cradle-to-cradle metabolisms that enable materials to maintain their status as resources and accumulate intelligence over time" (Ellen MacArthur Foundation).
- Waste prevention reduces the amount of hazardous waste and the impact that waste has on the planet. If the creation of waste is highly reduced, it will be possible to reduce waste disposal costs.
- Reduce, Reuse, Recycle, Recover strategy is the mechanism that can lead to stock optimization and waste prevention, according to many theories. As the name says, according to this mechanism we must first reduce the amount of waste generated, then reuse the waste

[4] In the cradle-to-cradle approach, materials are viewed as nutrients circulating in healthy, safe metabolisms.

as a new resource, recycle it only when it cannot be reused anymore or, in alternative, recover the energy if recycling is not available. (Kalmykova et al., 2017)

The circular economy concept is a very peculiar one since it developed throughout the years and did not have a specific author; however, since the late 1960s, many scholars with their theories started to lay out the foundations for it.

According to different authors[5], the introduction of this concept shall be attributed to Pearce and Turner; in fact, they investigated the linear characteristics of modern economic systems and described how natural resources could actually affect the Economy (Pearce and Turner, 1989). This, in turn, was influenced by the notion of Spaceman Economy.

Spaceman economy is a concept developed by Boulding, a British-American professor of Economics, in 1966. According to him, humanity needed to transition from a "cowboy economy" where there are vast expenses of resources to a "spaceman economy" which is a "spaceship in which man must find his place in a cyclical ecological system that is capable of continuous reproduction but limited by energy inputs from the sun"[6] (Boulding, 1966). Thanks to this essay, we have one of the first studies about Stock Optimization, one of the core principles of circular Economy highlighted before.

However, this study is not the only one that helped to lay out Circular Economy's principles. In fact, in 1989, two Economists, Frosch and Gallapoulos, first started to explain the idea of Industrial Ecology; they explained that "the traditional model of industrial activity should be transformed into a more integrated model: an industrial ecosystem. In such a system, the consumption of energy and materials is optimized, waste generation is minimized and the effluents of one process serve as the raw material for another process" (Frosch and Gallapoulos, 1989). As we can see, in this notion already lays the mechanism that is behind the "Reduce, Reuse, Recycle" strategy.

A further idea that introduced Circular Economy is that of steady-state Economy, principally associated with Herman Daly, an ecological economist. In order to being sustainable, a steady-state economy shall not exceed ecological limits. According to Daly, immediate political action must be taken to establish the steady-state Economy by imposing permanent government restrictions on all resource use (Daly, 2005).

[5] such as Andersen (2007) and Ghisellini et al.(2016)

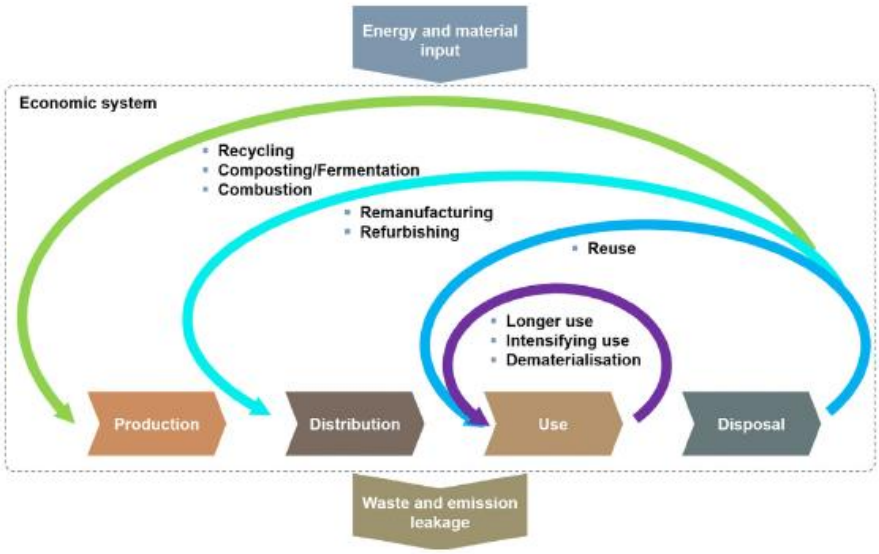
[6] Here we can see a great similarity with the concept of Spaceship Earth highlighted by the philosopher McLuhan, who was likely inspired by Boulding's theory.

Undoubtedly one of the most pertinent influences is Cradle-to-Cradle. Also known as C2C, it is an economical approach that adopts industry models to the environment by creating production processes based on the regenerative design (Stahel, 1981). According to Stahel, the scholar behind C2C and Performance Economy, we must not refer to waste as such, but as a new resource from which we can create new products; just like the name says, from cradle to cradle.

Waste equals food is a very notorious quote used to describe this approach: it is in fact a fundamental concept of organic waste materials becoming food for bugs, insects, and other animals which can feed on it, decompose it and return it to nature so that we can indirectly use it for food ourselves. However, this method can only work if combined with the extension of an object's life and thus the "reuse, repair, remanufacture" approach.

As highlighted before, it is still challenging to find a unique definition of Circular Economy. However, after revisiting 114 definitions, a very recent review defined it as "*an economic system in which resource input and waste, emissions and energy leakages are minimized by cycling, extending, intensifying and dematerializing material and energy loops. This can be achieved through digitalization, servitization, sharing solutions, long-lasting product design, maintenance, repair, reuse, remanufacturing and recycling"*. (Geissdoerfer et al., 2020).

Figure 4
Circular Economy



Source: M. Geissdoerfer et al. / Journal of Cleaner Production 277 (2020) 123741

As illustrated in Figure 4, we can clearly see that even if the base of this model is a line just like in the linear model, when we arrive at the end the flow does not stop there to start again at the beginning: in fact, after the distribution we try to stay in the "use" phase for as long as possible by extending products' life and promoting their reuse in different ways. Only when that is not possible anymore, we proceed to the next stage to dispose of the product by either remanufacturing it or recycling it.

1.2.2 Building Blocks

When talking about circular Economy, it is impossible not to mention the Ellen MacArthur Foundation.

Ellen MacArthur is a retired English sailor and a successful solo long-distance yachtswoman. In 2010, after she retired from professional sailing, she launched the Ellen MacArthur Foundation, a charity entity that works together with institutions and companies to accelerate the switch to a circular economy.

According to the Foundation, CE is "an industrial system that is restorative or regenerative by intention and design. It replaces the 'end of life' concept with restoration, shifts toward the use of renewable energy, eliminates the use of toxic chemicals […] and aims for the elimination of waste through the superior design of materials, products, systems, and […] business models" (What is a Circular Economy, Ellen MacArthur Foundation).

Thanks to the enormous work that has been done by researchers, the Foundation managed to identify four building blocks for a circular economy. These are Circular economy design, New business models, Reverse cycles, and Enablers and favorable system conditions.

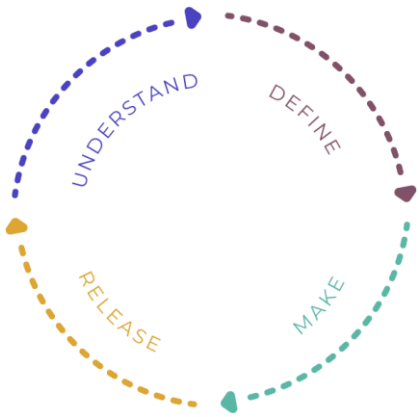
According to recent studies, up to 80% of products' environmental impacts are determined at the design phase (Publication Office of the EU, 2014). All the decisions which are taken in the moment of manufacturing impact the usage of products and the way they are handled at the end of their lives. While the design has been for many years part of the problem, it can become part of the solution: using circular design we can make the production process of organizations more efficient and at the same time do good to the planet.

In order to have a circular design, the most important thing is to incorporate the principles of circular Economy into the designs; when trying to do this, many steps will become very obvious, like for example designing products that last for more extended periods and choosing materials that are both safe and circular. However, applying a circular design

approach is not trivial: in fact, “where problems in the linear design process may be based on simple relations, circular design is rooted in complex problem-solving and is based on systems thinking approach” (Gardien, Gager, Haigh, Novak, & Raspail, 2020).

The Foundation identified the four stages of the circular design, which, as can be seen in Figure 5, are: Understand – get to know the user and the system, Define – put into words the design challenge and intention as the designer, Make – ideate, design, and prototype as many iterations and versions as possible, and Release – launch the design and build a narrative (Circular Design, Ellen MacArthur Foundation).

Figure 5
Stages of Circular Design



Source: Circular Design, Ellen MacArthur Foundation https://www.ellenmacarthurfoundation.org/explore/circular-design

The second building block of the Circular Economy is new business models. Companies are shifting from selling only a product to turning that product into a service; thus they must change from a property-driven earning model to a performance-driven earning model. It is essential to mention that big companies with an outstanding market share could play a key role in circular economy innovation.

Reverse Cycles or reverse logistics represent the third building block of the Circular Economy. They are tailored to move goods from their point of consumption to an end point to capture their value or properly dispose products and materials. With a more cost-effective and cost-efficient collection and treatment systems, the leakage of materials out of the system will consistently drop, thus supporting the circular model and nearly closing the loop. The last building block, enabling and favorable system conditions, focuses on the conditions that have the power to enable society to apply all the circular principles. Financing,

legislation, education and many more have the duty to simplify the transition and support some market mechanisms such as collaboration, rethinking incentives, leading by example and providing a set of international environmental rules. Furthermore, it is necessary to develop a general consumer awareness to enable more straightforward implementation of circular innovations.

1.2.3 Full circle, is it possible?

When reading with great attention the definitions given before of Circular Economy, one particular feature might seem oddly surprising: there is no unmistakable notice of the presence of circular flows of energy and matter. This can seem odd because of this method's very name, Circular Economy; however, as we have already seen in Figure 2, there is no perfect circularity.

Despite this, many authors include the role of loops in their definition and claim that these circles are closed. According to Wysokinska for example, a Circular Economy may also be referred to as "a closed-loop economy, i.e., an economy that does not generate excessive waste and whereby any waste becomes a resource" (Wysokinska 2016). Mathews and Tan (2011) would entirely agree since in their paper they also remark that a circular economy and a closed-loop economy are essentially the same concepts but with different words, and many more authors have the same thought.

However, what exactly is meant by a closed loop and can it be possible to have a closed-loop economy?

Figure 6
Closed Loop Economy

Source: Author's Own

Having a closed loop implies that both energy and matter can remain in the Economy forever and there is no waste as anything can be used and reused infinitely many times.

When talking about energy, this is theoretically impossible; when energy is transformed from one form to another or moved from one system to another, there is always some kind of energy loss[7]. Consequently, it is not possible to turn all of the input energy into the output energy, and thus this process can never be 100% efficient. From this straightforward notion, we can already see that it is impossible to have a closed-loop economy, but there is also the problem of everlasting matter.

According to a significant number of physicists[8], matter cannot last forever, and thus it is again impossible to have a closed-loop economy. Even if it were possible for matter to last eternally, as Zotti (2019) remarks, "this would probably result in unsustainable environmental and economic costs. In a simple economic perspective, the increasing marginal cost of maintaining a given type of material in the Economy would unequivocally lead to the termination of such activity as soon as marginal costs exceed marginal benefits" (Zotti, 2019).

