

RESUM / RESUMEN / ABSTRACT

Resum: Aquest estudi sobre Responsabilitat Social Corporativa tracta de comparar la visió d'aquesta en dos països, Anglaterra i Espanya. S'intenta recollir la opinió de les dues societats amb la realització d'unes enquestes, les quals serviran també per analitzar la importància que té per als usuaris i com veuen que actuen les empreses relacionades en el món TIC.

Resumen: Este estudio sobre Responsabilidad Social Corporativa trata de comparar la visión sobre ésta en dos países, Inglaterra y España. Se intenta recoger la opinión de las dos sociedades con la realización de unas encuestas, las cuales servirán también para analizar la importancia que tiene para los usuarios y como ven que actúan las empresas relacionadas con el mundo TIC.

Abstract: This study about Corporate Social Responsibility deals in compare the vision about it in two countries, UK and Spain. Attempts to collect the opinion of both societies passing surveys to citizens, which also will serve to analyze the importance that have to users and they point of view about how actuate the companies related with IT world.

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1. Introduction

What is understood by CSR today? What do people think about CSR? Is it important to the society? These and other questions are studied in this project.

Today CSR can be an important advantage in a business, because if is well applied, it can give customers a good corporate image. IT companies should apply CSR policies, because when it is well applied the environment can be less damaged than if nothing is done.

It is intended to find the relationship between CSR (Corporate Social Responsibility) and IT (Information Technologies) companies and to discover the role that the IT world plays in its responsibility to the environment.

Today the law is not very severe with companies in terms of CSR, but all the companies are discovering the possibility of winning customers easily (and making more money in consequence) by applying programs to help society or to improve the environment.

These and more topics will be explored during the development of this study, using people's opinion and companies' actions to reveal some of the possibilities of this topic.

2. Initial proposals and objectives

Today, it is essential to consider the environment, as it is important for the well-being of future generations.

All companies must be responsible with their acts and should consistently understand that the protection of the environment is an obligation for everyone. Also it is important to educate all the employers about its importance and use all the possible methods to ensure awareness of this issue with regards to professionalism, sustainability etc.

This project aims to be a comparison study of two countries; Spain and Great Britain, because the opportunity to do this now is available.

Also explain and study the importance of this topic is intended on the project, because nowadays there is little information about it, in terms of people's general knowledge. This is a very real and important topic; for example, hardware becomes obsolete in short periods of time, and companies have policies for example to renew all this hardware in three years. Is it necessary to understand about what do we do with the obsolete hardware? Is it correct to discard it and not do nothing more?

Is very important to have better awareness about CSR, because it becomes an important competitive advantage, and if well applied it could save money. The customers also can see that the company is interested in not damaging the environment, and this can be a vital piece of information for new customers in their choice of company.

The initial **objectives** were:

- What is/is not CSR?

The objective of this point is to analyze and compare different definitions of CSR that different experts said. Explain what is understood by CSR and clarify what IS NOT CSR.

- Comparison between Spain/UK.

This point is important because the opportunity to survey people in Spain and Britain and research information in both countries allows us to the differences/similarities between the different countries.

- Opinions of the experts in CSR.

Collecting different opinions from CSR experts and professionals is another of the objectives defined at the beginning of the project.

- Positioning of nations based of CSR application.

Application of *United Nations Global Compact* about CSR in IT companies. Definition of the 10 universally accepted principles.

- Companies' role in CSR.

In this section the main objective is to list companies/products that apply CSR and explain how it is helping society.

- Surveys.

People's opinion is very important on this topic, because finally it is the final customers who buy the products and have the final opinion about the companies. It is a very interesting point to study the actual situation about this topic. There are many people who do not know what CSR is, or how to apply it and if it is necessary to do business nowadays.

- Comparison between small and medium sized companies applying CSR.

CSR application varies depending on the business dimensions. This is to estimate which companies should be concerned with CSR, depending on their size.

- Budget of IT companies in CSR.

How much of their total budget do companies dedicate to CSR? Do they dedicate a sufficient amount to CSR? Solve these questions and to speak about this topic at this part

of the work is an objective. This is to find out if CSR is an important intangible activity for the companies or is not applied nowadays.

➤ Why is CSR important nowadays?

Arrived the moment to speak about the importance of applying CSR nowadays in a business. This point can be interesting because some people can think: “This is not important, only for spending lots of money on unimportant things...” other people can think: “Budget in CSR is very important to respect the environment, to save energy and to save material for the future”. Is important to explain and study here the importance of CSR in a company, because it can be very valuable intangible activity, depending on what is the best thing to do for good marketing in a company and for awareness of the environment of the company. Porter (USA economist) spoke and wrote many books with topics about economy and CSR (since 1979). There is lots of information of big and medium companies applying this knowledge, and how applying it improved the business (winning customers, making production cheaper and saving in costs).

