

The Sharing economy: the problem of a shared definition

Patrizia Gazzola, Stefano Amelio, Enrica Pavione

Department of Economics, University of Insubria (Varese)

Corresponding author: Stefano Amelio, Department of Economics, University of Insubria (Varese),
e-mail: stefano.amelio@uninsubria.it

Abstract

The sharing economy is founded on pooling and exchanging services, goods, resources, time, skills, and knowledge in order to reduce the costs and, at the same time, to reduce or eliminate the intermediaries. This phenomenon has increased in importance in recent years but there is no single definition in the literature, rather there are different terms to define the general concept. The aim of the paper is therefore to identify the different definitions developed in doctrine in order to finally understand the causes that led to the crisis of the linear economy in favour of the circular economy.

Keywords. Circular economy; Definition; Frugal innovation; Linear economy; Sharing economy.

Doi: 10.5281/zenodo.7527523

1. Introduction

Sharing economy phenomenon has increased in importance in recent years. Today, modern technologies and smartphones, thanks to the internet, helped this phenomenon to grow considerably. Also, with the increasing development of social networks, online platforms have been developed in order to facilitate meetings between users and the spread of the sharing economy.

The sharing economy is founded on pooling and exchanging services, goods, resources, time, skills, and knowledge (Ranchordás, 2015). The purpose is to reduce the costs and, at the same time, to reduce or eliminate the intermediaries.

One of the first researchers who explained the concept of the sharing economy was Russell Belk (2010). The economic model is based on sharing the underutilized assets, for example, the spaces or the skills. In exchange, people can have monetary or nonmonetary benefits (Botsman and Rogers, 2010). The problem of definition has been considered several times as pointed out by Hossain (2020), who lists contributions in the literature that have already addressed the issue, but without resolving it. There are also several systematic literature reviews on the topic of the sharing economy (Görög,

2018; Cheng, 2016), in which the main features and essential elements of the sharing economy are highlighted, attempting to systematise the subject.

Nowadays, the idea to share, swapping, trade, and rent products and services is very popular but is not a new phenomenon. If in the past, the sharing and the exchange of assets took place between close individuals and when they have known each other, actually, people, communities, and cities rent, lend, swap, barter, gift, and share resources, products and services. The difference between now and the past is that now, thanks to digital platforms, they can connect and communicate with all the world, with people coming from different cities, countries and states, on a scale never before possible (McAlpine, 2014).

It's not easy to understand, individuate and define the motivational factors of this so big phenomenon that affect consumers' attitudes and intentions towards sharing economy. But it's interesting to discover the reasons that lead consumers to share taking into consideration that there are extrinsic and intrinsic drivers and monetary and nonmonetary benefits (Gazzola et al., 2019). From the practical point of view, there are several benefits. The sharing economy permits access to a varied range of offers and trying new products before buying them (Hamari et al., 2016). The main reasons that drive participation in sharing economy communities and services are generally characterized by:

- social benefits, connected with the desire to help other people and to know new people;
- environmental benefits, connected with sustainable behavior and the idea of sustaining local organizations (Prothero et al., 2011);
- economic benefits, saving money, and facilitating access to resources.

Using a narrative approach (Beattie, 2014; Ganzevoort, 2012), based on a thorough literature review, the paper has a twofold objective. The first aim of this paper is to clarify what is meant by a sharing economy, in the light of its many applications in both the for-profit and non-profit sectors. In addition, the analysis identifies the reasons that led to the crisis of the linear economy model in favour of the circular model. The paper is divided into paragraphs as follows: after the introductory paragraph (par. 1), the second paragraph consists of a literature review aimed at identifying a definition of the sharing economy. The third paragraph identifies the origins of the sharing economy. Paragraph four sets out the crisis of the linear model, and the final paragraph is devoted to conclusions.

2. A sharing economy with no shared definition

There is not only one definition of sharing economy but there are different terms to define the concept (Codagnone and Martens, 2016). The definitions are characterized by related business and consumption practices; in particular the names are (Gazzola, 2018): collaborative consumption (Botsman and Rogers, 2010), collaborative economy (Vaughan and Hawksworth, 2014), connected

consumption (Dubois et al., 2014; Schor and Fitzmaurice, 2015), access-based consumption (Bardhi and Eckhardt, 2012), commercial sharing systems (Lamberton and Rose, 2012), product-service systems (Mont, 2002), access-based consumption (Bardhi and Eckhardt, 2012).