Despite having proved the impossibility of having a closed loop and the significant number of papers that agree with this physical notion, many authors keep fostering this idea.

The case of Ghisellini et al. (2016) is pretty peculiar regarding this matter. In their article in the Journal of Cleaner Production, they first provide reasons for the fact that loops cannot be closed, but they later affirm that "The circular economy […] helps optimize natural resource use through efficiency increase towards a transition from open to closed cycles of materials and energy" (Ghisellini et al. 2016)

As we can see many scholars fail to understand the impossibility of wholly closed loops and keep incorporating them in their definitions; however, it is crucial to remark for both academic and technical purposes that it is not physically possible to have zero waste in energy and that keeping matter in the Economy forever would become excessively costly in the long term.

[7] This energy loss is normally in the form of heat.

[8] Such as Stephen Hawking

1.3 The waste problem

1.3.1 Environmental Effects

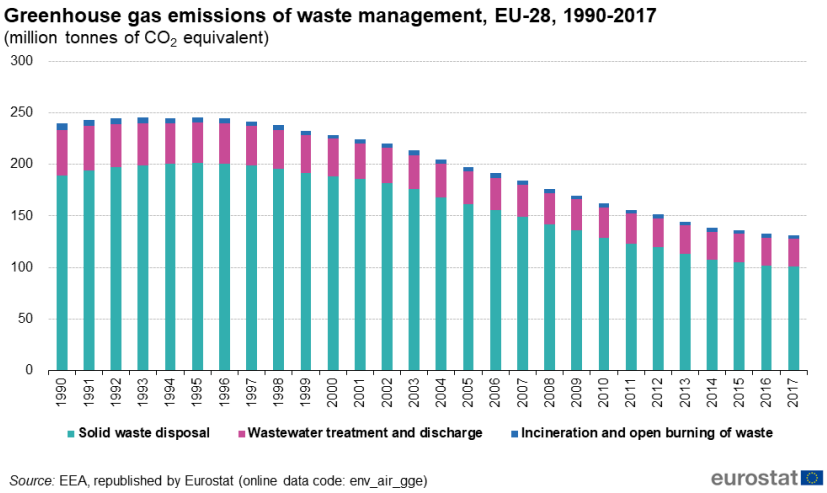
As mentioned at the very beginning of our analysis, a circular approach is needed to counteract the negative impact that the linear one has had on both the environment and our society. One extremely negative externality that linearity has produced is the problem of waste and waste management in particular; some of the changes in our climate can in fact be traced to solid waste.

While organic waste naturally releases carbon dioxide in the atmosphere, inorganic waste does not directly produce Greenhouse Gases; nevertheless, incineration and other forms of disposal of inorganic waste are a significant cause of emissions. According to a World Bank study, emissions from solid waste treatment and disposal […] account for about 5% of total global GHG emissions (World Bank, 2018).

In 1990 the amount of CO2 equivalent emitted by the EU through waste was almost 250 million tonnes, a value which the Union was able to decrease by 42% in 2017, reaching a low of less than 150 million tonnes as can be seen in Figure 7.

Despite this decrease and the European Union's tremendous effort, waste is still the fourth largest source sector of emissions, following combusting fuels, agriculture and industrial processes.

Figure 7
Greenhouse Gas Emission of Waste Management EU-28



Source: EEA, Republished by Eurostat

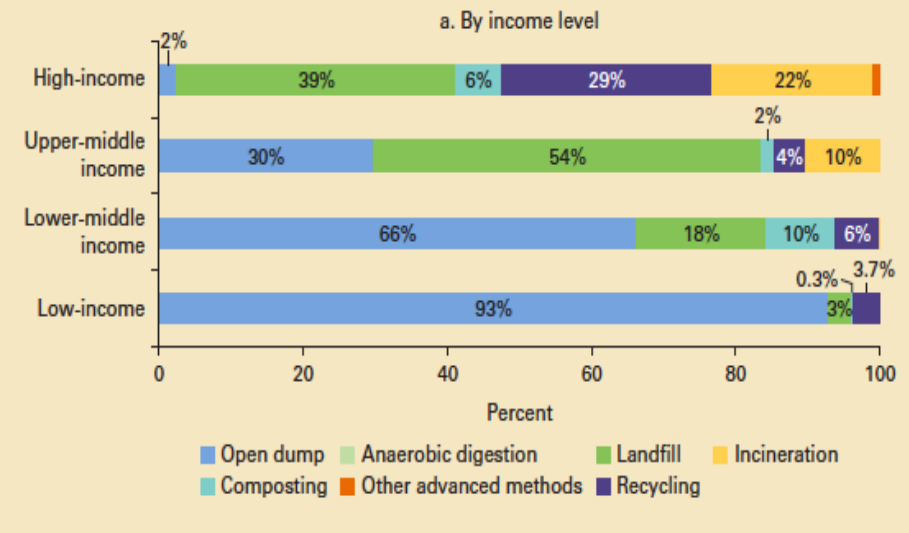
The release of these gases is unfortunately not the only negative effect that waste has on the environment. When inorganic waste is not carefully disposed of, it always ends up in nature: it can poison oceans, kill animals, and lead to many diseases. One enormous problem that has emerged in the past few years is that of plastics in our oceans: in 1997 the Great Pacific Garbage Patch was first discovered by Charles Moore, an adventurer sailing back to California after a yachting competition. It was initially impossible to detect this island by aircraft or satellite since it is mainly made up of microscopic plastic particles; however it covers an estimated surface area of 1.6 million square kilometers, an area three times the size of France (Laurent C.M. Lebreton, et al., 2018).

1.3.2 Social Effects

Waste and its management do not merely affect the environment; more correctly speaking, through the links between societies and the environment there is always also a social effect. Just as it happens with climate change, waste's adverse effects are especially evident among most vulnerable people.

Globally, according to recent studies, most waste is currently dumped or disposed of in some sort of landfill (World Bank, 2018). In this same study, a clear explanation of how waste is disposed of based on income is provided, as shown in Figure 8. In low-income countries, the most popular way of disposing of waste is through open dumping: in these countries, landfills are either not common or too far from the inhabited centers, leading the population to leave their waste on the streets or burn it in the fields. As income rises, we can see that the first step is to use landfills, which become more common first in lower-middle-income and then in upper-middle-income countries; only in high-income countries open dumping is below 5% and the share of waste that gets recycled is close to the one which gets thrown in landfills.

Figure 8
Disposal Method by Income



Source: What a Waste 2.0 report – www.worldbank.org

Poor waste management can mean that the waste does not get collected often or sometimes it is not collected at all, just as it happens in the great majority of low-income countries; in areas with inadequate service coverage, it is estimated that respiratory infections are six times higher than in areas with frequent waste collection (UN-Habitat 2010). This might also be because of the significant presence of flies and mosquitos who feed off of solid waste and carry illnesses and hazardous diseases, such as malaria, but also because of animals such as rats that infest waste facilities and can harm crops and spread other diseases such as Rat-bite Fever and Salmonellosis.

Besides, coming in contact with waste can cause infections, skin irritation and many more problems. These diseases can be deadly for people who do not have immediate access to healthcare and these people include the citizens of lower-income countries and the most vulnerable of high-income countries, such as homeless people and workers of poorly managed waste facilities.

1.4 Circular Economy Regulations around the World

1.4.1. CE in URSS versus now

When talking about Circular Economy and how Governments are helping companies to implement its principles, two things always come to our mind: first of all, that this is a relatively recent concept, and second that the countries doing this are mainly in the European Union.

In reality, a country in particular started to lay the foundations of the circular model of Economy many years ago: Russia.

From 1922 until the collapse of the Soviet Union in 1991, a positive trend in the implementation of Circular Economy principles was present, which then turned negative after the regime's dissolution (Fedotkina et al. 2019). In the 1970s the Government developed large-scale recycling programs and during the 1980s almost 30% of all paper and around 45% of all glass bottles were recycled. This was possible because of the industry's unification and the standardization process that influenced the product's long-life cycle and stable quality, thus extremely reducing waste. After its collapse, most of the Soviet Union's social programs were abolished, and recycling was one of these.

Today, Russia is the fourth largest emitter of greenhouse gases globally, but its effort to tackle this problem is almost non-existent. Russia signed the Paris Climate Agreement in 2019, but since it used 1990 as its benchmark, it can increase its emissions over the next decade while still meeting the 30% reduction target. This is because in 1990 Russia was still part of the Soviet Union and was emitting nearly 2,4 billion tons of carbon (United Nations, Climate Change Secretariat).

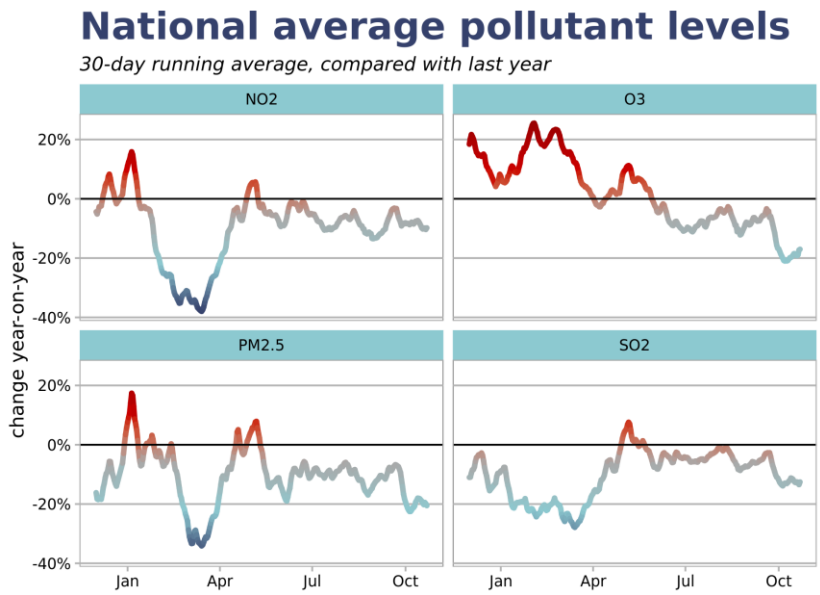
Despite being one of the first countries to implement the circular economy principles during its Soviet Union years, there is still no mention of Circular Economy in the new Plan proposed by the Ministry of Economic Development, and it is not encouraged in any way by the Russian Government.

1.4.2 China, Circular Economy Promotion Law

Together with India, China is currently one of the worst polluters globally (Nagle J. 2011). Despite the plummet in air pollution that happened during the first weeks of the Covid-19

Pandemic, since the industrial activity started again in April pollution levels rose above pre-crisis for a 30-day period as shown in Figure 9.

Figure 9
National Average Pollutant Levels



Source: CREA Analysis of MEE real-time air quality monitoring data

Being such a great polluter, Circular Economy does not simply represent a way to increment China's environmental policies, but it is actually the way China can save itself and make its Economy more sustainable in the long-term.

The concept of Circular Economy in China was accepted back in 2002 during the 16th National Congress of the Communist Party of China and it was introduced as a new development model to help the country leapfrog into a more sustainable economic structure (Geng and Doberstein, 2008). In 2009 the main framework for the implementation of the Circular Economy, the Circular Economy Promotion Law, was adopted followed by different action plans who could provide more clarity and details on how to implement CE in various sectors.