In the wider business world there is information about CSR and companies apply it usually, because they have experience of it and they can use other companies as a guide. The IT world is not concerned well in CSR terms, because it has little history, because the creation of these companies is very recent.

On other hand, the **importance of the topic to do a project** is to know what CSR is exactly, why it is important to apply this in businesses and what the best option to do it is. There are most important things to know, for example the impact of the environment in the IT businesses, or the importance of saving energy and materials. When a person who reads this project understands well what CSR is, another important thought is try to raise awareness in this subject, to get more people interested in it.

Another important point is the survey, because it reflects the people’s opinion, and this topic is very interesting, because starting with these opinions, is possible do a conclusion with the current view about the importance of the CSR in all the business, in both countries: *Spain* and *UK*.

This piece of work aims to be an interesting project about CSR and his application in companies nowadays. In the companies exist two types of activities, the *tangible* and the *intangible* ones. The tangibles are very easy to have, because they can be bought, but the intangible are very difficult to have. The intangibles cannot be bought, because the knowledge is very difficult to sell. **Porter** says the environment is very important to do good business, and to control and manage it is very important to have knowledge.

The ideas are intangibles, and so is the use of CSR. Is very difficult to get this type of activity, because it depends of the employers and the people related with the company. This work is important to people that do not know what CSR is because it is interesting to have this knowledge and there by can deliver more value in a company.

People who know the mean of these famous letters (CSR) can learn more about this topic, because this work will contain surveys and comparison between two countries. This work contains information about the companies that applies nowadays CSR and how it applies. It is very interesting to know the actual situation of this subject in the two countries.

Another important point is to know the importance of these subjects around the world. Here you can find information about *Global Compact*. The *Global Compact* is signed by lots of companies and with time becomes bigger. These companies are trying to aligning their operations and strategies for do business around the world.

3. Methodology

The methodology used to develop the study of this project has been research, mostly on the Internet, because the topic of the project is very actual and there are not many books, and also is a specific subject and the existent books are not very useful to the study. Although there is a lot of written information about CSR, it is in areas such business management or history of business or economics. The IT world has little written information, but there are different people that are concerned with it and study it as an important topic.

While doing the research, some of the initial objectives were changed because the available information was not adequate, and in other subjects there was much more information and so the research was grown.

Also the searching in forums, about the people's opinion and experts' knowledge was very useful in the development of all the study.

In some forums was found the option of subscribing to different newsletters, and these were very useful to the research of information, because CSR is an actual topic and there are people that work on the research of the improvement of CSR.

The teacher's knowledge and experience also was very useful, because they guided in the focus of some ambiguous topics, and they also researched information to help on the explanation of other relevant topics.

To do the surveys the methodology was to print a few copies and pass the survey to people at the beginning of the project, but the last solution was the creation of a website to distribute the questionnaire, in *Spanish* and *English*. This webpage was created at the end of the project development, because was a new idea during the development of the different surveys, and is better to analyze the results. Also this option gives the opportunity of collect more results, because somebody can access to the survey and answer it.

The obtained results were entered into a Microsoft[®] Excel sheet, and graphics and results were obtained with this program.

Different examples of existing surveys helped me in the development of the questions to my survey.

The pattern was passed to 80 people, 40 Spanish people and 40 British people. This was because during the development of the project the webpage was not developed, and all the surveys were collected manually, asking people (friends, family, university workers, university students and all the people who wanted answer the survey).

The analysis of the results was started putting all the data in a graphics and step by step analyzing the results doing a comparison with the available resources.

The main inspiration to do the surveys was *Agestic* (<http://www.agnostic.org>), because it helped to develop the necessary questions for the project.

4. Findings

4.1. CSR Concept

4.1.1. Definitions

Here there are listed some definitions by different people and organisations that study and work the CSR.

CSR DEFINITIONS

WHO SAYS?

DEFINITION

“Libro Verde: Fomentar un Marco Europeo para la Responsabilidad Social de las Empresas”, **European Union**

The Corporate Social Responsibility of the companies is defined as the “voluntary integrity, by the companies, the social concerns and environmental in its commercial transactions and its partners relationships” (Europe Union, 2001, page 7) [1]. Libro verde raised an extensive discussion about the mode of European Union in promoting CSR in companies.