According to Hamari, Sjöklint, and Ukkonen (2015) the sharing economy is “*the peer-to-peer-based activity of obtaining, giving, or sharing access to goods and services, coordinated through community-based online services*” (Hamari, Sjöklint and Ukkonen, 2015). Sundararajan (2017) considers the sharing economy connected with the recent phenomenon in which ordinary consumers have begun to act as sellers providing services that were once the exclusive province of professional sellers (Narasimhan et al., 2018).

In the report edited by the Observatory on Business Innovation, The European Commission proposed a definition of Sharing Economy as follows: “*to companies that deploy accessibility-based business models for peer-to-peer markets and its user communities. This type of business model is not limited to specific industry sectors, because it can, in theory, act as a broker between consumers, for any consumer-owned product or service*” (Dervojeda et al., 2013). According to Botsman and Rogers (2010), there are other different types of activities that are confused with sharing economy. They consider different ways of the collaborative economy, sharing economy, peer economy, and collaborative consumption. Botsman is one of the main exponents of this phenomenon, she defines the collaborative economy as “*Systems that reinvent traditional market behaviors — renting, lending, swapping, sharing, bartering, gifting — in ways and on a scale not possible before the internet*” (Botsman, 2015). The sharing economy is a specific subset of the collaborative economy, in which underutilized resources, from physical spaces to objects up to professional skills, are shared by some users for a monetary or symbolic benefit, allowing their use more efficient. The peer economy identifies person-to-person markets based on mutual trust which facilitates the sharing and direct exchange of goods or services. Collaborative consumption can be defined as “*an economic model based on sharing, exchanging, trading or renting goods or services which privileges access over ownership*” and it is redefining not only what we consume but also how we do it.

The Sole 24 Ore, one of the most important Italian economic magazine, has described Sharing economy as a new consumption model that satisfy various needs differently than the traditional model (Magnani, 2016). According to Glocal12, an information economic portal, Sharing economy is a new consumption model based on the access and reuse of resources, goods, services, and experiences, that influences the economy, the labor market, and the development of the territory¹. It represents an alternative, but not a substitution, of the traditional economic model, characterized by the acquisition

¹ Glocal12. (2016). *Un nuovo modello economico: la sharing economy* - Glocal12. [online] Available at: <http://www.glocal12.it/nuovo-modello-economico-la-sharing-economy>.

of resources, assets, and services. Rachel Botsman has defined Sharing economy as “*an economic model based on sharing underutilized assets from spaces to skills to stuff for monetary or non-monetary benefits*” (Botsman and Rogers, 2010). The sharing economy has grown remarkably over the last ten years and looks set to scale new heights over the next decade (Marchi and Parekh, 2015). The idea to share, swap, trade, and rent products and services is not new, but through the internet, modern technologies and smartphones, today this phenomenon is grown considerably. If in the past, the sharing and the exchange of assets took place between close individuals and acquaintances, today, thanks to digital platforms, it is possible to connect and communicate with people coming from different cities, countries and states.

It is easy to understand the largeness of the phenomenon that affects different sectors (both the for-profit and non-profit sectors) and industries, from rental solutions for mobility, accommodation, and catering to other sorts of services, such as finance and professional services, this is because it can serve the same needs at a significantly lower price. As emerges from the previous definitions the forms of sharing are very different (bartering, swapping, crowding ...) and it's possible to share from physical goods, to digital objects, passing through spaces, to money, time and skills. Sharing can be synchronous, together with the person who uses the property, or asynchronous, leaving the good to the person the necessary time, and ownership of the exchanged asset can remain with the owner, change owner or be a third party concerning the network of equal, as in bike-sharing. Finally, the value can be determined in cash, in complementary currencies, or equal to zero if the asset is sold free of charge.

In short, it is a model that focuses on the sustainability of the system, in which there are no waste products and in which the materials are constantly reused and reintroduced into the production cycle, in a logic of economy that "regenerates itself". A system, therefore, opposite to that defined as "linear", in which goods have a life cycle which, from the extraction of raw materials, continues with their transformation into finished products used by consumers and ends with disposal and elimination of waste in waste.