The Circular Economy Promotion Law is very different from the EU Circular Economy Action Plan, which will be later analyzed; both plans consider the "reduce, reuse, recycle" method but focus on different aspects.

In China, a clear focus on municipal waste, industrial waste, wastewater, and resources is present; this is because there is a severe shortage of resources and energy that cannot meet the country's growing demand. Both in the Promotion Law and in following action plans the

focal point is on detailed coverage of specific manufacturing sectors and measures to increase efficiency and reduce waste and pollution in manufacturing, thus the focus is more on the production side than on the consumption side.
Another crucial factor is the concern for the integration of Circular Economy principles into land-use planning (CE Promotion Law). This feature should be present in the framework for implementing CE of all countries that like China are still in an ongoing rural-urban transition.
Furthermore, the Law clearly states that the Government promotes and encourages both innovation towards a Circular Economy and education to it; it also enables central and local governments to set up incentive measures, such as fiscal funds, bank loans support and tax preferences.
Despite all of this, it seems like China is still not doing enough to protect both its citizens and its economy: in 2018, the Zhejiang region alone had reported a regional economic loss of more than 55 billion yuan due to natural disasters caused by environmental pollution (Textor, 2020).

1.4.3 The United States, the Biden Plan

The United States is currently the world's largest Economy, accounting for almost 22% of global output, and the world's second largest emitter following China.
Despite their power at a global scale, there is no explicit mention of the Circular Economy in all the climate plans presented in the past decade. In fact, in Obama's Climate Plan, the focus was mainly on a transition to cleaner energy with the use of renewable resources such as wind or solar power; besides, great attention was brought upon the car sector by encouraging the development and use of electric instead of traditional gas vehicles. Unfortunately, Obama's Clean Power Plan was officially nullified in 2017 by President Trump who defined it as "harmful and unnecessary".
During Trump's administration, all of Obama's action towards the use of clean energy was completely demolished: in his first year as president he announced the USA's withdrawal from the Paris Agreement to then introduce his "America First Energy Plan" whose main goal was to make the US energy-independent by exploiting gas and oil resources and approving new oil pipelines. Furthermore, he attempted to push policies that back the

harmful coal industry and denied the scientific consensus on climate change, causing concern to all the EU countries.

On January 20th, 2021, on his very first day as President of the United States, Joe Biden immediately re-entered the Paris Agreement and revoked the Keystone XL oil pipeline's federal permit that his predecessor granted. Despite having pushed a lot on his climate plan during his election campaign, there is still no mention of circular Economy and his policies are mainly focusing on nullifying Trump's regulations and going back to Obama's Clean Power Plan. Nonetheless, he plans on investing 2 trillion dollars in his climate plan, an action that could help steer investors to low carbon and fossil-fuel-free portfolios.

1.4.4 EU, Circular Economy Action Plan

In the European union, the first steps towards a more sustainable economic framework can be traced back in 2000 when the European Climate Change Program (European Commission, 2000) was first enacted. It was tailored to help ensure that the European Union would be able to commit to the Kyoto Protocol's reduction target and it examined a great range of policy sectors with potential for reducing greenhouse gas emissions.

In 2005, a second ECCP was launched to further explore new cost-effective options for reducing emissions while also increasing economic growth and job creation (European Commission, 2005). More focus was brought on the agricultural sector and the adaptation to the effects of climate Change.

In 2011, the Roadmap to a Resource Efficient Europe began to outline how to transform Europe's Economy into a sustainable one by 2050. It did so by proposing different ways to increase resource productivity and separating economic growth from resource use (European Commission, 2011). A highlighted problem is that of market failures caused by emissions and the inconsistency in policies, which is tackled in this plan to ensure that all policies go in the same direction. We can also start seeing an interest in the most responsible sectors for environmental impacts, which are nutrition, housing, and transport.

In 2015 the term "Circular Economy" officially appears in the EU Climate plan; in fact the Union adopted an Action Plan for the Circular Economy which includes measures to help stimulate Europe's transition towards a more circular economy, boosting global competitiveness and creating new jobs. This plan introduces all the CE principles, covering production, consumption, waste management and the market for secondary raw materials. In 2018, further measures are introduced to support the implementation of the Action Plan.

These include a common EU target for recycling 65% of municipal waste by 2035, a common EU target for recycling 70% of packaging waste by 2030, a series of actions for more circular consumption of the 27 most used materials in the Economy (European Parliament, 2018).

In 2020, an updated version of the EU Circular Economy Action Plan was announced, which further aims to help the transition towards the circular Economy. It also lays the foundation for a proposal for a Global Circular Economy Alliance by 2021, an alliance to identify knowledge and governance gaps in advancing a global circular economy and take forward partnership initiatives. Thanks to this Action Plan and to all the measures that have been put in place in the past two decades, the EU keeps affirming itself as the most tremendous driving force towards a sustainable future.

Chapter II: Turning a Profit While Doing Good

2.1 The Business Model

2.1.1 Strategy or Business Model?

The concept of Business Model was mentioned for the first time in 1957, by Bellman, Clark and others who identified the five core concepts of Business Models (Bellman et. al, 1957). However it is only in the 1990s that this notion becomes extremely popular not only in academia but also in the workspace. According to many authors, during that time a business model was merely a synonym of a way to make more money for the companies that were growing with the dot com bubble[9]. The situation is a little more complicated than this.

According to Preissl (2004), the business model would have been helpful both if the bubble kept growing and if it was about to burst: in the first case, the business model and its guiding concepts would still be sought as to how to compete in the flourishing environment, while in the second case firms could use it as a framework to explain failures and restructures for future success (Preissl et al. 2004).

The studies regarding business models therefore flourished during the last years of the 90s and the first years of the 2000s, where many definitions of the business model started to appear. A visible trend was that of the similarity between the concept of business model and that of strategy; in fact, some authors like Magretta were using the terms "strategy" and "business model" interchangeably (Magretta, 2002).

Others would use the words "business model" to refer to all things they believe could give some form of a competitive advantage (Stahler, 2002).

Even when talking about strategy, it is challenging to find a unique definition and that is undoubtedly one of the reasons why these two terms seemed to be so similar and linked. There is a specific Economists that always comes to mind when defining strategy and that is Michael Porter. He defined strategy as a competitive position with his five forces analysis, "deliberately choosing a different set of activities to deliver a unique mix of value" (Porter, 1996). He is not the only one who talked about strategy and in his review, Preissl (2004) identifies four "paradigmatic" perspectives: industrial organization perspective, resource-based view perspective, strategy process perspective and institution-based perspective. While the first two perspectives are both concerned with competitive advantage and are seen

[9] The "dot-com bubble" was a swift rise in US Technology stock equity valuations fueled by investments in Internet-based companies during the bull market in the late 1990s (Hayes, 2019).

as content-based approaches, the process-based view focuses on the processes through which strategy contents are created and managed over time. Instead, the institution-based perspective was born due to the frustration associated with the other perspectives' lack of attention to context.

A strategy framework can enable a manager to apply general principles to the firm's peculiar situation and develop a suitable theory of how the firm should compete (Richardson, 2008). Therefore, we can have a corporate strategy for the firm's most abstract level to then move to functional strategies like marketing or production strategies, which could be translated into policies to guide different activities.

Yip (2004) started to distinguish between routine strategies and radical strategies, which are used to improve the market share. While *routine strategies* can usually achieve reasonable improvements in market shares, more drastic ambitions might need a disruptive change in the business model to change the nature of the value position, spot new customer groups, etc (Yip, 2004).

Therefore we can see that strategies and business models are linked since a so-called radical or transformational strategy is needed to change the business model in one or more fundamental ways, but the two notions are not the same (Yip, 2004).

We can summarize the difference between business model and business strategy by saying that the former is all about how we can create value and get compensated for it, while the latter is about how we are planning on bringing our business to the market and how we are executing on it.

2.2.2 Definition and Framework

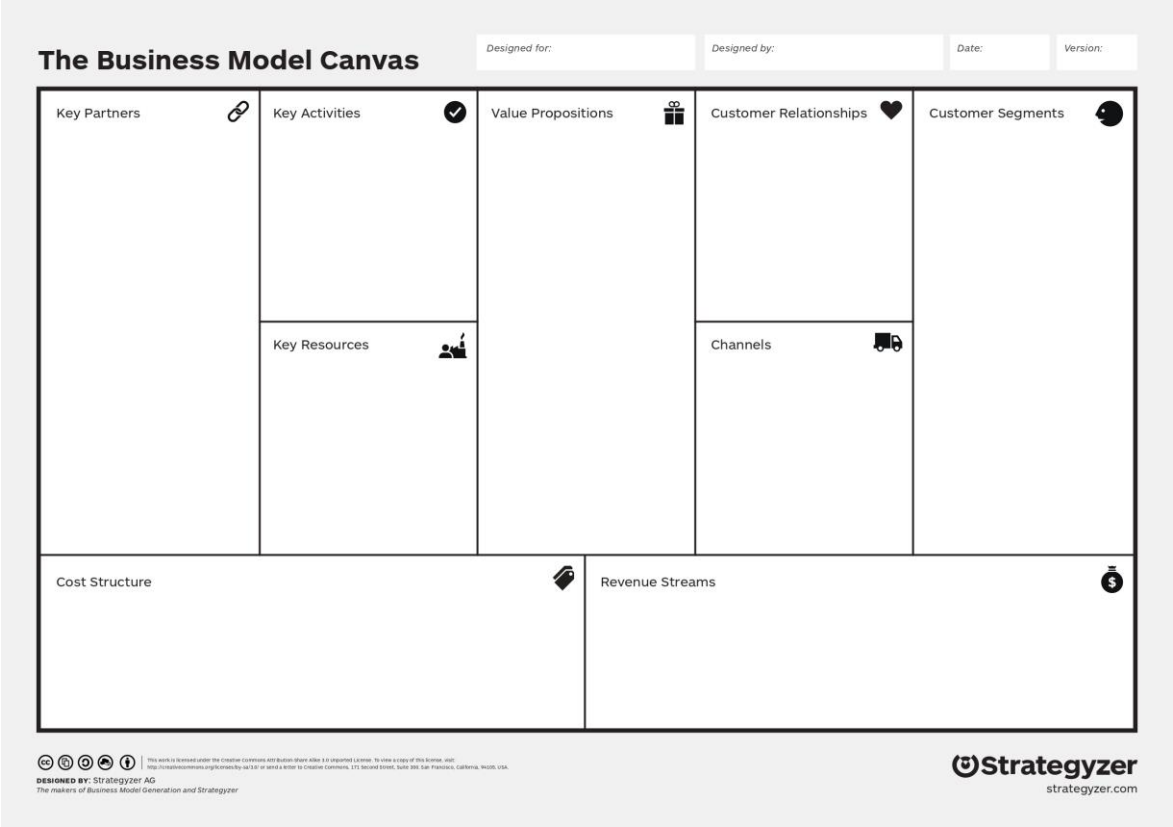
According to Osterwalder & Pigneur, the most famous scholars regarding the business model, a business model "describes the rationale of how an organization creates, delivers and captures value" (Osterwalder, Pigneur et. Al 2010).

Even if, as we said before, many more authors have described business models with their functions and how they should be used, these two authors managed to develop a framework that could contain all the other frameworks that were previously developed to understand a business[10].

[10] Such as SWOT, Porter's Five Forces and Value Chain Analysis

When referring to the business model, we can define nine building blocks that show the logic of how a company generates its profits. These nine blocks can be seen in the Business Model Canvas in Figure 10 and will now be described briefly.