World Business Council on Sustainable Development (WBCSD), global association of some 200 companies dealing exclusively with business and sustainable development

"Corporate Social Responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large" [2]

- Mark Line and Robert Braun** (CSR experts) [3] “The management of, and response to, social, environmental, broader economic and ethical issues – and the extent to which businesses are responsive to stakeholder expectations on these issues”.
- IBM** [4] CSR is the way that companies do good in the world, benefiting society through their own economic, environmental and social actions.
- Mallen Backer** [5], founding Director of *Business Respect* (e-newsletter about CSR) CSR is about how companies manage the business processes to produce an overall positive impact on society.
- Business in the Community**, an organisation on the UK [8] “The CSR is generally understood like the compromise expansion of a company with the society and the role acceptance in it. This includes the entire compliment of the law and additional actions for ensure the company not runs with knowledge in expense of the society. To be effective and visible, this compromise must be supported with resources, leadership, and be measurable and measured”.
- “Empresa y Sociedad”**, the Spanish partner of CSR Europe. “Do the work in a business to exceed the general expectations that the society has in relation with the companies. The CSR is more than a collection of specific practices or occasionally initiatives motivated by marketing reasons, public relationships or other benefits to the company. CSR must be look like an entire

policy including, practices and integrated programs throughout their operations and company policies

Other definition is: “CSR is referred to generally at the investment of human resources, technical and financials in the project development with the objective of improving the situation of socially excluded minorities”.

Looking the above definitions, the conclusion is that to be CSR Responsible there are few requirements:

- Be Effective and visible.
- Compromise supported by the resources and leadership.
- Be measurable and measured.

These definitions have commonalities and differences, and this study wants to analyse them. The best way to analyse them is with comparison tables. Both tables are on the next page.

To see the *similar aspects* is possible look this table:

SIMILAR ASPECTS	
Aspect	Who says?
Social concerns	<ul style="list-style-type: none"> - Libro Verde. - WBCSD. - Mark Line and Robert Braun. - IBM. - Mallen Backer. - Universidad Nebrija. - Business in the community. - Empresa y sociedad.
Environmental aspects	<ul style="list-style-type: none"> - Libro Verde. - Mark Line and Robert Braun. - IBM. - Universidad Nebrija.
Commercial transactions	<ul style="list-style-type: none"> - Libro Verde. - Mark Line and Robert Braun. - IBM. - Universidad Nebrija. - Empresa y sociedad.
Partner relationships	<ul style="list-style-type: none"> - Libro verde. - Mark Line and Robert Braun.
Workforce	<ul style="list-style-type: none"> - WBCSD. - Mallen Backer. - Universidad Nebrija.

Table 1: Similar aspects on CSR definitions.

And to see the *different aspects*, the following:

DIFFERENT ASPECTS	
Who says?	What says?
Libro verde	CSR is voluntary.
WBCSD	CSR must include continuing commitment and ethical behaviour.
Universidad Nebrija	They include the demands of the society historically and human rights. Also the marketing of the companies is important.
Business in the community	Business in the community has the unique definition that says something about the law, and explains that CSR should be measurable and measured compromise supported with resources.
Empresa y sociedad	In the definition, Empresa y sociedad recommend to see the CSR as a policy.

Table 2: Different aspects on CSR definitions.

4.1.2. Origin

For **Universidad Nebrija, Madrid** [6], CSR appears in USA during the ends of 50's and the beginnings of the 60's following the Vietnam War and other conflicts like the Apartheid [7] (trying to separate people by race).

The interest in the citizens was awakened and they started thinking that through their work in some businesses or buying some products, they are collaborating in the maintenance of certain political regimes, or with some ethically reprehensible political or economic practices.

As a consequence, the society starts to demand some changes in the businesses and more involvement of the business environment with the social problems.

The CSR is a term that references all the obligations and commitments, legal and ethical, national and global, that derive from the impacts that the activity of the organisations cause in society, labour, environmental and human rights. Previously businesses not take care with marketing or quality; they were only interested in the principal objectives. Today businesses need to incorporate mechanisms to be social responsible, as part of their business strategy.

4.1.3. What is and what is not CSR?

In the previous section of this work, it is possible to see different visions and definitions made by different people and organisations. It is very important to define what exactly CSR is, because it is not always easy to differentiate. Bjorn Stigson, member of WBCSD says: “a unique definition of CSR does not exist, so usually this depends on the culture,

religion or tradition of each society. A unique size of application does not exist, and must be designed for each case and necessity”.

CSR is a compromise made by the companies to find the balance between the interests of stakeholders and that of the environment. The companies must treat correctly and ethically the workers and the society to receive the same treatment.

There are some differences between *British* and *Spanish* business culture and some different features of the two countries, as is possible to see in the following pages.

DIFFERENCES IN BUSINESS CULTURE	
SPAIN	UK
Hierarchy: The manager has no relations with the “workers”.	<p>UK managers generally favour the establishment of good working relationships with their subordinates.</p> <p>The boss often takes the role of a coach, creating an atmosphere of support and encouragement.</p> <p>Today, UK businesses maintain relatively “flat” organisational hierarchies. The principal division is between managers and other ranks.</p> <p>In general, the board of directors is the principal decision-making unit. Major decisions are made at the very top.</p>
Less individualism, synergies between partners.	Teamwork is very important; however there exists a strong feeling of individual accountability for implementation and error.
<p>Schedule: 9:00 a.m.-7:00 p.m., with one hour to have lunch and lots of breaks to smoke or take a coffee.</p> <p>Spanish people do not worry too much about punctuality.</p>	In accordance with British business protocol, punctuality is essential at any business meeting or social event.
Dates are not required, but are advised. Milestones are not important.	When making business appointments it is best practice to do so several days in advance.
Business cards usually are presented in two languages; one side Spanish and the other English.	Business cards are an essential prop and are usually exchanged.

