

## **MARKET OPPORTUNITIES FOR DEPLOYING ECO-INNOVATIVE ACTIONS: FROM THE ANALYSIS TO THE DEVELOPMENT OF A BUSINESS MODEL**

OPORTUNIDADES DE MERCADO PARA A IMPLEMENTAÇÃO DE AÇÕES ECO-  
INOVADORAS: DA ANÁLISE AO DESENVOLVIMENTO DE UM MODELO DE NEGÓCIO.  
OPORTUNIDADES DE MERCADO PARA LA IMPLEMENTATION DE ACCIONES ECO-  
INNOVADORAS: DEL ANÁLISIS AL DESARROLLO DE UN MODELO DE NEGOCIO

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### **ABSTRACT**

Companies began to be concerned about environment and tried to reduce their environmental impact decades ago when Governments started to regulate environmental protection through environmental legislation. The way that companies deal with environment has changed dramatically since then. Nowadays, corporations cannot just accomplish regulations, they need to embrace sustainability. Customers are provided with more information and are more concerned about the environmental impact of the products and services they consume. These reasons are generating disruptive business models and business trends that have sustainability in their core business (e.g. circular economy). This work has the objective to identify the environmental issues that companies are facing currently, how they are dealing with them and the analysis of the new business trends that are trying to solve the issues which are still pending. For carrying out this work it has been necessary to perform a state of art about how corporations deal with environmental protection and how new companies and business processes can reduce environmental degradation. Results show how these new disruptive business models and new business processes can lead to a further reduction of the environmental degradation through the integration of the sustainability into the existing companies and the interaction with new companies that have as a main objective improving the quality of the environment.

*Keywords: Sustainability, sustainable business models, environment.*

### **RESUMO**

As empresas tomaram consciência do meio ambiente e tentaram reduzir o seu impacto ambiental há décadas, quando os governos implementaram medidas de proteção ambiental através da legislação ambiental. A atitude das empresas relativamente ao meio ambiente mudou drasticamente. Atualmente, atender apenas às normas ambientais não é suficiente, as empresas têm que procurar ser sustentáveis. O acesso à informação faz com que os clientes se preocupem com o impacto ambiental de produtos e serviços que utilizam. Isto origina a criação de modelos de negócios disruptivos, que têm a sustentabilidade como seu negócio principal (e.g. economia circular). Este trabalho identifica os problemas ambientais de empresas, como solucionam estes problemas, e analisa ainda novas tendências comerciais que buscam soluções para problemas ambientais ainda pendentes. Para obter esta análise, foi feita uma pesquisa sobre as ações de empresas atuais com respeito ao meio ambiente e como empresas e negócios novos podem prevenir a degradação ambiental. Os resultados indicam como esses novos modelos de negócios disruptivos e novas práticas comerciais podem

levar a uma redução na degradação ambiental através da integração da sustentabilidade em empresas existentes e a integração com novas empresas que têm como principal objetivo melhorar a qualidade do meio ambiente.

*Palavras-chaves: Sustentabilidade, modelos de negócios sustentáveis, meio ambiente.*

## RESUMEN

Las empresas privadas empezaron a preocuparse por el medio ambiente e iniciaron sus esfuerzos para reducir su impacto ambiental hace décadas cuando los Gobiernos empezaron a regular la protección ambiental a través de la legislación ambiental. La manera en que las empresas lidian con el medio ambiente ha cambiado significativamente desde entonces. Actualmente las organizaciones no pueden simplemente cumplir la normativa, es necesario adoptar la sostenibilidad. Los clientes disponen de gran cantidad de información y están muy concienciados con el impacto ambiental que producen los productos y servicios que consumen. Estas razones están dando lugar a modelos de negocio disruptivos y tendencias de negocio que sitúan a la sostenibilidad en su ‘core business’ (por ejemplo, la economía circular). Este artículo tiene como objetivo identificar los problemas ambientales a los que se enfrentan las empresas en la actualidad, cómo están lidiando con ellos y llevar a cabo un análisis de las nuevas tendencias de negocio que están intentando resolver estos problemas ambientales. Para poder realizar este trabajo ha sido necesario establecer un estado del arte sobre cómo las empresas desarrollan su protección ambiental y como las nuevas empresas y procesos pueden reducir el impacto ambiental. Los resultados muestran como estos nuevos modelos de negocio disruptivos y los nuevos procesos pueden dar lugar a una futura reducción de la degradación ambiental a través de la integración de la sostenibilidad en las empresas existentes y la interacción con nuevas compañías que tienen como objetivo principal mejorar la calidad del medio ambiente.