Figure 10
The Business Model Canvas



Source: https://strategyzer.com

The first block that we will analyse is **Customer Segments**. Customer segmentation is a process in which we subdivide our group of interest into different customer groups that share similar characteristics; this tool helps to identify those separate groups' specific needs and pursue those of the most profitable one. The information that we can find in this section of the BMC is mainly demographic.

One of the blocks deeply linked with Customer Segments is that of **value proposition** which is precisely the heart of the whole business model canvas. It represents the particular bundle of products and services that create value for a particular Customer Segment, thus it should be developed while keeping the customer segment in mind. The value Proposition is

precisely why customers choose our company and it is that one factor that can turn customers to a company instead of another one.

Channels represent how a company communicates with its Customer Segments. There must be communication for the company to deliver its Value Proposition. As we can already see, the different blocks are all linked together in some sort of way.
We can identify five types of channel phases, which are: Awareness, Evaluation, Purchase, Delivery, After Sales.

Customer relationships describe what kind of relationship our company has established or wants to establish with its customer segments. It is of extreme importance to gain and keep good customer relationships, keeping our business going for a long time. This can also be explained with the concept of Viral Loop: if customers are happy with the product/service they might share it with others, creating a quick and cost-effective awareness or brand recognition for the company (Blank, 2012).

In the **Revenue Streams** block we can see the revenue flows that the company obtains from the sale of products or services to a specific customer segment. The variables to take into account in the composition of this block are the price and mode of payment, both fundamental to regulate the cash flows and make the business model work and sustainable activity.
There are two different payment methods that generate different revenue flows, which are payment in one lump sum and recurring payments, such as rents or subscriptions.

Key Resources represent the most important assets that make our business model work. They are the resources that allow our firm to create and offer the value proposition, reach markets, maintain relationships with Customer Segments and earn profits. This building block is closely linked to Value Proposition, Channels, Customer Relationships and Revenue Streams since we need to take into account all of these blocks to analyse our key resources. We can also identify four categories of resources, which are Physical, Intellectual, Human and Financial.

Key Activities are the crucial activities in executing a company's value proposition.. It is mainly related to the activities need for our value proposition, our cannels and our customer relationships.

Key Partners are the relationships that our company has with other businesses and governmental or non-consumer entities that help our business model work to include manufacturers, suppliers, business partners and so on. We can identify four types of partnerships: Strategic alliances between non-competitors, Coopetition, Joint Ventures to develop new businesses, and Buyer-supplier relationships.

Cost Structure is the last building block that we will analyse and it describes all the costs that the company will incur while operating the business model. We can distinguish cost structure in two categories: value-driven cost structures pursue the creation of more value in the product itself without necessarily diminishing costs; cost-driven cost structure do the exact opposite and want to minimize the costs of the product or the service.

2.2 Circular Business Model

2.2.1 Definition and Framework

In the first chapter we thoroughly discussed the topic of circular Economy, however it is complicated to reach this economic view while still using old frameworks and methods born with the linear Economy in mind. This is why we need to start mentioning circular business models, which can be viewed as an evolution or as a different take on the "traditional" business model.

This term appeared for the first time in 2006 in an article that was exploring company-specific circular business model types (Schwager and Moser, 2006). However, it then disappeared for a few years to re-emerge thanks to the rising popularity of circular Economy promoted by both the World Economic Forum and the Ellen MacArthur Foundation.

During the past years an increasing number of scholars has developed studies regarding circular business models and of course each one of them has given their definition of the concept. A selection of those definitions can be seen in Table 1.

All the selected definitions focus their attention on value and especially its creation, delivery and capture.

Table 1
Definitions of Circular Business Models

Publication	Definition
Mentink (2014)	"A circular business model is the rationale of how an organisation creates, delivers and captures value with and within closed material loops."
Den Hollander and Bakker (2016)	"A circular business model describes how an organisation creates, delivers and captures value in a circular economic system, whereby the business rationale needs to be designed in such a way that it prevents, postpones or reverse obsolescence, minimises leakage [...] in the process of creating, delivering and capturing value".
Linder and Williander (2017)	"We define a circular business model as a business model in which the conceptual logic for value creation is based on utilising economic value retained in products after use in the production of new offerings."
Nußholz (2017)	"A circular business model is how a company creates, captures and delivers value with the value creation logic designed to improve resource efficiency thorugh contributing to etending useful life of products and parts and closing material loops"

Source: Author's Own

As we have already seen in the previous section of this Chapter, the definition that we analysed of Business Model is that given by Osterwalder and Pigneur (2010) that relates the concept of business model to the creation, delivery and capture of value, therefore we can say that in the definitions that were selected of circular business model that concept of value is combined with circular economy principles or translated into circular strategies.

According to Geissdoerfer et al (2020), "circular business models can be defined as business models that are cycling, extending, intensifying and dematerialising material and energy

loops to reduce the resource inputs into and the waste and emission leakage out of an organizational system" (Geissfoerfer et al., 2020).

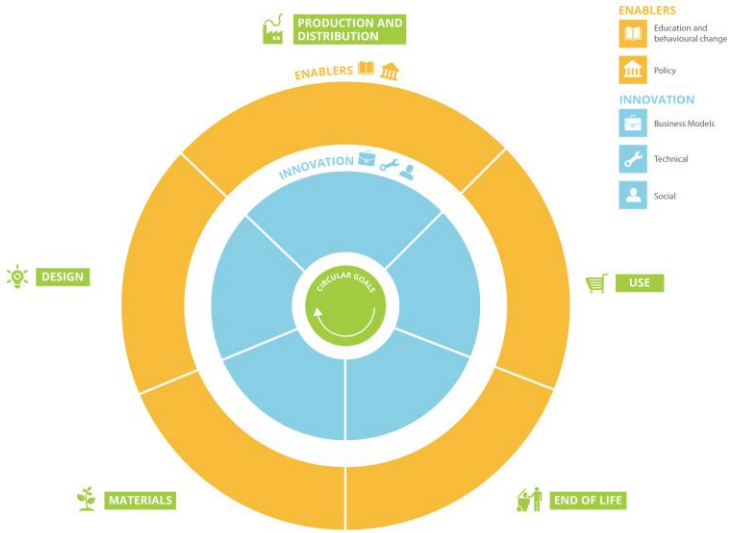
Of course, a mere definition is not enough to physically understand what is meant by actually using a circular business model and switching to it from a traditional one.

What happens often in the present literature on circular business model innovation is that we find simplistic definitions of this phenomenon, such as a shift from a linear to a circular production model (Rizos et al., 2016).

The reality is not that simple: it is not as trivial as it might seem to scholars to "shift" from one model to another without having any guidelines.

According to the European Environment Agency, circular business model innovation could involve developing an entirely new business model or introducing a new business model to the company, even if it is considered relatively common in other companies or sectors (EEA, 2021) . It is always crucial to remark that circular business model innovation shall be considered together with technological and social innovations as they are closely intertwined. In explaining this concept, the European Environment Agency developed its framework for enabling circular business models, as shown in Figure 11, which includes Business Model Innovation, Technical Innovation, Social Innovation, Policy Enablers, Behavioural and Educational Enablers.

Figure 11
Analytical Framework for Circular Business Models

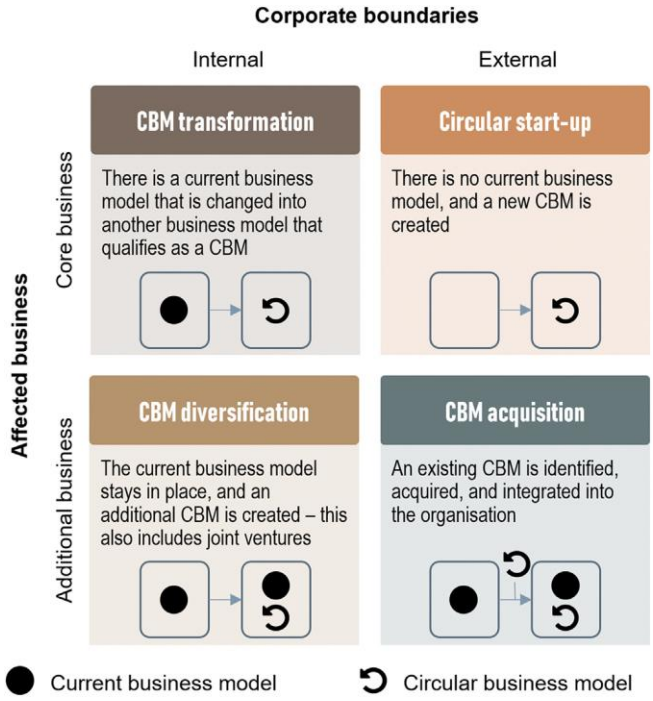


Source: EEA and ETC/WMGE; Illustration by CSCP

In Geissdoerfer's Review on Circular Business Models, we can find that circular business model innovation can be defined as "the conceptualisation and implementation of circular business models, which comprises the creation of circular start-ups, the diversification into circular business models, the acquisition of circular business models or the transformation of a business model into a circular one" (Geissdoerfer at al., 2020).

This definition is much more detailed than the one that was given by EEA and it explains that there are four different types of circular business model innovation based on the Affected Business and the Corporate Boundaries, namely CBM Transformation, Circular

Figure 12
Four Types of Circular Business Model Innovations



Source: Geissdoerfer et al., 2020

After finding a definition both for the circular business model and business model innovation concept, it is important to develop a proper framework to apply those principles.

In the previous section, we analyzed the Business Model Canvas which, as we already mentioned, was developed in a contest where the only conceived business model was a linear one. However, according to the Ellen MacArthur Foundation, this canvas can still be used while using a more circular approach by adding more questions regarding circularity. For example, in the Customer Segments we not only ask who our primary customers will be, but also who else might be affected, positively or negatively, by our product or service; in the

Key Resources we ask ourselves where our resources come from and what will happen to them after use, or also what capabilities we need to enable circular flows in the short and long term.

Mentink (2014) instead developed the BCC, Business Cycle Canvas, built on the BMC of Osterwalder and Pigneur, which traverses the organizational limits to help companies plan the business cycle (Mentink, 2014). He was not the only one who developed a new canvas that was based on the original model: we can see the Circular Business Model Canvas (Lewandowski, 2016), the Adapted Sustainable Business Model Canvas (Bocken et al., 2018) and the Circular Business Model Mapping Tool (Nußholz, 2018). All these different models are described in Table 2.

Table 2
Frameworks for Circular Business Models

Publication	Description
Lewandowski (2016)	The Circular Business Model Canvas (CBMC) is an element-based diagram inspired by the BMC. It contains eleven elements. With respect to the BMC, we have: 1) new elements such as "take back systems" and "adoption factors"; 2) a definition of new relationships between elements; 3) some predefined attributes to fill in the BM elements were suggested
Bocken et al. (2018)	The Adapted Sustainable Business Model Canvas is an element-based diagram inspired by the BMC and the value logic. It contains eight elements. The value proposition is divided into three categories for "Profit, People and Planet".
Nußholz (2017)	The Circular Business Model Mapping Tool is an element-based diagram inspired again by BMC and the value logic. It contains ten elements and a matrix structure to analyze the BM elements throughout different life-cycle stages was proposed.