(Continued on the next page)

Negotiations, meetings and conferences are more chaotic; people shout and interrupt frequently.	The British are inclined to follow established rules and practices; therefore decision-making is often a slow and systematic process.
Failure is failure	Failure is experience

Table 3: Differences in business culture.

Characteristics of both cultures: Male chauvinism.

- Family values.
- Dress: More formal. Is very important show professionalism. Suit and tie.
- One should not wear flashy clothes as this suggests one is lazy or inefficient.
- Higher job security. It is harder to lose one's job by the labour law. This is why there is little motivation to work harder than the least necessary.
- To have good relationships is mandatory to succeed in the market. Ability is less important.
- Dinner is good time to do sales, is better than office.
- Spanish people work to live, not live to work.
- Money is used to enjoy life with family and friends.

British business etiquette (Do's and Don'ts):

- DO respect personal space. The British value their space and keeping an acceptable distance is advised.
- DO remember to shake hands on first meetings. It is considered polite to do so.
- DO make direct eye-contact with your British counterpart, however remember to keep it to a minimum or it could be considered impolite or rude.
- DON'T ask personal questions regarding your British counterpart's background, occupation or income.
- DON'T underestimate the importance of humour in all aspect of business in the UK.
- DON'T forget that instructions are often disguised as polite requests.

To talk about socially responsible companies is not speak of companies that in December give football balls to a school somewhere. Is not also speaking of companies that adopt a foundation and periodically give school materials. Nothing of this is criticism, by the opposite, this is very big asset. However, these occasional and philanthropic actions are not

CSR as regarded by the United Nations, **OIT** (Organización Internacional del Trabajo) or OECD (Organisation Economic Cooperate Development) understands. [9]

To **OIT**, CSR is linked with corporate interests and recommends that governments must promote the voluntary concept of CSR.

4.1.4. CSR defenders and CSR detractors

Defenders:

José Luis Fernández Fernández is Manager in the “Cátedra Javier Benjumea de Ética Económica de la Universidad Pontificia Comillas” and he says “*CSR IS NOT A FASHION, IS THE COMPANIES FUTURE*”. You can see an interview made with him [46] (in Spanish language).

In summary, in the interview (the entire model is in annex II) Jose Luis Fernández Fernández said:

About the CSR concept, not only big companies can apply it, SMEs (Small and medium enterprises) think that CSR is only for big companies, but that is not really the case. CSR is managed in three different ways: economical-financial, environment and social concerns. He gives importance to the conciliation of family life, but said that companies not do that at all. CSR is not only a fashion; it can help in the management of the company to improve it, and is related to globalisation.

By other hand, **Simon McKeon** says: “I WILL declare my colours at the outset. I am a passionate supporter of corporate social responsibility. CSR encapsulates many different aspects of corporate life, ranging from environmental respect through to appropriate ethical behaviour.” [11]

Detractors:

Detractors believe, however, that Corporate Social Responsibility is simply a smokescreen or window dressing which covers up more important issues. By putting their ethical initiatives at the forefront, companies can bypass a great deal of consumer concern. [10]

Milton Friedman (economist, defender of government interventionism in the economy) says that a company's objective is to maximize benefits, and CSR can link the companies at a time of decision making:

- The companies must be free to decide whether to apply CSR or not.
- The companies should not misuse its scarce resources.
- The companies only are responsible if there exists some law in the government to regulate and punish it.

Janet Albrechtson, who said CSR "is a con job. It's largely all talk. It's a meaningless gimmick". Albrechtson then says that CSR is "a neat trick used by NGOs as ... blackmail, the idea being that if a corporation fails to embrace social responsibility by taking up their particular agenda, then, by default, that company must be socially irresponsible".

In a similar vein, **John Roskam**, executive director of the Institute of Public Affairs, says that "the problem is that companies are diverted from their most important social responsibility, the creation of wealth".

Garry Johns, a senior fellow with the same institute, has said that "CSR diverts the corporation from its purpose and places it, inappropriately, in the role of government" [12]

4.2. CSR Stages

CSR must follow some progressive stages. All of the stages are very important, because they are necessary to the good development of the company. If some of these components are not going well, the company can fail in different ways.

As the stages are advanced, they gain importance. The first stage is the least important, and the last is the most important.

The two first stages are applied by all the companies that apply CSR, and the other three are more important to IT companies, to create responsible products. For example: the usability in products for the customers, and the Green IT to the environment.

The stages can be classified depending on who is targeted.