*Palabras clave: Sostenibilidad, modelos de negocio sostenibles, medio ambiente.*

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## **INTRODUCTION**

Nowadays, business world is coming through a dramatic transformation. Environmental awareness of the society and sustainability are reshaping the existing business models even generating new business models (Schaltegger et al., 2006).

Environmental regulation is becoming more restrictive, in addition, companies now need to protect their corporative image, satisfying the stakeholders' needs; from employees to investors and customers; and developing business opportunities environmentally friendly if they want to be competitive in their markets or even in new markets (Jakobsen and Clausen, 2016, Cheng et al., 2016, Tsai and Liao, 2017).

However, many reports demonstrate that companies that embrace sustainability in their business model become more competitive, which allow them to surpass over their competitors, therefore, they report more benefits (Porter and Van der Linde, 1995).

The main purpose of this paper is to show how the way that companies deal with environment has evolved during last years until now. It will show which environmental problems are facing companies, the way they deal with them and the new sustainable business models that are currently coming out.

## **1 LEGISLATION AND NEW TRENDS**

Currently, corporations that are looking to be competitive cannot avoid compliance with the regulations. Governments started to regulate environmental protection more than 30 years ago in industrialized countries, the environmental legal system of these countries has grown with the aim to reduce environmental impact produced by industries due to the pressure from the society (customers, NGO's, Public Administrations, etc.).

Porter and Linde (1995) performed a study with industrial sectors that are pressed by a complex environmental regulation: printing inks, refrigerators, electronics manufacturing, paint and coatings, dry cell batteries and pulp and paper.

The authors concluded that is possible to minimize the costs, even eliminate them, adopting environmental regulations through a well-managed innovation. Moreover, innovation will reduce or eliminate the environmental regulation costs and will bring competitive advantage to the company.

According to them, making environmental improvements will benefit resource productivity, and environmental legislation will force companies to perform more innovative processes, but managing properly this innovation can lead to improve the product quality, reduce its environmental impact and also, increase the sales.

In addition, in order to show the impact of the sustainability among the society, there is a survey (Accenture, 2013) that states that 80% of the CEOs think that sustainability could be a way for improving their competitive advantage.

## **2. MARKET IMPERFECTIONS**

According to Cohen and Winn (2007) most of the environmental issues that companies need to face come from four types of market externalities:

- Firms are not perfectly efficient.
- Externalities exist.
- Pricing mechanisms work imperfectly.
- Information is not perfectly distributed.

Nevertheless, those market externalities or market imperfections can lead to new business opportunities. So, externalities create entrepreneurial opportunities and existing companies, if they identify and exploit these opportunities can improve their market performance and launch product and services more sustainable which will be also more competitive.

## **3 ENVIRONMENTAL ENTREPRENEURSHIP**

According to Dean and McMullen (2007) entrepreneurship can help to solve environmental problems through the exploitation of opportunities inherent in environmentally relevant market failures and thereby help move global economic systems toward sustainability. The growing desire of market actors for the cessation of environmentally degrading activities represents opportunity for entrepreneurial action and that exploitation of these opportunities by entrepreneurs can lead to the enhancement of ecological sustainability.

Environmental economics states that the environmental degradation comes from the market imperfections (Cropper and Oates, 1992; Dorfman, 1993). Literature about entrepreneurship argues that business opportunities come from market imperfection (Dean and McMullen, 2002). Therefore, it is logical to conclude that environmental externalities and market failures will bring opportunities for getting economic reward minimizing environmental degradation.

In brief, this means that market failures that are leading to environmental degradation will create entrepreneurial opportunities that well managed will generate profits and will improve the people's quality of life. Taking in account that a market failure consists in a need pending to be solved that people will pay for solving (if there is a cost-effective solution), there are so many niches that entrepreneurs can get profits from. And, which is also important, reducing the environmental degradation entrepreneurs are collaborating for achieving a more sustainable and social society.

Therefore, environmental or sustainable entrepreneurship can get profit through the exploitation of market imperfections (Kirzner, 1985, 1997). Entrepreneurs can design and develop innovative

business models for minimizing the environmental externalities, so they can help to improve our environment and make economy grow.

Environmental entrepreneurship and sustainable entrepreneurship have in common that both consists in the process of identifying, analysing and taking advantage of economic opportunities, but the difference lies on that environmental entrepreneurship takes advantage of opportunities present in environmentally relevant market failures, however, sustainable entrepreneurship takes advantage also in the market failures diminish from sustainability, including those ones environmentally relevant. Accordingly, environmental entrepreneurship is considered as a part of sustainable entrepreneurship.

This paper has the following objectives:

- Identification of the environmental issues that companies are facing currently.
- Detection environmental practices that companies are carrying out in order to solve the environmental issues.
- Analysis of the new business trends related with sustainability.
- Development of potential new business trends.