Source: Author's Own

We can conclude therefore that there is still not a unique framework present in the literature, however a significant number of scholars seems to be taking into account the concepts of

Business Model Canvas and Value Logic, incorporating in those the circular economy principles.

2.2.2 Strategies

When we stated the definition that was found by Geisserdoerfer (2020) of Circular Business Models, four strategies were identified which are Cycling, Extending, Intensifying and Dematerialising.
Before we analyse those strategies and their impact, we must define Value Proposition, Value Creation & Delivery and Value Capture.
Value proposition is the value that a company assures to deliver to customers if they choose to buy their product; it tells consumers what the company stands for, how it operates and why it is worthy.
Value creation is the main goal of a business, as without value a business simply does not exist; value delivery instead involves everything necessary to ensure that costumers are happy customers, such as key value chain elements and core competencies.
Value capture means to retain a certain percentage of the value that the business provides to customers in every transaction; we can have a maximization approach, where the business tries to capture as much value as possible, or a minimization approach which does the exact opposite.

We will now proceed to analyse the four strategies and how they might impact the business's value logic.
Cycling derives from the reuse, repair, remanufacture and recycle strategy. Regarding value proposition, this strategy mainly attracts a segment of customers who need affordable and green products or services; the organization is able to use old materials and transform them into new resources (Ludeke-Freund et al., 2019). For the value creation and delivery, the most important process is the reverse supply chain, or reverse logistics: this means planning, implementing and controlling the inbound flow and storage of used goods and the information for recovering their value or adequately dispose of them (Bocken at al., 2016). Value is captured through the additional revenues that may arrive from the residual value of the used products and materials and the reduced costs that are achieved thanks to recycled materials instead of new materials (Bocken et al., 2016).

The Extending strategy refers to, as the word says, extending the life of products and their usage; this can be done through so-called timeless design or the higher quality of materials. Therefore, the value proposition is about proposing the use of long-lasting products, often with maintenance and control services, and with premium quality; the customers that this strategy might attract are those who want to gain savings thanks to extending the use of the products (Ludeke-Freund et al., 2019). Regarding the value delivery, the most critical factors are for sure the long-term customer relationships and the services operations such as maintenance, repair and upgrade. Value is captured thanks to the revenues from the high-quality products and services and the customer loyalty which is essential in this strategy (Bocken et al., 2016).

In the Intensifying strategy we shall use sharing models or rental/leasing models. The value proposition regards the use of products as services and the attracted customers are those who need a lower cost of ownership or lower up-front investments (Bocken et al., 2016). In the value delivery process, we must consider the relationship with suppliers and among the different suppliers and the contract and customer relationship management, which is fundamental in this case. Value is captured through the recurrent revenues from the temporary contracts and thanks to the ability to have long-term customer relationships; costs are saved because the products are fully exploited (Bocken et al., 2016).

The last strategy that was mentioned is Dematerialising. In this strategy, software substitutes hardware or reduces its use; the attracted customers need lower ownership costs. In the value delivery, we must consider the technology design for digitalization and the product-service systems design. Value is captured through recurrent revenues from subscriptions or contracts and thanks to long-term customer relationships (Bocken et. Al, 2016). This strategy is very similar to that of Intensifying for what regards value capture; however, it is about a completely different kind of product or service.

2.2.3 Future Research Path

The strategies that we found in the previous section are the mere beginning of research towards proper frameworks and strategies for circular business models.
The focus on this type of business model has been increasing in the past few years and it will likely continue to do so. This is why we can also affirm that many more studies will try

to find the best strategy to use when we want to switch from a linear to a circular business model, or the best strategy to use when setting up an utterly circular business.

A critical spotlight could be on the effect of the analysed strategies on circular Economy and how disruptive they are to linear models.

As mentioned earlier, business models are what can make a business idea successful. Without a business model, it is impossibile to capture the value that an innovation might bring.

The use of circular business model would therefore help companies make profit, while also doing good to the Planet and all the species that live on it.

Chapter III: IKEA Case Study

3.1 The Furniture Industry

For our analysis of circular business models, we decided to consider a particular industry that, in the past few years, has become one of the greatest enemies of the environment: the furniture industry.

This industry is made of businesses that manufacture and sell furniture and textiles for offices, hotels, residences, commercial spaces and homes. In the European Union alone, this sector employs around 1 million workers in 130,000 companies, generating an annual turnover of approximately 96 billion Euros (European Commission, 2016).

Despite being a mature industry, it has renewed itself many times and continues to do so. Just like the Fast Fashion phenomenon, also Fast Furniture made its appearance in our society and buying furniture is now as easy and cheap as buying a pair of sneakers. Of course, even if to customers this seems very convenient, it is crucial to consider the environmental effects of fast furniture.

According to the Environmental Protection Agency, 12 million tons of furniture was thrown out by Americans in 2018, up from 2.2 million tons in 1960; approximately 20% of this waste was combusted for energy recovery, but the remaining 80% was landfilled (EPA, 2020).

Moreover, in 2011 the Furniture Industry Research Association (FIRA) conducted a research to assess the carbon footprint of furniture; the results were shocking, with the average piece of furniture consuming approximately 47kg of CO2, the same as 5.3 gallons of consumed gasoline (FIRA, 2011).

Despite the saddening data, there is still hope for this industry. Thanks to the promotion of circular Economy and circular practices in general, more and more companies are starting to pay more attention to the quality of materials and how they are designed.

The company that embodies the most this is for sure IKEA. Even if we all know it as a Fast Furniture company, IKEA has always tried to protect the environment through sustainable practices.

We will now analyse IKEA and the way it is trying to become the leading company in the sustainable furniture retail industry.

3.2 IKEA

3.2.1 The Company

IKEA is a Swedish company founded by Ingvar Kamprad in Älmhult in 1943. Since its early days, the company shows an entirely different mindset from all other furniture companies. In 1953, we can see the first flat-pack furniture at IKEA, a solution to the high costs and damage rates of transporting furniture and a trademark of the company, and in 1960 the first IKEA restaurant opens with its iconic Swedish meatballs.

The first IKEA Store outside of Scandinavia was only established in 1973 but, after 48 years, 445 stores are present worldwide, of which 174 are outside of Europe (About IKEA, n.d). The company is the leading retail furniture brand globally with a maximum market share at an international level (Ikea, 2019) and its core aspects are affordability, functionality and quality.

IKEA's vision is "To create a better everyday life for the many people" and it pursues it with the business idea of "offering a wide range of well-designed, functional home furnishing products at prices so low that as many people as possible will be able to afford them" (About IKEA, n.d). The company's mission instead revolves around attaining sustainable long-term growth to benefit suppliers, customers, and employees. We can also affirm that IKEA believes that sustainability should be affordable for the majority and not a luxury good, which is a major trademark of the company.

Despite being a leading company, there are several other furniture sellers in the furniture industry, making it crucial for IKEA to analyze the industry's different factors.

Every company needs to analyze its competitive environment, since it directly affects a firm's profitability and the nature of an industry's competition. The competitive environment comprises different factors directly related to a firm's strategy; these are suppliers, buyers and competitors.

The most important tool to analyze it is Porter's Five Forces Analysis. Michael Porter developed this framework in 1979 and it quickly gained relevance since it is a very convenient and adaptable tool.

According to this model, competitive strategy should be based on understanding industry structures and how they might change. Porter has identified five competitive forces that shape every industry and every market: they all determine the intensity of competition and a specific industry's profitability (Porter, 1979).

We will now proceed to analyze these five forces in the case of IKEA. A summary of this analysis is shown in Figure 13 and will now be discussed.

Figure 13
IKEA's Porter Five Forces Analysis

Source: Author's Own

Rivalry Among Existing Firms is very intense in the global market of low-cost furniture. The global revenue collection of the furniture industry amounts to US$ 1,371,983 million in 2021 and the market is expected to grow annually by 4.18% (Statista, 2021). With such a slow growth, competition among existing players is expected to increase since all competitors will try to increase their sales.

Some of the major competitors of IKEA include Walmart, Amazon, Euromarket Designs Inc. and Wayfair, which are all tremendous multinational companies with the ability of matching IKEA's every move.

The Threat of New Entrants can be considered a low force. This is because enormous financial investments and a great expertise are required to become a low-cost furniture retailer at a global scale. It would be impossible for a new entrant to benefit from the beginning from economies of scale to the same extent as IKEA and to gain access to the same or similar distribution channels.

Bargaining Power of Buyers is an extremely high force. Customers have in fact a great number of alternative options by both global retailers and local producers. There are no switching costs for buyers: this fuels their bargaining power enormously.

The Bargaining Power of Suppliers would typically be a low-medium force in the furniture industry since firms can choose from numerous factories in the World with both the capabilities and resources to form partnerships. However, IKEA wants to form a strategic long-term relationship with its suppliers, making this force a little stronger than it would generally be.

The Threat of Substitutes is extremely low. This is because furniture is fundamental for people and there are currently no products that can actually substitute the demand for furniture.

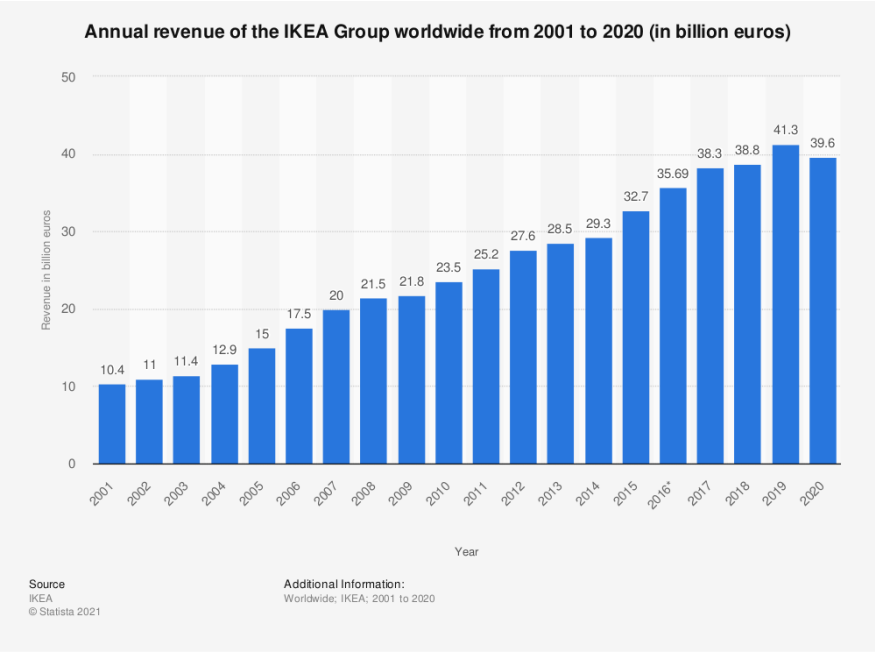
In addition to the Porter Five Forces Analysis, there is another beneficial framework that can help us understand IKEA: the SWOT Analysis. SWOT stands for Strenghts, Weaknesses, Opportunities and Threats and it is both an external and an internal environment analysis. In fact while Strengths and Weakenesses are internal, they depend on the company, Opportunities and Threaths are external. A summary of this analysis is shown in Figure 14.