The growth model on which companies around the world have relied over the past 250 years, it is that of the Linear Economy. Companies extract raw materials, use them to manufacture the desired products and sell them to as many customers as possible. Customers, to them turn, use and throw away these products once their function is exhausted. This type of economy is based on the principles “Take – Produce – Throw away”. When resources are plentiful, cheap and there is no reason to worry about the impact environmental, the current linear approach is not a cause for concern significant. Unfortunately, however, we are there rapidly approaching a time when the linear model will no longer

be sustainable: the increase in population and consequently in demand will not be able to go hand in hand with the limited availability of many non-renewable resources. In fact nature's regenerative capacities begin to be used beyond their limits. Compounding this, there is the huge volume of waste generated by such a model. In other words, if this trend continues, it will make business as usual more unsustainable.

The principles (Bompan, Brambilla and Cianciullo, 2016) on which the circular economy is based are three:

- The first foundation is to rediscover deposits of discarded matter as source of matter, limiting processing as much as possible. It is so to take everything we throw away and reintroduce it into the cycles of production, exactly as happens in nature, where nothing is wasted.
- The second principle is related to the end of the waste of use of the product (unused value), even before being discarded. We are full of warehouses full of machinery waiting to be disposed of, boxes in the cellar full of clothes with little sentimental value, objects bought and used mostly once. An amortization of assets whose value is not made to bear fruit. Around us is material that lies inert and could be reused to create value.
- The third principle is to stop the premature death of matter. Often we condemn to death perfectly healthy matter and it does not matter if it will be recycled.

In short: The circular economy, therefore, provides for greater ease of repair, recycling, disassembly, and regeneration of products, to feed the technological cycle that extends the life and value of materials and products themselves. Consumption, therefore, also becomes fundamental in the implementation of the new circular model, introducing a new and more active role of the consumer, called to become an active and reactive counterpart.

In terms of business models, innovative solutions in the field of the circular and collaborative economy can be classified according to scientific literature in the following paradigms:

- Systemic Design and Sustainable Inputs - product/service design with a view to systemic design and use of renewable or reuse/recycling inputs.
- Extension of product useful life - modular design and recurring maintenance to extend product life
- Sharing - Sharing of resources, spaces, services and resources, to rethink lifestyles and consumption and create opportunities for interaction and social cohesion through the use of platforms and tools / physical and/or virtual spaces.

- Product as a service - replacement of the sale of a product with the supply of services associated with the product itself to discourage planned obsolescence.

- End-of-life management - minimization of waste of materials through the adoption of a recovery/reuse/regeneration (Upcycling)/recycling approach.

However, there are always recurring elements, and it is possible to describe the sharing economy based on the five elements that characterize it:

- 1) existence of a platform
- 2) presence of a good number of users (critical mass)
- 3) exchanges are made between private individuals with a strong propensity to share
- 4) the subjects do not know each other, they do not meet personally
- 5) enjoyment is limited in time and the use of unused/underused capacities that are put back into circulation
- 6) in some cases many people can use the same service at the same time.

Businesses are starting to understand the importance of trust and are introducing mechanisms of greater transparency in their platforms for verifying the identity of users, which allows them to increase trust and to each build their online reputation. Reputational algorithms calculate the reputation of users, within a community or a portal, collecting the opinions and feedback that the subjects of the community express (after having used a service concerning the service itself and the person who provided it). In this way, each user is associated with a rating that serves to give an approximate measure of the trust that the community places in that user.

A digital reputation-based feedback economy is therefore spreading in which the forms of "capital symbolic", at Pierre Bourdieu, are converted into economic capital because receiving a good reputation will imply a greater flow of earnings or greater savings. The different definitions of sharing economy allow us to frame the phenomenon and its main characteristics, but beyond the proposed definitions it is necessary to remember that it is a process in progress and continuous evolution, it is therefore not possible and not necessary, to consider only one definition of a very complex phenomenon because it's too rigid and the risk is to lose its variety.

3. The origin of sharing economy

In going back to the origins of the concept of circular economy, we do not identify a date and an author in particular, but it is the result of a set of different concepts, ideas and schools of thought that over time have led to circular thinking.

The first thought from which it can be traced is the systemic one, first developed in the '30s, by the converging reflections of organic biologists, psychologists and environmentalists, was then officially recognized as a scientific movement in the years between the '40s and '50s, thanks to the Australian biologist Ludwig Von Bertalanffy (1968), author of the essential work *General Systems Theory*, and the formulation of the concept of "open system". He argued that living organisms are open systems, they survive by constantly consuming an infinite flow of matter and energy from their environment and are characterized by a "flowing balance".