## **4. METHODOLOGY**

For carrying out this paper has been necessary to perform scientific literature review in a state of art perspective, nevertheless, as this is a very innovative topic which is coming out currently, there have been a search in publications from specialized private companies.

Initially, for developing this work it has been performed a linear structure that intends to show to the reader the reasons that enhance CEO's to embed sustainability, how they are doing it, the new business opportunities that are coming out related with sustainability and the new business trends that can appear.

### **4.1 INFORMATION RETRIEVING**

For developing the linear model, it has been required to retrieve information from the scientific literature about the reasons that companies need to adapt their business processes in order to reduce the environmental impact, and how these reasons have led to the creation of new business models and the adaption of existing business models for achieving an environmental impact reduction.

Nevertheless, one of the most important points that has been essential for companies to enhance a more sustainable way to make business has been the proliferation of environmental legislation. So, there have been a research through the Spanish legislation via reports written by governmental organizations and employers organizations that group the laws depending on the type of environmental protection they pursue.

Then, the data to analyse how companies are adapting to new sustainable trends and which kind of practices they are carrying on has been taken from recent scientific literature.

However, the information regarding environmental issues that are still pending to be solved and the new sustainable business models that are coming out very recent, it has been necessary to take the data from reports published by Foundations, consultancies and public organizations.

## 4.2 EXTRACTION OF RESULTS

This information has brought different types of data that crossing them can show interesting results. So, combining the information about the environmental issues which are still pending to be solved with the new business models that are coming out, it is possible to extract which needs are solving these new companies and start-ups.

In addition, the analysis of the market niches and business trends as given as a result a possible future scenario for sustainable business models and processes.

## 5. FINDINGS OF ENVIRONMENTAL MATTERS PENDING TO BE SOLVED OR IMPROVED.

Currently, due to the more restrictive environmental legislation and the customer awareness, there are some trends that are generating new kinds of business models which has the sustainability integrated into their core business.

As this is a recent field of study, it is hard to find scientific literature about this topic. So, the most reliable sources for retrieving this data are reports and papers published by consultancy companies and private Foundations.

There are numerous environmental issues still pending to be solved (Figure 1).

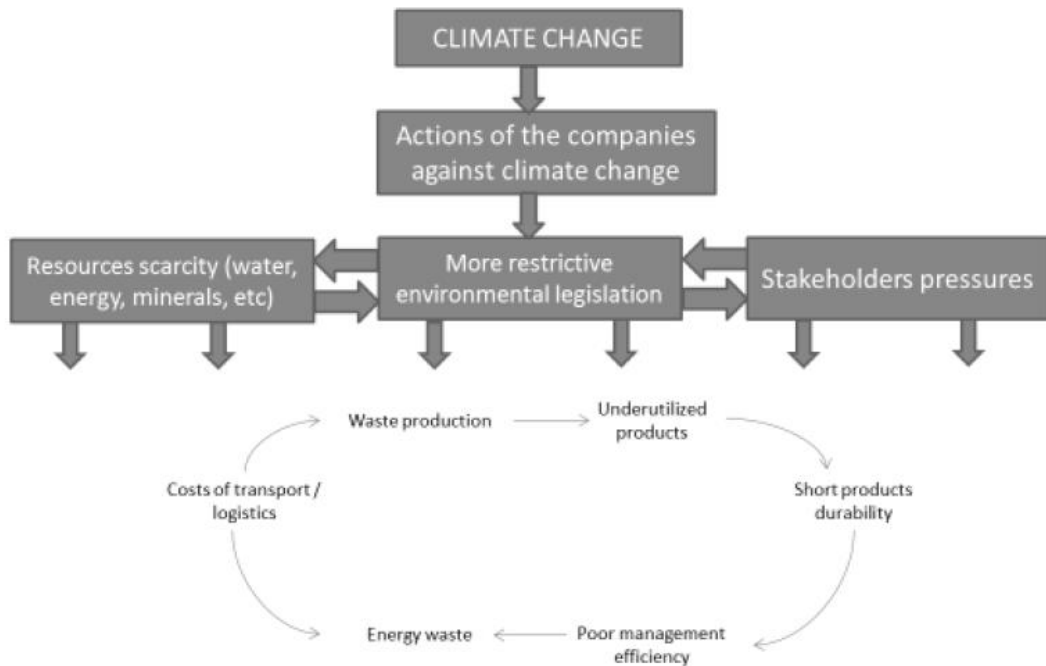


Figure 1: Drawing that highlights the most common environmental issues that companies are facing (Perez-Sanchez et al., 2003).