Figure 14
IKEA Swot

Source: Author's Own

As shown in Figure 15, there is one thing that has been continuously growing in the past 20 years for IKEA and it is its revenue. We can see in 2019 an increase of 6.4% in revenue compared to 2018, which was unfortunately followed by a decrease in 2020 caused by the Covid-19 pandemic. Despite the global crisis, IKEA's revenue remained higher than the 2018 level, affirming the company's strong financial position also in times of crisis as one of its main strengths.

Figure 15
Annual Revenue of IKEA Group



Source: Statista Research Department, 2021

Another strength of IKEA is its affordability: the company's ideal customers are "normal people" who want nice furniture to make their house a home but are also looking for cheap prices. The company during the years has been able to constantly find new ways to drive down costs without affecting the appearance of their products and that keeps customers coming back for more.

Finally we can also add that IKEA is currently the most well-known furniture brand worldwide and it has more than 600 million customers annually, showing us its excellent brand reputation.

IKEA's weaknesses are directly linked with its products and in fact they are both low quality and the very standardized products. Despite its efforts in the past few years, IKEA's furniture tends to be still very standardized, driving customers to make important purchases

elsewhere. However, the company is trying to solve the problem of low quality by using better and more sustainable materials.

Switching to the external environment, we can affirm that one of the main opportunities IKEA should take advantage of is its "green" business model and the green drive by governments. IKEA's business model will be thoroughly discussed later in this dissertation; however we can say that in places like the European Union where circular business models are incentivized, the fact that the company is already using this kind of model is a great opportunity for growth. Another opportunity could be the expansion of the company both in Asia and South America; because of the Covid-19 pandemic this expansion was delayed, but hopefully IKEA will still be able to take advantage of it in the following years.

Turning to the threats, there is for sure the danger of the rising costs of materials. This should not be a big problem for IKEA since it uses a more circular business model, however it could become a problem in case for some products it is not feasible to use recycled materials or different resources.

Lastly, we have seen some bad press about IKEA which deteriorated the company's reputation. One of the most famous examples is when in 2017 a 2 years old was suffocated and killed when wardrobe fell on him (Vigdor, 2020). Unfortunately, he was not the only one: a total of 8 children were killed by this unstable dresser, of course extremely damaging IKEA's reputation.

3.2.2 People & Planet Positive

IKEA launched its sustainability strategy for the first time in 2012 with the grand ambition of completely transforming the IKEA business and its value chain. This strategy is called People & Planet positive, it was relaunched in 2018 and it sets many commitments for 2030 in line with the UN Sustainable Development Goals.

IKEA Wants to have a positive impact on people, society and the planet (IKEA, 2020). The company believes that "the better the balance between environmental, economic and social impact, the more people will have the chance at a better life within the boundaries of the planet" (IKEA, 2020).

Three main challenges were identified, which are Climate Change, Unsustainable Consumption and Inequality. From these three challenges, three corresponding focus areas were identified and those are: Healthy & Sustainable Living, Circular & Climate Positive,

and Fair & Equal. Each of these areas aims for different goals, some of which have already been fulfilled, while others will be in the next 9 years.

For Healthy & Sustainable Living, IKEA's primary commitment are: Inspiring and enabling people to live healthier, more sustainable lives; creating a movement in society around better everyday living; promoting circular and sustainable consumption. Regarding Circular & Climate Positive, IKEA wants to: transform into a circular business; become climate positive; regenerate resources, protect ecosystems and improve biodiversity. For the last focus area, Fair & Equal, IKEA commits to: providing and supporting decent and meaningful work across the IKEA value chain; being an inclusive business; promoting equality (IKEA, 2020).

To fulfill all of these commitments, a series of specific goals were layed out.

Since IKEA's business is not simply about furniture, we decided to split those goals in different categories which are Furniture & Textile, Food, Transports, and Energy. Table 3 shows all the goals present in the People & Planet Positive strategy based on their area and their deadline.

Table 3
People & Planet Positive Strategy Goals

Area	Ambition	Timing
Furniture + Textile	Only use renewable or recycled materials, by adapting and finding new sources and developing new materials	by 2030
	20% renewable or recycled foam	by 2025
	designing every product from the very beginning to be reused, refurbished, remanufactured and eventually recyled, by applying circular product design principles during the product development process.	by 2030
	Use only renewable or recycled materials, by adapting and finding new sources and developing new materials	by 2030
	end dependency on virgin fossil materials	by 2030
	Launch MISTELN, a water mozzle that can reduce water use by up to 90%	by 2022
	develop roadmaps for all product categories, describing the actions required to make sure all products are circular by 2030	As soon as possible
	reduce absolute GHG emissions from value chain by at least 15% compared to 2016, while still growing IKEA Business	by 2030
	reduce absolute GHG emissions from production by 80% compared to FY16	by 2030
	reduce absolute GHG emissions from retail and other operations by 80% compared to FY16	by 2030
	regenerate resources while growing IKEA business	by 2030
Food	phase out all coal and oil-based fuels used on site in production when feasible	by 2025
	absolute 25% reduction in food-related GHG emissions or 38% relative reduction in food-related GHG emissions per calorie compared to 2016	by 2030
	halving rates of food loss and waste	by 2030
	50% of meals offered at Ikea restaurants will be plant-based and 80% of the main meals will be non-red meat.	by 2025
	80% of packaged food will be plant-based	by 2025
	all sourcing of eggs, chicken, pork, beef, dairy and salmon will be fully compliant with the Better Programs	by end of 2025
	1 in 5 main meals and snacks sold should be healthier	by 2022
	measure and cut food production waste in half in all IKEA stores globally	by end of 2022
Transports	reduce absolute GHG emissions from product transport by 15% compared to 2017.	by 2030
	reduce GHG emissions from customer travel and home deliveries by 50% in relative terms (per person) compared to 2016	by 2030
	100% of transport for customer deliveries and services to use electric vehicles or other zero-emission solutions	by 2025
	reduce GHG emissions from coworker travel by 50% in relative terms per person compared to 2016.	by 2030
	use liquified biogas in heavy duty transportation in Italy, starting from the first half of 2021	by 2021
Energy	all IKEA suppliers use 100% renewable energy	by 2025
	solar panels available in 30 Ikea Markets	by 2025
	consume 100% renewable electricity in retail and other operations	by 2025
	phasing out non-rechargeable alkaline batteries from the global range	by October 2021

Source: Author's Own (developed from

https://www.ikea.com/se/sv/files/pdf/c3/e2/c3e2b54b/ikea_sustainability_report_fy20.pdf)

As can be derived from Table 3, IKEA's commitment is extremely strong. However there is one small problem about these goals: not all of them apply to all of the IKEA Stores.
IKEA in fact uses a franchise system: the Ingka Group owns the majority of stores and all of the goals apply to these stores, but it is not the same for all the other stores.
In Table 4, we can see where the stores owned by the different franchisees are located. Those owned by Ingka Group are mainly in Europe, where strong environmental regulations are being put in place. It is not surprising instead to see the stores in countries like China, or Mexico owned by different franchisees: some of the goals that they are not required to pursue are the single-use plastic ban (by 2020), the achievement of zero emission home deliveries (by 2025) and the expansion of the offer of affordable home solar solutions.

Table 4
IKEA's Franchisee's Stores and their Locations

FRANCHISEE	N OF STORES	LOCATION
Ingka Group	372	Australia, Austria, Belgium, Canada, China (Mainland), Croatia, Czech Republic, Denmark, Finland, France, Germany, Hungary, India, Ireland, Italy, Japan, The Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, South Korea, Spain, Sweden, Switzerland, United Kingdom, United States
Dairy Farm Group	11	China (Hong Kong), Indonesia, Taiwan
IKANO Group	8	Malaysia, Singapore, Thailand, Mexico, Philippines
Mapa	7	Turkey
House Market Group	7	Bulgaria, Cyprus, Greece
Sarton Group	5	Dominican Republic, Spanish Islands
Al-Sulaiman	5	Bahrain, Saudi Arabia
Northern Birch	4	Israel
Al-Futtaim Group	4	Egypt, Qatar, United Arab Emirates
Miklatorg Group	3	Iceland, Latvia, Lithuania
Al-Homaizi Group	3	Kuwait, Morocco, Jordan
Falabella Group	tba	Chile, Colombia, Peru

Source: author's own (developed from https://www.inter.ikea.com/en/this-is-inter-ikea-group/the-ikea-franchise-system)

3.2.3 Business Model

As we have seen in the previous section, one of IKEA's commitments is to transform into a completely circular business.

Achieving this is of course not easy, but the company actually started focusing on environmental sustainability many years ago. We can see its firsts efforts from the beginning of the 1990s: in 1990 the IKEA Group developed an environmental policy to ensure that the company and its co-workers took environmental responsibility for all activities conducted within its business, while in 1993 the IKEA Group became a member of the global forest certification organization Forest Stewardship Council (FSC) and in 1998 the first forestry manager was employed to work fulltime with securing sustainable use of forestry resources (IKEA 1990s, n.d.).

The first step towards an actual circular business model is in 2002, when IKEA implements a new product-recovery concept in more than 100 stores in Europe to ensure that returned products are, where possible, repaired instead of being wasted (IKEA 2000s, n.d.). After the success of this new concept, the company kept integrating more and more environmental sustainability in its business model.

The problem that many other companies have with sustainability is in fact not being able to integrate it throughout the whole business and value chain: when this happens it is usually because environmental sustainability is seen as an added value or a trend to follow to attract customers and not as something that shall be present everywhere. According to many scholars, while sustainability was considered a mere trend until a few years ago, it is now a business imperative for the majority of brands. Of course, if a company does not try to disruptively innovate[11] its business to make it sustainable, it will never take advantage of the great opportunities that a circular business model can offer, such as reduced costs.

IKEA is a different case: thanks to its management's foresight, the company has been adapting to a more sustainable business for the past few years; we will now analyze its Business Model Canvas, shown in Table 5.

[11] The idea of "disruptive innovation" gained relevance thanks to the book "The Innovator's Solution" by Christensesn.

Table 5
IKEA Business Model Canvas

<table>
<tr>
<td>KEY PARTNERS
• Delivery & Shipping Companies
• Manufacturing Firms
• Woodmakers & Harvesters
• Outfitting Firms
• Franchisees
• Nonprofit Organizations</td>
<td>KEY ACTIVITIES
• Furniture Design & Manufacturing
• Sales & Distribution
• Advertising & Marketing
• R&D
• Collection and Recycling of Waste Materials
KEY RESOURCES
• Physical Infrastructures
• Labor
• Financial Capital</td>
<td>VALUE PROPOSITION
• Low Prices
• IKEA Experience</td>
<td>CUSTOMER RELATIONSHIP
• IKEA Family
• Self-Service
• Personal Assistance
CHANNELS
• IKEA Catalogue
• Social Media
• Email Subscription
• Retail Shopping Centers
• Online Store</td>
<td>CUSTOMER SEGMENTS
• Families
• College Students
• Small Businesses</td>
</tr>
<tr>
<td colspan="3">COST STRUCTURE
• Raw Material Costs
• Advertising Costs
• Transportation Costs
• Manufacturing Costs
• Labor Costs</td>
<td colspan="2">REVENUE STREAM(S)
• Furniture and Accessories Sales
• Food Sales
• Service Fees
• Leasing Fees (TBA)
• Franchise Fees</td>
</tr>
</table>

Source: Author's Own

IKEA's business model is based upon its great attention on cost control, continuous product development and operational details that can empower its business model to lower products prices.