4.2.1. 1st stage: Shareholders

The shareholders want profit in the company. The most important point in a business to some shareholder is the financial benefit. Depending on the economic result, the shareholders can decide to erase CSR practices, because these are not mandatory and they only want to make money.

The company should look after the shareholder, and protect his interests. This is fundamental to maintaining and securing investments.

4.2.2. 2nd stage: Workers

The workers are the part of the company that is producing artefacts or services with their hours of work, and they help to make money and obtain benefits. Here there is a point that has lots of importance: a worker is a person. Sometimes this aspect is forgotten, and when a problem exists, the firsts who suffer the consequences are the workers.

Somebody who is worker in a company needs to be a part of the company always, especially in a crisis time.

A good policy in human resource management will be positive to the company, because if the workers are fine, the work always runs the best way possible. The effort of the workers

must be rewarded with different benefits, wages or advantages to the workers. For example, motivation policies or training policies

UGT (Unión General de Trabajadores), syndicate of Spain, studied the CSR situation for workers in the companies, and the conclusion was there is a lack of information about CSR. The companies put the information on the Internet, before they offer it to the shareholders. The workers complain that they cannot provide ideas and suggestions, and their compliance of any organization idea. This situation is more serious in the work centres that do not have Information Systems. [47]

For example, something as simple as workers lunch-breaks; Seven in ten workers want to have a shorter lunch in the workplace so that they can leave work earlier, is the conclusion of a study, called “*Life quality and conciliation at work*” made by Sodexo (<http://www.sodexo.com>) [48], catering company to Spanish companies workers. The workers that arrive home between 16:00 and 18:00 are the people who prefer this most, followed by the women managers with children, and the administrative people who leave between 16:00 and 18:00.

The male managers and the people with few home responsibilities are the less partisan in reducing the lunch time to advance the going home time.

One interesting thing is that the half (50%) of workers prefer companies to have a catering service (with healthy food).

Sports facilities are less preferred by the workers than a nursery service according to what the workers said.

The managers, above all the women, value the possibility of doing personal administrative management, like house documentation or payments.

4.2.3. 3rd stage: Others (consumers, suppliers ...)

This stage studies usability to help the final customer. All the products are studied to work well and to be very comfortable to the end customer. The final customers become a very

interesting part of product development. Porter (ref.?) included it and the post-selling service in his value-chain; because he knew that the end customer and the offered services are very important to the company.

4.2.4. 4th stage: Society

“The IT sector creates the major part of the workplaces in Spain” said José Luís Rodríguez Zapatero, president of the government. [49]

IT helps society in most of the usual activities of people. Since the emergence of Personal Computers, the society is in continuous changing. At the beginning people could not buy computers for personal use, and computers were only used in big companies with big budgets in IT.

With the time, the PC's become cheaper, and a person who was interested in its use (to play, to work at home, or to different activities) was able to acquire one of them. Technology become useful to everyone with the passing of the time, because at the beginning all the things that it was possible to do with PC was very difficult, but IT companies were improving the computer's features to make them easier to use. Different possibilities were offered by new technologies. To solve the many problems that appeared with the learning of people in computers, IT companies are still working on the improvement of the usability. A product, when designed, must pass different usability controls, and before its commercialization, quality controls are made to assure the good manufacturing quality of the final product.

The appearance of the Internet at home forced companies to work faster and better, because the competitors grew considerably and very quickly.

Today the IT sector is a very important part on a budget of a country, because there are different people (a significant number) that depend on the IT to work, and there is a lot of money invested in IT companies that contributes to the growth of the countries where they are located.

Environment

At this moment there are companies that take care with power consumption, because they want to be responsible. Google, for example is a company that always wants to reduce the power consumption in the data centres that they use.