The following figure shows the most important environmental matters that companies are still trying to solve or improve obtained from a study performed by (Bonini and Görner, 2011) (Figure 2):

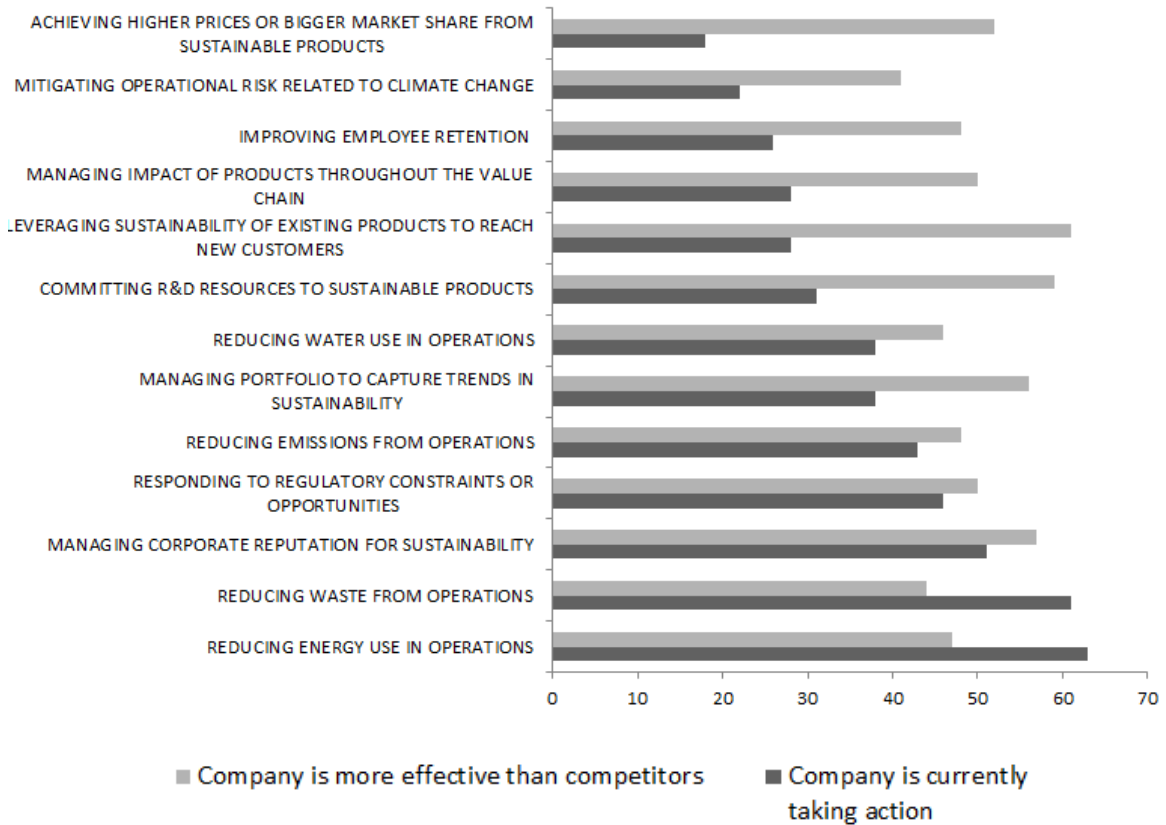


Figure 2: Results from a poll about the environmental issues pending to be solved (Bonini and Görner, 2011). Data shown in percentage. Poll made with 2.956 respondents. Respondents who answered 'don't know' or 'none of the above' are not shown.

Regarding to these results, the areas where most executives say their companies are taking action are reducing energy usage and reducing waste in operations, ahead of reputation management. Fewer respondents report that their companies are leveraging the sustainability of existing products to find new growth or committing R&D resources to bring sustainable products to market. Yet both of these are important ways sustainability can drive growth: organizations that act in these areas are the likeliest to say they are more effective than their competitors at managing any other sustainability initiatives. These results suggest that companies may be better able to find a competitive advantage when pursuing growth activities than operational activities.

## 6. EVOLUTION OF THE ENVIRONMENTAL MANAGEMENT

Some decades ago corporations had to adapt their processes to environmental regulation that Public Administration started to establish. Some years later, international organizations created certificates like the ISO's (International Standard Organization). Though, there are some companies that have gone one step beyond regarding environmental protection and have developed innovative practices which have led to changes on their business processes (Leitner et al., 2010). Currently, there are coming out new business models and business trends that are helping to fight against climate change through disruptive solutions (Pujari, 2006). Likewise, society is becoming more concerned about environment and is changing its mind to sustainable consuming trends, so the combination between the mind change and new business trends will give rise to a power evolution in our economy (Revell et al., 2010).