For its value proposition, the company decided to focus on two main factors: pricing (and excellent quality-price ratio) and the IKEA experience. Regarding pricing, the company is currently the leading affordable furniture retailer, and it keeps lowering its costs while also increasing its quality and its attention towards the environment; the IKEA experience is instead about what customers can feel when they enter an IKEA store and it is enhanced by the presence of dining options, onsite childcare and the cordiality of staff.

Given these value propositions, we can also say that the customer segments that IKEA wants to approach are families, which are often cost-conscious consumers but also care about the experience, college students who are living outside of their home for the very first time and require cheap furniture, small businesses who cannot afford to spend their entire capital on furniture and thus rely on IKEA to get cheap yet stylish pieces of furniture.

It is important for IKEA, and for every company to cultivate its relationships with customers. This is done thanks to the IKEA Family, a fidelity program with discounts, special offers, and even a free coffee every time we go inside a store.
In addition, the presence of both self-service and personal assistance is another important factor, because when entering an IKEA store or going on their website it is possible to either decide to shop or ask for help from designated staff directly. In this way, both independent customers and those who like and need special assistance can be happy with their experience.

The channels that IKEA uses to deliver its value propositions are many, including its famous catalogs, the IKEA Family email subscriptions and their significant presence on social media.
Every year 200 million copies of the IKEA catalog were printed: they counted hundreds of pages each, 38 editions and were published in 17 different languages. However, since the company is embracing a more circular approach to its business, IKEA stopped printing the iconic Catalogue in 2020 and now only offers its digital version. This is different from all other furniture catalogs because it presents products with their prices and tells their story.
With its content marketing, IKEA has been one of the first companies to promote contents that represented its mission and vision in the design, offered services and general massages of the brand. IKEA's communication campaigns always follow the idea that the company should represent Family and Everyday Life concepts to customers.

The company achieves high revenue streams thanks to different activities, including furniture and accessories sales, food sales in restaurants and in the IKEA Market, Service Fees for additional services such as delivery and assembly of furniture and Franchise Fees Franchisees shall pay each year to the Inter IKEA Group. IKEA is currently working also on a leasing program that we will further analyze later on; this program is part of IKEA's circular strategy and thanks to it the company will be able to keep prices low for customers and make profits while also lowering its impact on the environment.

After analyzing the right side of the business model canvas, we can turn to the left side, which focuses more on the business and thus on internal factors under the company's control.

One of the Key Activities performed by the company is Furniture Design & Manufacturing: IKEA focuses on innovative and modular design for its furniture so that its products will be used throughout the customers' life without the need of replacing them when they seem to be no longer useful. Another Key Activity that we can link to the company's drive towards a circular business is the Collection and Recycling of Waste Materials: thanks to this activity, the company is able to lower its costs of production and disposal and it can use cheaper materials to produce new furniture. Of course R&D, Sales & Distribution and Advertising & Marketing are also considered key activities, as without them the business would not be functioning.

The Key Resources are divided in three main areas, which are Physical Infrastructures, Labor and Financial Capital. Physical Infrastructures include IKEA's megastores, its recycling plants, all the tools and trucks that are used to manufacture and deliver products; for Labor IKEA relies on very skilled personnel, extremely diverse teams and assures its employees the opportunity to grow with the company.

IKEA's Key Partners include all Companies that partially or entirely perform some of IKEA's key activities, such as Manufacturing Firms, Woodmakers & Harvesters, Outfitting Firms, etc. In addition, IKEA relies on partnerships with various Nonprofit Organizations such as Save the Children and WWF to promote its values.

Like any other company, IKEA incurs many costs due to its operations; however, many are lower than they would typically be since the company has a more circular approach. For instance, the use of recycled material decreases both the production costs and the disposal of material costs; the use of renewable energy and electric vehicles lowers the transportation costs and the cost of energy in both its manufacturing facilities and retail stores.

3.2.4 Circular Strategies

In order to lower its impact on the environment while also continuing to be a competitive company, IKEA in the last few years has decided to implement different circular strategies and therefore inaugurate new services.

One of the company's main achievements is for sure that it can recycle its plastic waste thanks to the acquisition of a plastic recycling facility. Thanks to this acquisition, the company can lower its costs of disposal and production; IKEA is now trying to use only recycled plastics and completely phase out virgin plastics from its production line. By using recycled material, the company can both lower its costs and keep prices low for customers: in this way, more and more people will be able to afford an environmentally sustainable way of living. This is clearly an example of the Cycling strategy that we have analyzed in the previous chapter.

Thanks to the increasing use of recycled material in 2020, we can see from IKEA's financial statements that the company was still able to lower its costs of production despite the decrease in profits due to the Covid-19 pandemic: in fact the decreased prices of raw material offset part of the lost sales volumes, resulting in a higher gross margin percentage (Inter IKEA, 2021).

Figure 16
Inter IKEA Financial Statement

Consolidated income statement

in millions of EUR	FY20	FY19
Sales of goods	22,387	23,916
Franchise fees	1,162	1,195
Other income	64	73
Total revenues	23,613	25,184
Cost of goods sold	18,860	20,633
Gross profit	4,753	4,551
Operational cost	2,529	2,695
Total operating income	2,224	1,856
Financial income and expense	-201	-65
Total income before taxes	2,023	1,791
Income taxes	-295	-301
Results from the sale of entities	3	-5
Net income	1,731	1,485

Source: Inter IKEA, 2021. FY20 Financial Results

Another service that the company has decided to inaugurate to promote its sustainable business and to support its Cycling Strategy is the Buy-Back: customers who possess old IKEA Furniture which is still in good condition can sell it back to IKEA, giving it a second life and minimizing the contribution to landfill. As mentioned previously, every year in the United States alone approximately 12 million tonnes of furniture are thrown out by Americans and 80% of them are landfilled: this is a significant problem that can easily be tackled thanks to the Buy-Back Service.

After bringing a product to an IKEA store, if it is accepted, customers will receive a special "Return Card" valid for two years and your product will be sold in the store's Occasion Corner. Thanks to this service, the company will be able to profit twice or more times from each product: the first time will be of course when the product is bought from the store, while the second and eventual other times will be thanks to the re-selling of it in the Occasion Corner. If the product is not sold, the company can still keep it to recycle it and create new products, thus lowering its production costs.

This service is currently being implemented in all IKEA Stores in Australia and most European ones.

In particular in Milan, the first Italian Circular Hub was opened: it replaced the Occasion Corner and displays second-hand furniture. It also has a Learn&Share area to favor the interaction with clients and the collaboration with local communities regarding environmental sustainability.

Cycling is not the only circular strategy that IKEA decided to implement; in fact we can see a clear effort towards the Intensifying strategy. This strategy is all about rental models: in 2019 the company announced that it was testing the rental of its furniture in the Netherlands, Sweden, Switzerland and Poland and was looking to expand this to all of its European markets in 2020 (Butler, 2019). However, because of the Covid-19 Pandemic there were no more insights on this new program and its trial in other markets.

What we know from IKEA's press release is that the furniture leasing would be accomplished through a "subscription-based leasing program so that the company could still maintain ownership of the product to secure reuse as many times as possible before material and component recycling at the end of life" (IKEA, 2019). This would ensure products are reused, repaired and recycled at various points to sustain their optimum life-cycle.

There is yet another strategy that IKEA is implementing and it is the Extending strategy. With this strategy the main goal is to extend the life of a product and it can be done in various ways, such as focusing on high quality to make the product last longer or on its timeless design so that we can keep using it year after year without feeling the need to change it. IKEA is doing a combination of these things, while also focusing on repair services and circular design.

During FY20, IKEA provided customers with 14 million spare parts as part of an extensive sustainability push. It has developed an online ordering system to get also complementary parts for different kinds of furniture: according to Lena Pripp-Kovac, chief sustainability officer at Inter IKEA, "to prolong the life of products, a key aspect is to have spare parts. So that you can upgrade things such as buy new covers or legs for a sofa" (Milne, 2021). In addition, we can see many products made to be helpful throughout the changing lives of customers. For example, baby cots transform into toddler beds, or modular products such as PLATSA storage solution or VIMLE sofa, where pieces can be added or taken away as needed to adapt to constantly evolving needs. (IKEA, 2021)

Figure 17
IKEA SUNDVIK Cot that turns into Toddler Bed

Source: IKEA Catalogue

As we have seen, IKEA does not simply focus on one single strategy while trying to become a completely Circular Business Model but is instead incorporating different kinds of them to get the best results.

Pursuing only one strategy would still help IKEA get closer to its goal, but it probably would not be in an efficient way: by combining these three strategies, the company is making sure of completely exploiting the product's life cycle without leaving any part of its value uncaptured.

3.2.5 Survey

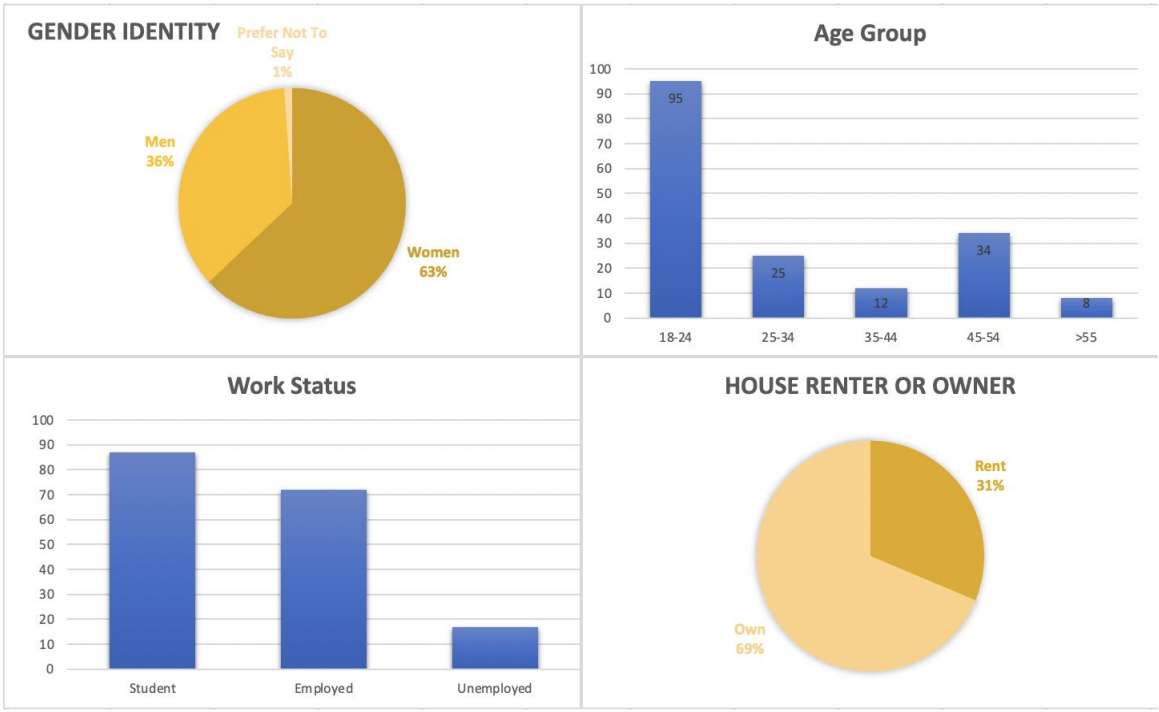
In the previous section we talked about some new services that IKEA is offering to its clients to become an utterly circular business, particularly the Buy-Back and the Furniture Leasing services.