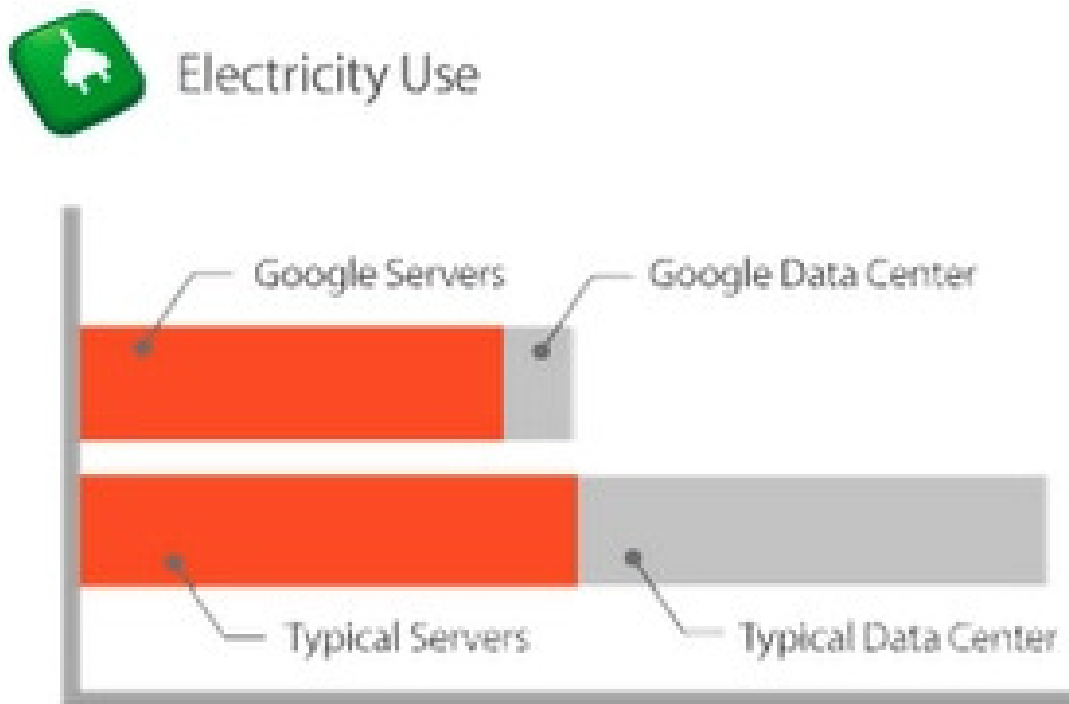


Image 1: Electricity use by servers.

Power Use Efficiency (PUE) [54], is a very simple ratio to evaluate data centres. The result of this ratio is to divide the total power use in one data centre by power consumption of all the computers putted on it.

Also Dell is working in Green IT, reducing its green footprint, replacing Styrofoam packaging for example, working with Liebert to reduce data centre energy consumption, and designing a new blade server to be 25 per cent more energy efficient than its predecessor. [53]

<http://www.thegreengrid.org/> is the webpage of an academy and each company around the world can become a member. They also organize forums and have very useful material about the power consumption of data centres.

4.3. Socially responsible IT products

At this point, some examples will be explained about how companies are offering to the market new products that are socially responsible.

4.3.1. Example 1: Laptops.

OLPC (One Laptop Per Child) created XO, a computer that the company wants to sell for \$100, but the real cost was \$199 at the beginning of its commercialisation. The purpose of this project is to provide computers to children around the world. If a person buys one of these devices, it will buy another for one child around the world.

Initially the objective was not to sell to the public, but later the G1G1 (get one give one) program gives the opportunity of buying one to give another to some person around the world. For the commercialisation, it was possible to buy the product in Amazon.com, but following the programme that was established before to help the children.

The project has a website (laptop.org/) to support the product and to explain the objectives, to make donations and to follow news or contact with the supporters. There are different devices made by people who contribute in this project.

This project is good to help in the development of undeveloped countries, helping the society in the improving of its knowledge. A person who buys this product also is contributing into the society development. That is good for the society (because people think that it is Socially Responsible) and for the companies, to win good corporate image.

Such as all products, this product also has disadvantages, because it is made by a company, and the main objective of a company is to make money and obtain benefits from everything that they do. The business is made by the company that manufacture the laptop, because they manage the donations to the third world, and they do the donations with the money, but the final user does not know exactly how much money goes to the underdeveloped world.

4.3.2. Example 2: Monitors.

Few years ago, new technology affects all the people who use computers. All the CRT (Cathodic Ray Tube) monitors, can be replaced by TFT (Thin Film Transistor) monitors. TFT has lots of advantages, as such: lower power consumption, less heat generated, less electromagnetic emissions and less space occupied. The most important disadvantage is the image quality, because the experts say that CRT has more quality than TFT. The problem is that people and companies want to replace their monitors, because the occupied space is reduced and/or because the TFT monitors are more attractive than CRT, but: What do people do with their old monitors? Is there sufficient information to people for recycle the products? Are people aware of the environmental impact? Are the companies fined if the adopted solution is bad? [15] We will find the answer these and more questions with the help of the surveys.

TFT use helps the environment, because the power consumption is reduced by 50%.

4.3.3. Example 3: Companies and products.

- **Dell:** Michael and Susan Dell formed a foundation in 1999 to help children around India and U.S. The main objective is to transform the life of children living in urban poverty through better health and education. Dell has a range of products, called (PRODUCT)^{RED}, to help the elimination of AIDS in Africa. The initiative has not cost the customer, and helps to save lives. [17][18] Dell is a company that helps the society.
- **Microsoft:** This company contributed in the (PRODUCT)^{RED} campaign. Microsoft writes social responsible games, because with “Halo 2”, Microsoft delayed its release because it contained some scenes with partial nudity. They want to encourage socially responsible games, addressing today’s social problems, such as racism, hunger or conflict. Microsoft has announced a partnership with Games for Change (G4C) to launch games containing the social problems, because they think that

these games can make a social change. [19] This project helps the society.