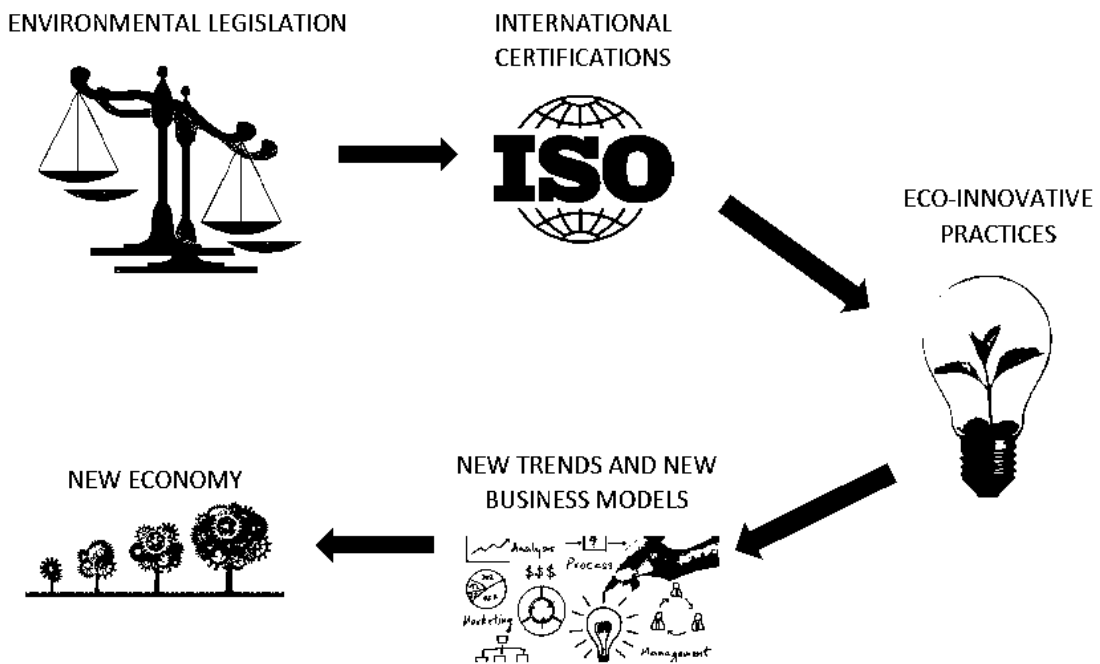


Figure 3: Diagram that shows the evolution of the environmental management performed by corporations (Leitner et al., 2010; Pujari, 2006; Revell, et al., 2010).



However, companies still have a long list of environmental issues that have to face, for instance, waste recycling or energy saving. In addition, as society is changing its mind, there are coming out other problems like the eco-innovative products or the reduction of the environmental impact through the value chain (Xavier et al., 2017).

There are new business models and business trends which have as objective solving the environmental issues, called sustainable business models. The following list shows the most important sustainable business models and real examples of existing companies (Secretaría Técnica del Laboratorio de Ecoinnovación, 2016):

- Circular economy.
- Sustainable production.
- Servitization.
- Sustainable consumption.

## 6.1 CIRCULAR ECONOMY

The concept of ‘waste’ is eliminated by turning waste streams into useful and valuable input to other production and making better use of under-utilised capacity. Figure 7 shows the ‘create value from waste’ archetype (Bocken et al, 2014).

It seeks to identify and create new value from what is currently perceived as waste. This approach has similarities with the natural world, where the concept of waste does not really exist because all ‘waste’ products become food stock for another natural kingdom (Boons & Lambert, 2002).

This trend seeks to reduce environmental impact of industry by reducing the continuous demand for resources, by closing material loops and using waste streams as useful inputs to other products and processes, so reducing demand for primary extraction and resource depletion, and reducing waste to landfill and emissions.

In doing so, it contributes towards improved resource efficiency. However, to achieve greater system-level impact, the speed of new product introductions needs to be reduced.

E.g. Some apparel companies are taking back used clothes from customers in order to recover the fabrics to use them in new clothes.

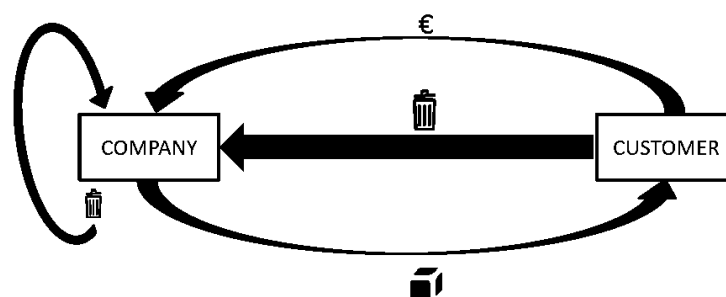


Figure 4. Diagram of a business model based on circular economy (Secretaría Técnica del Laboratorio de Ecoinnovación, 2016).