To understand if those two services were perceived as beneficial to customers and if they were willing to use them, we decided to perform a survey on a random sample of people from the European Union, describing to them two different scenarios.

This survey was based on another study conducted by Ronja Lidenhammar on the Consumer Acceptance of Product-Service Systems for Home Furniture (Lidenhammar, 2015).

A total of 176 people completed the survey, whose demographics are shown in the following table.

Table 6
Survey Demographics



Source: Author's Own

We proposed two different scenarios to this sample.

In the first one we had a retailer who offered kitchen furniture to purchase with the possibility of returning it after use. Depending on the condition of the used furniture, the retailer could

re-sell it, upgrade it or recycle it. The customer could receive a coupon to buy more furniture and decide to buy either new or used furniture from the retailer.

In general the respondents had an overall positive attitude (61.9%) towards returning the kitchen furniture. However a relatively high number of participants (27.3%) neither agreed nor disagreed with the proposed statement, while the remaining percentage (10.8%) clearly stated their disagreement.

Without the coupon's financial incentive, these percentages were thought to change and that is precisely what happened: now only 34.6% of participants are willing to return their kitchen furniture, 24.4% neither agrees nor disagrees, and 41% is not willing to return their furniture. When the value of the coupon is considered reasonable by customers, a stunning 77.8% of them admit to being willing to return their kitchen furniture and only 6.25% clearly state they still would not do it.

Regarding the purchase of second-hand furniture from the retailer, we found that 43.2% of customers would be willing to purchase it, while 39% clearly would not and the remaining percentage (17.8%) neither agrees nor disagrees. In this case, we can see a clear difference in behavior between renters and owners: renters are more favorable to purchasing second-hand furniture[12], while most owners state their disagreement[13].

In the second scenario we presented the opportunity to lease new and/or second-hand furniture for bedrooms, dining and living rooms. The leasing periods are from 1 month up to 5 years and the customer can purchase the leased furniture at any time of the rental period (loss of value is deducted from price). After the furniture is returned, the retailer can decide based on its condition if it will be recycled, remanufactured or re-rented.

41% of respondents stated that their attitude towards leasing furniture was favorable, while 20% neither agreed nor disagreed and the remaining percentage (39%) stated that their attitude was not enthusiastic.

We can show that the attitude towards leasing furniture depends on the duration of the need: in fact when asked if they would be willing to lease if they needed furniture for a short period, the percentage of favorable respondents highly increased[14]. Another factor on which the attitudes depend on is of course price: if the leasing price is considered reasonable by customers, only 30% still admits to not being favorable. However for this specific case we

[12] 53.6% compared to 38.95% of owners

[13] 44% compared to 28% of renters

[14] 65.3% compared to the previous 41%.

can see that there is a considerable difference between renters and owners: again renters appear to be more optimistic than owners (60% versus 44%).
For this scenario we also analyzed the possible benefits that customers could perceive from leasing furniture, which were identified as Convenience and becoming more Environmentally Friendly.
Surprisingly, most respondents (51%) do not perceive leasing furniture as more convenient than buying furniture, which is true especially for homeowners; a significant percentage of home-renters instead (41%) neither agrees nor disagrees with the statement. Only 21% of all respondents perceive the convenience of leasing furniture, therefore we can say that convenience is not the benefit that we should mainly focus on as it is tough to perceive.
On the other hand, 58.5% of respondents recognized leasing furniture as a more environmentally friendly practice compared to buying new furniture, with only 20% of them disagreeing with this statement.

In the survey we also asked respondents about their beliefs on Environmentalism: we supposed the individuals with deeper environmental concerns would be more favorable in both scenarios, however this did not prove to be correct.
In fact, in the first scenario the correlation is 0.10, while in the second it is -0.17; in both cases we cannot consider the correlation as significant and, based on performed regression analysis, we do not see causation.

We can summarize this analysis by stating that the first scenario is generally more accepted by customers, both renters and homeowners. In general, renters have a more positive attitude towards the two different services, however like homeowners they tend not to perceive the economic benefit but rather the environmental one. Therefore, we can conclude by saying that a company pursuing to implement those services should focus more on their convenience than more traditional services, as our respondents did not perceive it.

3.2.6 Challenges and Future Expectations

This chapter has seen how IKEA is shifting towards a more circular business: it is doing so by implementing various circular strategies in its business model, combining them, and setting a complete and detailed list of ambitions to reach before 2030.

In particular, the company is combining the Cycling, Extending and Intensifying Strategies. If combined well, these strategies can give the firm an incredible competitive advantage; however if that is not the case, the company could get "stuck in the middle" and not profit as much as it would with pursuing one single strategy and being the leader in that segment (Porter, 1985).

Being the first low-cost furniture company to focus on environmental sustainability and develop a circular business model, IKEA enjoys a tremendous first-mover advantage. When thinking about inexpensive but environmentally friendly furniture, it is impossible not to think of IKEA.

The company must keep this advantage, it can do so in various ways: investing more in its advertising to make a greater number of customers aware of its products and its values; continually improving and innovating to meet customers' needs; implementing even more its vertical integration through the acquisition of recycling facilities, wind and solar farms, and on-site manufacturing firms.

In addition, we suggest that the company keeps investing in Circular Design Innovation: IKEA's Weaknesses are its standardized products and their low quality, therefore it is crucial for the firm to not only use higher quality resources, but to also offer a wide range of customization for each modular product. In this way, consumers will be more willing to buy a modular product from IKEA than a standard product from one of its main competitors: they will have for example the possibility to choose colors or to upgrade their furniture as they desire.

As was shown in the survey results, people are overall willing to change some of their habits and use different services to benefit the environment. However, based on the results that we have shown, we think that IKEA should focus more on its Buy Back service than on Leasing Programs.

Because of the Covid-19 Pandemic, many of the categories that would have been interested in the Program, such as Students/Workers away from home and small businesses have incredibly changed their habits. In Italy for example, because of the many lockdowns, smart-working and the closed Universities, a significant amount of both students and workers stopped leasing apartments and the demand for those has fallen by 13,2% in 6 months (Ladisi, 2020).

We suggest that IKEA keeps working on the trials for Leasing Programs in more countries, but that it mainly focuses on implementing the Buy Back Service in all of its markets as it is an easy-to-implement service and it is more likely that customers would use it.
In addition, we believe that customers need to be more informed about the environmental impact of their choices regarding furniture: this is why we suggest IKEA to invest in its customer education thanks to the implementation of Circular Hubs such as the one present in Milan where it is possible for customers of all ages to understand how to make a good choice.

We also mentioned that not all IKEA's Stores have to comply with all the set goals for 2030. Although all INGKA Group's Stores (the majority of all IKEA Stores) are working towards meeting the 2030 Goals, we advise Inter IKEA to add the compliance to IKEA's own 2030 Agenda as one of the terms of being a Franchisee.
In this way, we can assure that the business will become completely Circular throughout the world by 2030 and that no country will be damaged by the unsustainable practice of a linear business.

All of the factors that we have just mentioned contribute to the creation of a completely sustainable business model.
The use of its own waste as a resource to create more products, the intensification of each product's usage, the extension of products' life cycle and the continuous attention on meeting customers' needs are all factors that can make IKEA ready for all the challenges that Climate Change has in store for us in the next years.

Conclusions

The aim of the above thesis is to demonstrate that thanks to the use of multiple circular economy approaches, a business model can establish itself as sustainable. The use of this particular approach not only assures sustainability, but also solves the problems of waste generation and it optimizes the use of scarce resources.

We decided to focus on the Furniture industry as it is currently one of industries that employs a tremendous number of EU Citizens and because of its impact on the environment. Furniture manufacturing has always been relying on natural resources, such as wood, who are scarce and take a very long time to reproduce.
Being a necessary good, furniture will keep being in our lives and thus it is of extreme importance to tackle the problems that its production might cause.

IKEA is the perfect example to sustain our thesis. The company has started out as the first "Fast Furniture" retailer, optimizing its value chain to drive down its costs and the prices for customers. While doing so, IKEA realized that an enormous quantity of waste was being produced in the manufacturing process and that the concept of fast furniture was leading people to buy more products than they might need to then dispose of them after very little time.
The company's management was able to see great opportunities in those problems. They were able to re-use part of their waste as a new resource, lowering both their cost of production and those of waste-disposal. In addition, thanks to services such as the Buy-Back, IKEA can fully exploit each of its products: not only can they profit from their first acquisition by customer, but they can later either re-sell them when they are brought back, or use them as resources to produce new products, again lowering their costs of production. Thanks to these strategies, one of the main Threats for IKEA, which is the rising price of raw materials, is almost completely blocked.
Being the first low-cost furniture retailer to explore the use of a circular business model, IKEA enjoys a first-mover advantage that, if well exploited, could keep it as the leading company in this business for a fairly long time.
Its circular business model can be considered a competitive advantage, as it grants the company lower costs compared to its competitors and thus higher sales and margins.

We believe that in the next years, an increasing number of companies will switch to circular business models and that in particular in the furniture industry they will be inspired by the work that IKEA has been doing in the past decade.
It is crucial to remark that the implementation of such a business model shall not be postponed by companies in any way and that it must entail a disruptive innovation of their traditional business. Only in this way they will be able to take advantage of the circular practices and they will be ready to face all the challenges that climate change is leaving us with.

We would like to conclude this dissertation with a very powerful quote from a famous Canadian social Activist, which summarizes our view on the concept of Climate Change and the importance of Circular Economy.

"Climate change isn't an 'issue' to add to the list of things to worry about, next to health care and taxes. It is a civilization wake-up call. A powerful message – spoken in the language of fires, floods, droughts, and extinctions – telling us that we need an entirely new economic model and a new way of sharing this planet. Telling us we need to evolve."(Naomi Klein).

APPENDIX A: Survey on Furniture Industry

Questions
I feel that it is important for me to update my style by replacing my furniture often
I expect my furniture to last for many years
I believe that wood furniture (tables, chairs, cupboards etc) should be kept for:
I believe that upholstered furniture (sofas, mattresses, armchairs, etc) should be kept for:
My attitude about returning kitchen furniture is favorable
If the value of the coupon is reasonable to me, it is likely that I would return my kitchen furniture
I would be willing to return my kitchen furniture if no coupon was given to me
I would be willing to purchase second-hand furniture from a retailer
I think that returning my kitchen furniture is good for the environment
I think that this activity can help me save money (either by buying second-hand or by receiving a coupon)
My attitude about leasing furniture is favourable
If I would only need furniture for a short period of time, I would be willing to lease it
If I had the opportunity to lease furniture for a reasonable price, it is likely that I would do so
I think that leasing furniture would be more convenient than buying furniture
By leasing furniture I could change my style more often
I think that leasing furniture is environmentally friendly
I prefer purchasing furniture because they have a high sentimental value to me
I would worry about the consequences in case the furniture would break during a lease
The great majority of people do not act in an environmentally responsible way
I am worried when I think about environmental conditions for future generations
In my opinion, environmental problems are greatly exaggerated
What do you identify as?
What is your age group?
Where are you from?
Level of completed education
Are you currently..?
Number of people currently living with you?
Do you rent or own the accommodation you're currently living in?

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