- **Apple:** Greenpeace attacked Apple because Apple was using dangerous products that other companies were not using because they were dangerous to the environment, and Apple reacted creating a laptop made with all its components recyclable. This is a clear case of corrective CSR. [20]
- **Google:** Google has some socially responsible initiatives and products. Ecocho (<http://www.ecocho.co.uk>) is an example: A new search engine that fights climate change! With certain number of searches made, Ecocho grows 2 trees, and Ecocho pay for the trees via ads on the site. Also Google has an ecologic mouse made with recycled plastic material, and the packing also is recycled, but this product is contradictory, because uses two AAA batteries to run (because is wireless). [21][22]
- Hymini: the small size device consists in a battery charger that can give solar energy, wind energy or even your PC by USB. It consists of a device to charge different devices that use batteries. The price is more or less 50\$ and you can charge the most batteries at the moment with the sun or the wind. [23]
- **Nigel's Eco Store** wants to use IT waste to decorate houses at Christmas. It is possible to buy recycled IT products, such CD, DVD, electronic components or things like that to decorate the house and use fewer lights, because there are some bright components. [31]
- **Hewlett-Packard** launched new program called Eco Highlights. This program was created to launch a few products that met with the requirements of the program. Some of the requirements are: save energy, more efficient printing with less toner use, includes the two-sided printing, and design for recyclability (Of course the products support recycled paper). HP says "Better business outcomes equal better environmental outcomes. " HP takes care of the environment. In their webpage there is a lot of information about the environment, power saving and related aspects. [36]

4.3.4. Example 4: Ecologic mobile phone.

It is very difficult to create an entire mobile phone 100% ecological, but some companies are trying to develop one, because the waste produced by mobile phones is extremely big, and people have the habit of changing their mobiles every 18 months in average. Only 10% of the mobile phones for sale each year are recycled, and there are programs to give your old mobile to a company and the company sends the mobile to other countries. If is impossible to use, the components that can be recycled are recycled, but always there are components that cannot be recycled or reused. **Vodafone** has a program with these features, and since 2001 recycled more than 130 tonnes of mobile phones. If when the mobile phone is charged, people disconnected it from the power, 60,000 European citizens could be supplied with the power saved in one year doing this practise. [24] [25]

Bamboo is an example of ecological mobile phone that, when all the necessary electronic components are extracted, it disintegrates and disappears.

4.4. Sustainability issues

“IT Businesses not only improve power efficiency and offset the climate change, they also promote the development of a big vanguard market of technologies of better power efficiency and based on IT that improves the competitiveness of the European industry and creatwe new business opportunities.” (Ecoperiodico, Addressing the challenge of energy efficiency through Information and Communication Technologies) [45]

Miguel Vergara Trujillo [43](Engineer of Universidad Politécnica de Madrid), dedicated all his professional career to Alcatel, working in responsibility posts to this company around France, Latin America and Spain. He was Manager of Communication and International Relationships of the “Asociación de Empresas de Electrónica, Tecnologías de la Información y las Telecomunicaciones de España, AETIC”, member of the directive of the Oficial School of Telecommunication Engineers (COIT/AEIT) and patron of the

Euroamerica foundation. He also belongs to various editorial boards related with new technologies, such as: *Dinero, Tendencias 21, Jubilo, Senior Net, Bit* or *E&TIC*.

Today, the greenhouse effect is a big problem that affects the entire world, caused by the planet warming in consequence of the gases emission, generated by the human activity. If in the future there are not changes, the effects could be very dangerous to our planet.

IT, representing in the European Union more than the 6% of the *Gross Domestic Product* (GDP) and contributes 20% of the global supply of these technologies, is also part of the problem, because it is responsible of the 2% of the CO₂ emissions. On the other hand, it contributes at the same time to limiting the remaining 98%, providing a big range of technological solutions that improve the efficiency of processes related to other industrial activities, above all in the European system, because there is a heavy dependence on fossil energy that is not renewable, is undiversified and has no clear strategy with respect to the renewable energies. This European technological sector can contribute to reducing the environment impact of the whole economic sector.

There was an existing Forum, organized by **AETIC** (Spanish organization of Information Technologies) and “*Consejería de Innovación, Ciencia y Empresa*” of “Junta de Andalucía”, with a discussion centred on energy efficiency, but also on transport and mobility, water management and with the behaviour of customers.

The most important emissions stem of the energy sector. 19% of the world’s power consumption is due to lighting. However, $\frac{2}{3}$ of the installed lighting in European Union uses inefficient or outdated technology. Just the transport sector emits more or less 23% of the entire gases of the greenhouse effect, of which 70% comes from road traffic. If 10% of the EU citizens used teleworking, 22 million of tones of CO₂ will be saved the same as if 20% of people uses the videoconferencing.