Sustainable production aims to reduce environmental impacts and increase business resilience by addressing resource constraints ‘limits to growth’ associated with non-renewable resources and current production systems.

It seeks to reduce environmental impact of industry by substitution with renewable resources and natural processes to create significantly more environmentally benign industrial processes. It contributes to the wider need of reducing, the use of the planet’s finite resource supply and reducing unwanted waste and pollution.

E.g. Supermarkets that only offer ecologic products produced through sustainable processes.

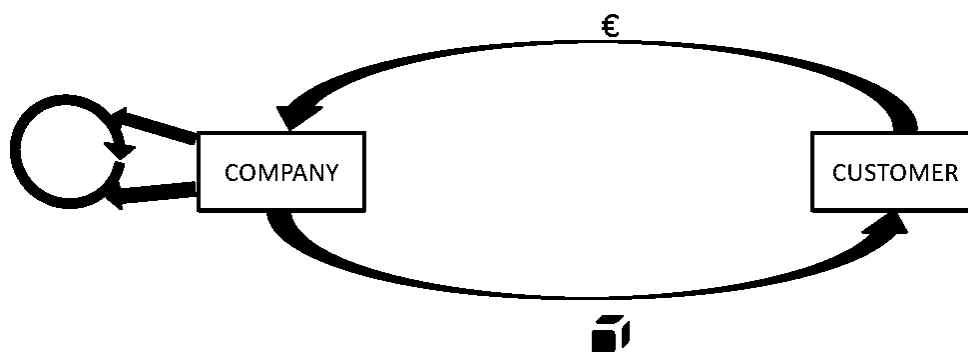


Figure 5. Diagram of a business model based on sustainable production (Secretaría Técnica del Laboratorio de Ecoinnovación, 2016).

### 6.3 SERVICITIZATION

Servitization provides services that satisfy users’ needs without having to own physical products.

This kind of business trend is based on the way that companies shift the business model from offering a manufactured product to offering a combination of products and services. The product is still important, but customer experience is fundamental to the offering or value proposition. Product service systems span a continuum from mainly product through to mainly service content (Mont & Tukker, 2006).

This is about shifting substantially towards the pure service model that is, delivering functionality on a pay-per-use basis, rather than selling ownership of a product. In doing so, this may fundamentally change the material throughput requirements of the industrial system. The literature suggests the following potential benefits of such an approach, which result from better alignment of the customer’s (and societies) needs with that of the manufacturer:

- Breaks the link between profit and production volume (but probably not usage volume).
- Can reduce resource consumption.
- Motivation and opportunity to deal with through-life and end-of-life issues as the manufacturer retains ownership of assets.

- Enhanced efficiency in use.
- Enhanced product longevity/durability.
- Reuse of materials.

This trend has the potential to change consumption patterns, in particular by reducing the need for product ownership. In addition, it may incentivise manufacturers to develop products that last longer and design for upgradability and reparability, potentially reducing resource use. However, literature and practice indicate that servitized systems and models are not inherently more eco-efficient (Mont & Tukker, 2006) and consumers are unsure whether they will live up to their expectations (Catulli, 2012). Careful attention to detail is required to realise the benefits such business model innovation generally needs to be married with efficiency and value in waste innovations. In addition, to achieve greater system-level impact, product and service usage volume would also need to be mitigated.

E.g. Companies based on sharing, like car sharing. Users offer their cars (product) for taking people from one point to another (service).

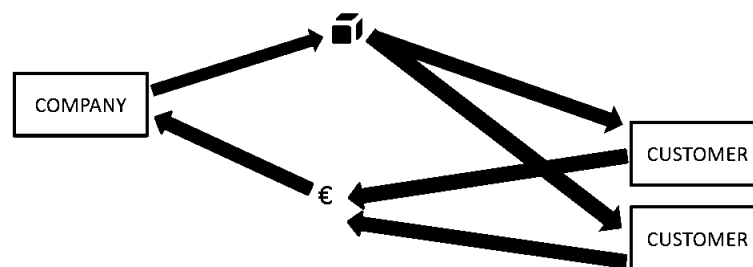


Figure 6: Diagram of a business model based on servitization (Secretaría Técnica del Laboratorio de Ecoinnovación, 2016).

## 6.4 SUSTAINABLE CONSUMPTION

Businesses models based on sustainable consumption are solutions that actively seek to reduce consumption and production and they aim to address this, by tackling sustainability from the perspective of sustainable consumption.

These businesses have a particular relevance in developing the sufficiency-based business model is the reframing of the value proposition to better address the broader range of stakeholders in a firm. Furthermore, the sufficiency approach should inform the appropriate use of advertising, sales and growth targets. On a systems level, this could reduce over consumption, and hence material and energy throughputs.