Kenneth Boulding, in 1966, describes the Earth as a "spaceship" that instead of being guided by an astronaut who understands the need to manage the use of limited resources such as waste disposal space, is guided "by the economy of the cowboy" in a projection of boundless and violent spaces. He, therefore, sees the need for mankind to be in a cyclical system to maintain sustainability in his life on earth.

In 1976, the study carried out by the Swiss Walter R. Stahel, "The potential for Substituting Manpower for Energy", was published. In the report, for the first time, we hear about the possibility of a "cyclical" economy, based on a closed-cycle system. The same author in 1982 published a new study "The product-life factor" in which analyzed the positive impacts that the lengthening of the life cycle of a product can bring as the decrease in the use of material from natural sources, the maximization in the use of materials and the consequent generation of waste. It comes defined also as the economy of the performances, which is centered on the maintenance and the exploitation of the supplies, with the revenues obtained from the supply of services rather than from the sale of goods. In recent years, the concept of an "industrial ecosystem" and the hypothesis of the creation of "closed-cycle processes" in which waste is transformed into a resource for new cyclical products has also taken hold in Europe. This is the birth of the so-called industrial ecology, which in analogy with natural systems, has generated the idea of "industrial symbiosis", which means the exchange of energy, resources, or products between companies selected according to location so that they work in close contact to increase not only the competitive advantage but also the effective use of waste and virgin material.

In 1996 university professor John T.Lyle spread the thought of "Regenerative design", that objects must be the result of a regenerative design for which the use of local renewable resources, the pre-

recycling, the eco-design of every part with a view to a better end of life, the sale of services based on a logic of shared ownership of the object, are fundamental aspects of product design.

A year later, Jenine Benyus published "Biomimicry: Innovation Inspired by Nature" which coined the term "biomimesis". She describes biomimicry as the study of the best ideas of nature by imitating processes and mechanisms and then translating them into human design issues.

Later, in 2009, the American designer William McDonough and the German chemist Micheal Braungart published "Cradle to Cradle", in which they defined that the output stream of a production process (by-products and waste) when it is of organic origin should always be reintegrated into the biosphere thanks to a "biological metabolism" while if it is composed of more materials, it should be used in new industrial cycles, technosphere, slowly leading to the point of no more waste, thanks to a "technical metabolism". In 2013 they then publish "The Upcycle: Beyond Sustainability"; starting from the idea that "waste does not exist", they think that the outputs that are put into a new production cycle can do an "upcycling", i.e. have a higher value than the initial one.

In 2010, the report "Blue Economy" written by economist Gunter Pauli is published, which is inspired by the cycle of nutrient cascades in ecosystems. The concept of a cascade system suggests reducing waste and recycling garbage to meet the primary needs of communities, to create a new cash flow from the essential roles played by 7 flows: air, light, water, energy, sound, matter and people.

In June 2009 in the United Kingdom, a non-profit organization called "Ellen McArthur Foundation²" was founded, whose main interest is to deepen, through analysis and study, the theme of the circular economy and in parallel work to increase knowledge and application worldwide this type of economic model. As far as the definition of Circular Economy is concerned, again there is no general and unique definition, but there are different interpretations due also to the diversity of intentions that it sets itself. Some examples by which this model is defined are a "new economic paradigm" (Geissdoerfer et al., 2017), an "industrial model" and a "new business model" (Ghisellini et al., 2016).

During this paper, the definition given by the Ellen McArthur Foundation, which defines the circular economy as follows, will be taken into consideration: *"The concept is characterized, more than defined, as an economy that is restorative and regenerative by design and aims to keep products, components, and materials at their highest utility and value at all times, distinguishing between technical and biological cycles. It is conceived as a continuous positive development cycle that preserves and enhances natural capital, optimizes resource yields, and minimizes system risks by managing finite stocks and renewable flows. It works effectively at every scale. This economic model*

² <https://www.ellenmacarthurfoundation.org>

4. The crises of the linear economy

The last century is distinguished from the previous ones by the use of a linear economic model, in which production follows a one-way trend starting from the collection of raw materials to the disposal of obsolete products as waste.

From about 1910 onwards there is the birth of the so-called mass production, characterized by a standardized production and an unskilled labor force that must perform basic and monotonous actions. The affirmation of this production is facilitated mainly by two factors: the first is related to the increasing economic wealth of the population. The second one regards instead the intuition from the industries of the fact that the quantity of the products sold and the unit cost of the good are inversely proportional, in fact to the increase of the first ones the unit costs decrease.