E.g. Clothes companies that show tips to their customers for expanding the life-span of their products.

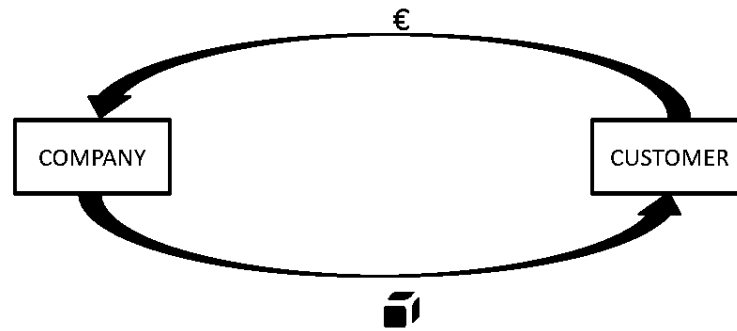


Figure 7: Diagram of a business model based on sustainable consumption (Secretaría Técnica del Laboratorio de Ecoinnovación, 2016) .

Moreover, these trends are not only coming from new companies, existing companies are also integrating this way of doing business into their business processes.

So, due to these kinds of business trends, economy is going from an industrial and manufacturing more based to services. This means a reduction of the number of products that need to be manufactured.

However, the real payoff will come only when multiple players across the business and research communities, supported by policy makers and investors, come together to reconceive the most critical and key industrial processes and flows of materials and products. This will affect dramatically to manufacturing companies and logistics.

Presently, multiple stakeholders are mobilizing and being concerned about the sustainability and the huge benefit they can contribute to the society, there are several Foundations and organizations, even consultancy companies (e.g. Ellen McArthur Foundation, Laboratorio de Ecoinnovación) promoting sustainability in different ways (e.g. promoting the circular economy or sustainable consumption) through numerous stakeholders.

Society and economy is changing, companies and users are concerned about sustainability and there are numerous entrepreneurs, company's owners and customers that will place sustainability as one of the most important points in order to use or buy a product. So, there is still a long path to go through which will generate new kind of business models, ways of consume and even interact between companies and customers.

## 7. DISCUSSION

Decades ago, companies began to be concerned about environmental protection when Governments and Public Administrations decided to regulate it.

Then, some years later the most aware companies adopted some international certifications, e.g. ISO 14001, EMAS, etc.

As the society's sensitivity towards sustainability has been increasing, some companies have enhanced projects in order to go beyond the mere certifications and integrate the sustainability into

their business processes. For that reason, they have been developing different kinds of eco-innovative processes.

However, companies are still facing several environmental issues. There are some issues that are still present and companies have been dealing with them for a long time, e.g. recycling, water treatment, etc. And there are new issues like managing the reputation for sustainability or leveraging sustainability of existing products which managers are handling recently.

Therefore, those issues are being perceived as market niches so there are new business trends coming out for solving from the most common issues (e.g. waste treatment) to the most recent issues (leveraging sustainability of existing products).

As it has been presented previously, there are new start-ups trying to solve these problems, but also existing companies are solving these problems changing or creating new business processes. For instance, circular economy can solve problems related with the waste generation and servitization can solve problems of sustainable consumption.

Therefore, the interaction of existing companies with start-ups can lead to the generation of more businesses, more opportunities and more possibilities that can improve our environment.

There is an interesting ecosystem of start-ups and existing companies innovating through their products, supply chains, etc. in order to become more sustainable.

Nowadays, companies are still working quite isolated, but there are more and more companies looking for the collaboration of other companies and also consultants because they want to implement sustainable strategies within their business processes.

After the information presented in this report it is not an overstatement to say that sustainability and its integration into the businesses, Administrations and other organizations like NGO's is still taking off. In this work have been presented interesting business practices and also, those practices can be boosted and improved due the innovation policies carried on by Public Administrations and Governments. For instance, European Union has prepared numerous laws and subsidies in order to boost circular economy.

In the previous sections, sustainable business trends have been described. Therefore, there are researchers working in order to know how sustainable business trends will evolve in the future

According to Whelan and Fink (2016), companies are investing in improving their sustainability in the following topics, where there is still a long path to go through:

- Improving risk management.
- Fostering innovation.
- Financial performance.

## 7.1 – IMPROVING RISK MANAGEMENT

Supply chains today extend around the world, and are vulnerable to natural disasters and civil conflict. Climate change, water scarcity, and poor labour conditions in much of the world increase the risk. McKinsey reports (Sheila & Swartz, 2014) that the value at stake from sustainability concerns can be as high as 70% of earnings before interest, taxes, depreciation, and amortization.