It is therefore inevitable that we try as much as possible to put products on the market so that we can reduce production costs and create profits. All this is facilitated by technological innovation, which leads products to obsolescence in less time to stimulate consumers to buy again.

The model of economic growth thus becomes characterized by the thought of producing and consuming, thanks also to the help of advertising that allows not to decrease demand by creating new desires in consumers and products are replaced not because they are broken, but because of their planned obsolescence.

During this period there has been a lowering of the prices of resources which has thus facilitated economic development in developing countries. Costing little resources, not having great obstacles in finding them, having a limited cost for the disposal of waste and having an approach oriented to maximizing profit, has come to the creation of what is the current system of waste of raw materials. This market economy characterized by the continuous use of materials and waste of end products, besides being one of the major causes of pollution and subsequent global warming, is also extremely inefficient and expensive.

The linear model is also called the "take-make-dispose" model, characterized by the fact that the process follows a single direction: the material is extracted, processed to create a product, it is sold and finally waste is created to be disposed of when the object is no longer working.

This type of production, however, involves a disproportionate use of resources in different forms, one of which concerns the creation of waste during the production process, from the extraction of the raw material to the finished product. The food field is one of the most subject markets. It is believed that almost one-third of the food produced annually for consumption worldwide is lost along the entire

supply chain. Waste can arise at every stage of production from the moment of harvesting, due to the presence of parasites, at the moment of production due to a lack of efficiency, or at the retailer because the food is not kept in suitable conditions or because it is close to exceeding the valid date for consumption.

Another limit linked to the take-make-dispose model concerns the continuous global extraction of natural resources, which continues to grow. It is estimated that the total extraction of resources will be about 80 billion tons in 2020 and over 100 billion tons in 2030, more than double in 30 years.

The consequences of this increase are not few: first, it is increasingly common for minerals to be found in isolated locations and this leads to higher risks and more intensive use of energy for extraction which will inevitably lead to higher costs.

In fact, since the beginning of the century, prices for natural resources have grown exponentially as well as being characterized by strong volatility, which in the long run can lead to moderate economic growth and increased risk exposure on the part of companies. To aggravate the situation, in addition to the increase in prices of natural resources, a study³ carried out by the company McKinsey reports that in the last 15 years there has also been a drastic increase in commodity⁴ prices, particularly in: food, non-food agricultural goods, metals and energy.

In addition, it must be taken into account that, since land resources are not unlimited, there are more and more constraints related to environmental protection and a greater commitment by governments to implement regulations to reduce and assess negative externalities.

Moreover, in the current era, the global population is drastically decreasing the so-called natural capital⁵, consuming in a non-proportional way concerning what terrestrial ecosystems can offer sustainably, having repercussions on the productivity of economies and the creation of world wealth. Another factor to consider is the demographic increase expected for the next few years; the world population continues to grow: in 1927 we were about 2 billion in 1927, currently, we are about 7.7 billion, and in 2050 we expect to reach 9.7 billion people, reaching 11 billion in 2100.

In addition to the expected population increase, according to an estimate made by the Ellen McArthur Foundation, it is expected that by 2030 nearly 5 billion people will join the middle-class consumers automatically triggering an increase in demand for goods. Population growth and the rise in the middle class will lead to increased consumption of energy, metals and minerals, increasing the amount of waste generated by 70%. It is estimated that every year only one inhabitant can consume

³ McKinsey Global Institute "Resource revolution: Tracking global commodity markets", 2013

⁴ The term Commodity refers to raw materials, i.e. that particular category of goods that is traded on the market without quality differences. It is more specifically the so-called fungible goods, which are therefore replaceable in the satisfaction of the need to which they are connected, regardless of who produces them.

⁵ Natural capital should be understood as the world's total stock of natural assets including geology, soil, air, water and all living organisms.

11 thousand kilos of resources, of which only two-thirds are reused or recycled and every year the planet's capacity to absorb and dispose of waste decreases.

These estimates have consequences for the environment linked in particular to the need for water, food, transport and energy. According to an analysis carried out by the Organization for Economic Cooperation and Development, the demand for energy over the next 30 years will increase by 80% and it is assumed that more than half of the world's population will move to urban areas by increasing the transport and industrial processes sector and this will lead to increased GHG emissions (OECD, 2012)⁶.

Last but not least, we must take into account the inevitable increase in demand for water. In the last hundred years, global water demand has increased sixfold and continues to grow at the rate of one percent each year. This growth, together with problems related to climate change and pollution of available supplies, will lead to a scarcity of the resource and more than 5 billion people by 2050 to problems of access to water itself (United Nations, 2018)⁷.

Given all the factors listed, it can be concluded that the linear system is unsustainable, being a waste of resources and having a huge environmental impact that affects the entire production process: from the collection of raw materials to the disposal of waste there is interaction with the surrounding environment. Such a model cannot last long in a world where natural resources are increasingly limited. As Ellen McArthur said during an interview⁸, the linear economy model is at the end of the line. A change in the production system is necessary, both upstream and downstream, to manage the available resources more sustainably.

5. Conclusions

As we have seen, the linear model is no longer sustainable and there is a need to start a change both at the beginning of the production chain, trying to increase the production efficiency of natural resources and reducing inputs as much as possible, and downstream with a change in the output process and avoiding unnecessary waste, trying to give a new life to the products where possible. In addition, it is essential to push towards an energy transition, making greater use of renewable energy (e.g. wind and solar), thus abandoning the use of energy from fossil fuels. The decarbonization⁹ of

⁶ <https://www.oecd.org>

⁷ "Making Every Drop Count: An Agenda for Water Action" by the United Nations and the World Bank on the state of the world's water, 2008.

⁸ https://www.arpae.it/cms3/documenti/cerca_doc/ecoscienza/ecoscienza2017_2/MacArthur_es2017_2.pdf

⁹ Decarbonization is a process that involves the use as energy sources of elements containing fewer and fewer carbon atoms, and their replacement with renewable sources so as to decrease more and more the release of CO₂ into the atmosphere.

the economy is a turning point to decrease the release of Co₂ into the atmosphere and consequently curb the phenomenon of global warming, to the benefit of the survival of ecosystems.

All this can be implemented through a transition to a circular economic model, aimed at creating value and using resources more efficiently to reduce the environmental impact.

In addition to the environmental problems, the companies themselves realized how the take-make-dispose system could increase their risk exposure, on the one hand, due to the increase and volatility of commodity prices and on the other hand due to an increasingly aggressive market and less predictable demand.

The transition to this model is made possible thanks to innovation in the field of technology (for example, easier traceability of products or more efficient logistical configurations) and the consequent progress in the company.

The crisis of the linear model of economy is linked to the need to adopt a frugal approach to growth. In this context, recent studies emphasize the concept of frugal innovation, understood as the ability to "do more with less" (Jaideep and Navi, 2016). As mentioned, consumers demand products at reasonable prices but, at the same time, same, sustainable and high quality. Users in the world are becoming more and more aware not only of the value of individual products, but of values. They are more worrying than in the past of ecological degradation of deterioration natural resources and social balance. Despite the increasingly limited budget, these consumers expect products to be of high quality and sustainable. More importantly, they pay attention to quality, rather than quantity.

Frugal innovation, therefore, must be more than a strategy, it is a new mentality that sees limited resources as an opportunity; is a means to increase the quality of life. Frugality must be a way to increase, not to decrease, one's quality of life. This translates into an improvement in the more excessive aspects of consumption and of the waste that characterized the twentieth century (Hossain and Simula, 2013).

This economic model is not as intense as an opposite system to the linear one, but it is an approach that develops as a consequence of the crisis, examined above, of the linear one; in particular, it tries to transform some disadvantages of the latter into possible strengths. An example is to strengthen the cycles of use of materials, thus supporting economic development, but relying on resources that have already carried out a production cycle instead of using material from scratch each time. One of the cornerstones of circular thinking is to rethink the notion of "waste" which must, where possible, be transformed into a new resource capable of creating new value. The circular model takes the example of nature itself, in which there is no landfill, in fact, everything that is considered waste for one species will be a source of nourishment for another.

The circular economy can be said to be based, not on an idea of scarcity, but on abundance, in terms of the exploitation of resources, value creation and increased resilience in economic systems. To be competitive today it is necessary to change the thinking behind production by trying to extract the maximum value that each resource has at its disposal, avoiding creating waste.

For it to be realized, it needs social and economic instruments that regulate its functioning as well as the sensitization of the entire social system. Over the years, social, political and economic projects aimed at its implementation have become more and more established, with targeted actions both at the level of the individual and concerning the entire globe.