In the agriculture, food, and beverage sector, the impacts of climate change have the potential to alter growing conditions and seasons, increase pests and disease, and decrease crop yields.

Disruptions in the supply chain may affect production processes that depend on unpriced natural capital assets such as biodiversity, groundwater, clean air, and climate. These unpriced natural capital costs are generally internalized until events like floods or droughts cause disruption to production processes or commodity price fluctuation.

## 7.2 - FOSTERING INNOVATION

Investing in sustainability is not only a risk management tool; it can also drive innovation. Redesigning products to meet environmental standards or social needs offers new business opportunities.

## 7.3 - FINANCIAL PERFORMANCE

In addition to the financial benefits that accrue from increased competitive advantage and innovation as discussed earlier, companies are realizing significant cost savings through environmental sustainability-related operational efficiencies. Moreover, investors are now able to track the high performers on ESG (environmental, social and governance factors) and are correlating better financial performance with better ESG performance.

Mounting evidence shows that sustainable companies deliver significant positive financial performance, and investors are beginning to value them more highly. Arabesque and University of Oxford reviewed the academic literature on sustainability and corporate performance and found that 90% of 200 studies analysed conclude that good ESG standards lower the cost of capital; 88% show that good ESG practices result in better operational performance; and 80% show that stock price performance is positively correlated with good sustainability practices (Clark et al., 2015).

One study (Society for Human Resource Management (SHRM), 2011) found that morale was 55% better in companies with strong sustainability programs, compared to those with poor ones, and employee loyalty was 38% better. Better morale and motivation translate into reduced absenteeism and improved productivity. Firms that adopted environmental standards have seen a 16% increase in productivity over firms that did not adopt sustainability practices.

The preponderance of evidence shows that sustainability is going mainstream. Executives can no longer afford to approach sustainability as a “nice to have” or as solid function separated from the

“real” business. Those companies that proactively make sustainability core to business strategy will drive innovation and engender enthusiasm and loyalty from employees, customers, suppliers, communities and investors.

## **CONCLUSIONS**

Embedding sustainability into business not only helps secure a sustainable future but it also benefits companies, enabling them to prepare for future risks, act on opportunities and creates more value for the business and its stakeholders.

As it has been presented in this work, the way companies have been dealing with sustainability has changed dramatically last years.

Decades ago companies faced the environmental protection established by the legislation created by Governments, but years later some companies saw the environmental protection as an opportunity and decided to adopt certifications like the ISO or EMAS.

However, as the society is getting more concerned about the environmental impact of the products and services they consume, there are companies that are embracing sustainability further than the certifications and are improving their business processes through eco-innovative practices.

Even some companies have been working hard for improving their sustainable performance; there are still several environmental issues that cannot be eliminated. The most common environmental issues are recycling, product improvement for reducing its environmental impact or energy efficiency management.

As each problem can lead to a business opportunity, there are entrepreneurs that have identified potential niches from the needs that are under-satisfied and have created new sustainable business models.

Those new sustainable business models are classified on the following business trends:

- Circular Economy
- Sustainable Production
- Servitization
- Sustainable Consumption

Circular economy aims to turn waste into valuable materials for other processes or users. E.g. Some apparel companies are taking back used clothes from customers in order to recover the fabrics to use them in new clothes.

Sustainable production consists in the use of renewable and low environmental impact products. E.g. Supermarkets that only offer ecologic products produced through sustainable processes.

Servitization tries to turn products into services. E.g. Companies based on sharing, like car sharing. Users offer their cars (product) for taking people from one point to another (service).

Sustainable consumption has as the purpose of reduce the consumption of products and services. E.g. Clothes companies that show tips to their customers for expanding the life-span of their products.

Moreover, these trends are not only coming from new companies, existing companies are also integrating this way of doing business into their business processes.

So, due to these kinds of business trends, economy is going from an industrial and manufacturing more based to services. This means a reduction of the number of products that need to be manufactured.

However, the real payoff will come only when multiple players across the business and research communities, supported by policy makers and investors, come together to reconceive the most critical and key industrial processes and flows of materials and products. This will affect dramatically to manufacturing companies and logistics.

Presently, multiple stakeholders are mobilizing and being concerned about the sustainability and the huge benefit they can contribute to the society, there are several Foundations and organizations, even consultancy companies (e.g. Ellen McArthur Foundation, IDEO, Laboratorio de Ecoinnovación) promoting sustainability in different ways (e.g. promoting the circular economy or sustainable consumption) through numerous stakeholders.

Society and economy is changing, companies and users are concerned about sustainability and there are numerous entrepreneurs, company's owners and customers that will place sustainability as one of the most important points in order to use or buy a product. So, there is still a long path to go through which will generate new kind of business models, ways of consume and even interact between companies and customers.

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