At the level of the individual consumer, there has been an increase in the propensity to commit to the objectives of the circular economy. According to a study¹⁰ conducted by the European Commission, 85% of EU retailers surveyed report an increase in sales of sustainable products in the last five years, while 92% of EU retailers surveyed predict an increase in sales of sustainable products over the next five years. At the Italian level, the same study shows that 84% of the retailers interviewed found an increase in sales of sustainable products, in all sales sectors, and 90% of them expect further increases in the future. This change in consumer behavior is one of the key points that has led to the growing popularity of the circular economy. Consumers themselves are the first to have accepted over the years alternative business models to those already in existence, which allow them, instead of owning the products, to become users by accessing their services; examples are rental methods, sharing platforms or the return function thanks to technological innovation. This change has been noticed by retailers themselves, who have seen an ever-increasing interest on the part of consumers in the issues of circularity, which has prompted brand owners to commit themselves to what are the objectives of the circular economy.

The problem of defining the sharing economy, as pointed out several times, is still open and probably difficult to solve as it involves different topics and different categories of actors (Herbert and Collin-Lachaud, 2017). The issue could be further investigated, also by considering other cultures and other societies, such as the Islamic one (Campra et al., 2021).

The transition to this circular model has become of fundamental importance and one can no longer afford to procrastinate. A real example of this need can be offered by Overshoot day¹¹, the day on which humanity consumes all the resources produced by the planet throughout the year. The first year in which this day was included was 1971, and the day fell on December 21; since then, especially in recent years, the date has always been brought forward. This is an example that allows us to highlight the imminent need to lead a sustainable lifestyle.

¹⁰ European Commission, International Trade Centre “The European union market for sustainable products”, 2019

¹¹ <https://www.overshootday.org>

References

- Bardhi, F., & Eckhardt, G. M. (2012). Access-based consumption: The case of car sharing. *Journal of consumer research*, 39(4), 881-898.
- Beattie, V. (2014). Accounting narratives and the narrative turn in accounting research: Issues, theory, methodology, methods and a research framework. *The British Accounting Review*, 46(2), 111-134.
- Belk, R. (2010). Sharing. *Journal of consumer research*, 36(5), 715-734.
- Benyus, J. M. (1997). Biomimicry: Innovation inspired by nature.
- Bertalanffy, L. V. (1968). *General system theory: Foundations, development, applications*. G. Braziller.
- Bompan E., Brambilla I. N., Cianciullo A., (2016). *Che cos'è l'economia circolare*, San Giuliano Milanese (MI), EDIZIONI AMBIENTE.
- Botsman, R., & Rogers, R. (2010). What's mine is yours. *The rise of collaborative consumption*, 1.
- Botsman, R. (2015). *Where does loyalty lie in the Collaborative Economy? - Collaborative Consumption*.
- Boulding, K. E. (1966). The Economics of the Coming Spaceship Earth. In *Environmental Quality in a Growing Economy*, edited by Henry Jarrett, pp. 3-14. Baltimore, MD: Johns Hopkins University Press, 1966.
- Campra, M., Brescia, V., Jafari Sadeghi, V., & Calandra, D. (2021). Islamic countries and Maqasid al-Shariah towards the circular economy: The Dubai case study. *European Journal of Islamic Finance*, 17, 1-10.
- Cheng, M. (2016). Sharing economy: A review and agenda for future research. *International Journal of Hospitality Management*, 57, 60-70.
- Codagnone, C., & Martens, B. (2016). Scoping the sharing economy: Origins, definitions, impact and regulatory issues. Cristiano Codagnone and Bertin Martens (2016). *Scoping the Sharing Economy: Origins, Definitions, Impact and Regulatory Issues*. Institute for Prospective Technological Studies Digital Economy Working Paper, 1.
- Dervojeda, K., Verzijl, D., Nagtegaal, F., Lengton, M., Rouwmaat, E., Monfardini, E., Frideres, L. (2013), *The Sharing Economy, Accessibility-Based Business Models for Peer-to-Peer Markets*, Case study no. 12, European Commission, Directorate-General for Enterprise and Industry, Brussels
- Dubois, E. A., Schor, J., & Carfagna, L. (2014). New cultures of connection in a Boston time bank. *Sustainable lifestyles and the quest for plentitude: Case studies of the new economy*, 95-124.
- Galbreth, M. R., Ghosh, B., & Shor, M. (2012). Social sharing of information goods: Implications for pricing and profits. *Marketing Science*, 31(4), 603-620.
- Ganzevoort, R. R. (2012). Narrative approaches. *The Wiley-Blackwell companion to practical theology*, 214-223.
- Gazzola, P. (2018). Behind the sharing economy: innovation and dynamic capability. In *Knowledge Management in the Sharing Economy* (pp. 75-94). Springer, Cham.
- Gazzola, P., Vățămănescu, E. M., Andrei, A. G., & Marrapodi, C. (2019). Users' motivations to participate in the sharing economy: Moving from profits toward sustainable development. *Corporate Social Responsibility and Environmental Management*, 26(4), 741-751.
- Geissdoerfer, M., Savaget, P., Bocken, N. M., & Hultink, E. J. (2017). The Circular Economy—A new sustainability paradigm?. *Journal of cleaner production*, 143, 757-768.

- Ghisellini, P., Cialani, C., & Ulgiati, S. (2016). A review on circular economy: the expected transition to a balanced interplay of environmental and economic systems. *Journal of Cleaner production*, 114, 11-32.
- Görög, G. (2018). The Definitions of Sharing Economy: A Systematic Literature Review. *Management (18544223)*, 13(2).
- Hamari, J., Sjöklint, M., & Ukkonen, A. (2016). The sharing economy: Why people participate in collaborative consumption. *Journal of the association for information science and technology*, 67(9), 2047-2059.
- Heinrichs, H. (2013). Sharing economy: a potential new pathway to sustainability. *GAIA-Ecological Perspectives for Science and Society*, 22(4), 228-231.
- Herbert, M., & Collin-Lachaud, I. (2017). Collaborative practices and consumerist habitus: An analysis of the transformative mechanisms of collaborative consumption. *Recherche et Applications en Marketing (English Edition)*, 32(1), 40-60.
- Hossain, M. (2020). Sharing economy: A comprehensive literature review. *International Journal of Hospitality Management*, 87, 102470.
- Hossain, M., & Simula, H. (2013). Frugal Innovation and Reverse Innovation: Imperative in the Global Business. *British Academy of Management*.
- Jaideep, P., Navi, R. (2016). *Frugal Innovation – Come fare di più con meno*. Rubbettino Editore, Soveria Mannelli.
- Lamberton, C. P., & Rose, R. L. (2012). When is ours better than mine? A framework for understanding and altering participation in commercial sharing systems. *Journal of marketing*, 76(4), 109-125.
- Lyle, J. T. (1996). *Regenerative design for sustainable development*. John Wiley & Sons.
- Magnani, M. (2016). Con la sharing economy rivoluzione a 360 gradi. *Il Sole 24 Ore*, 20.
- Marchi, A., & Parekh, E. J. (2015). How the sharing economy can make its case. *McKinsey Quarterly*, 3.
- McAlpine, T. (2014). The sharing economy. *Credit Union Management*, 37(12), 40-41.
- Braungart, M., & McDonough, W. (2009). *Cradle to cradle*. Random House.
- Mont, O. K. (2002). Clarifying the concept of product–service system. *Journal of cleaner production*, 10(3), 237-245.
- Narasimhan, C., Papatla, P., Jiang, B., Kopalle, P. K., Messinger, P. R., Moorthy, S., ... & Zhu, T. (2018). Sharing economy: Review of current research and future directions. *Customer needs and solutions*, 5(1), 93-106.
- Pauli, G. A. (2010). *The blue economy: 10 years, 100 innovations, 100 million jobs*. Paradigm publications.
- Prothero, A., Dobscha, S., Freund, J., Kilbourne, W. E., Luchs, M. G., Ozanne, L. K., & Thøgersen, J. (2011). Sustainable consumption: Opportunities for consumer research and public policy. *Journal of Public Policy & Marketing*, 30(1), 31-38.
- Ranchordás, S. (2015). Does sharing mean caring: Regulating innovation in the sharing economy. *Minn. JL Sci. & Tech.*, 16, 413.
- Schor, J. B., & Fitzmaurice, C. J. (2015). Collaborating and connecting: the emergence of the sharing economy. In *Handbook of research on sustainable consumption* (pp. 410-425). Edward Elgar Publishing.
- Stahel, W. R. (1982). The product life factor. *An Inquiry into the Nature of Sustainable Societies: The Role of the Private Sector* (Series: 1982 Mitchell Prize Papers), NARC, 74-96.
- Sundararajan, A. (2017). *The sharing economy: The end of employment and the rise of crowd-based capitalism*. MIT press.
- Vaughan, R., & Hawksworth, J. (2014). *The sharing economy: How will it disrupt your business*. Megatrends: The collisions. PwC Presentation.