Sustainable development and environment responsibility are now an important part of corporate strategy of companies. In Spain, one good example is **Telefonica**, which in 2007 created a Corporate Management for the Environment, and quantified their “carbon

footprint” that represents 1.7 million of Tones of CO₂ equivalent to 7 Kg per telephone call.

The objectives for the European Union to 2020, known as 20:20:20, correspond in each percent with the power saving, with the use of renewable energies, and with the reduction of the greenhouse gases. If society wants to meet this triple objective, it needs strong growth economy and low carbon emissions. For this, the adoption of innovative solutions and low consumption in IT will determine the reduction of emissions in all the economic sectors, not only in EU, but throughout the world.

In conclusion, IT contributes to the problem of greenhouse effect, because the equipment requires power and therefore emissions of CO₂ (about 2% of total), but IT helps in the other 98% to be less dangerous. Today there are partnerships that want to research power efficiency. One of the bigger problems in CO₂ emissions is the use of obsolete technology that uses power, and with application of available technology this problem can be solved. To solve and improve this kind of situation, companies today need to be careful with topics related to social responsibility and now are integrated into the corporate strategy of different businesses. The most important aspect now is to use the least power possible, to accomplish the 20:20:20 goals.

4.4.1. IT possibilities to improve the environment

Today IT can help companies make lots of different improvements in the management of the business, but also IT can help businesses by saving paper, saving time and saving space.

One of the bigger challenges today for many companies is to be environmental responsible. The use of paper was traditionally excessive for all the companies, because it was the only medium to give the necessary information to customers and workers. With the implementation of Information Systems, society thought that the use of paper would be reduced, but time has demonstrated that the use of paper remains excessive.

Nowadays companies need less paper than few years ago, because the technology allows them to use different ways to substitute paper documents with other valid documents, but the companies can do many different things since Information Systems were introduced in the business world, and to do some of them they use a big quantity of paper.

A good configuration of the office systems is the key to manage well documents and reduce the use of physical paper, to give successful a campaign of paper reducing.

To the image of the company, a good policy in the company about “office without paper” can help to give different benefits, and it is good to improve the efficiency obtaining more productivity levels.

It is very important to never forget the sentence: “*Time is money*”, because with the implementation of good network and good system policies, is possible to reduce time and spend less money in office material. In example, today a worker can work and share information in the company without physical paper, he can do that in archives or giving the document to another colleague. It is a very simple process, he need only enter the network system, log in and give the document (without the necessity to print it, because he can email or use different methods to transmit the document to other sites).

To reduce paper use it is necessary use electronic documents, because a big quantity documents must be presented in all the transactions that the companies do. For example, bills are necessary in all the operations, because all the purchases and sales must to be declared to demonstrate the numbers of the companies. Traditionally, the bills are transmitted on paper and signed by the seller, but today the law allows us to do an electronic bill, i.e. to send the bill via email. One of the big advantages on the use of this kind of document is the space-saving, because the bills now are in computers, and only hard disks are needed to save all the information and keep it securely. There are other advantages such as less errors and the process becomes faster.

One disadvantage is the mobility of the documents, because with physical paper you can always bring your paper with you, but in electronic format you need a device to read it, and it is not always possible access to one of them.

The banks today uses IT to develop their work, because is more efficient for the customer and the workers. With Internet use, in some examples you can do all the work that you need with your money (see the balance, do payments, do transactions and more).

The email is one of the better inventions talking about this topic, because it is fast and easy. You can read information without using the printer and not use paper, and you can send or receive most documents via email.

This topic is important in companies, because there are many documents that are not necessary to print. The government of many countries fight sometimes over the use of new technologies, because it is a problem when a company grows with time, and some people don't change their way of working. Some companies do reforestation programs, because they know that is necessary today.

There are companies, such as **Paperless** (<http://www.paperless.com>), who work to reduce the amount of physical paper. For example, this company will scan all the existing documents that you want and convert them into different formats, such as pdf, CD-ROM, or webpage.

4.4.2. IT and Power consumption

IT can help the European Union to save energy [44]

In 2020, the use of IT could realise savings in energy efficiency of more than €500 million, and reduce emissions by at least 15% by this year.

There are three types of technology that can contribute to a generalized reduction of the global energy demand:

- Optimize power use making the existing processes more efficient.
- Save power by doing things differently, for example using forms that can be filled online, so that it is not necessary to power on the printer and print papers and send them by post.
- Alternative business model and low carbon footprint.

Among the technologies that improve are included transport solutions (with mechanized transport and intelligent navigation will be possible to save between 20% and 30% of combustible and associated emissions), and the intelligent management of buildings, that can reduce the power consumption in EU homes by 17.5%.

On the other hand, we have technologies which help, and the most important here are the virtualization technologies or the paperless offices technologies.

At last there are technologies which transform our way of working, such as teleworking. There is a study that concludes: if 10% of European citizens use it, will be possible to save 1.3% of the EU emissions associated with transport.

The IT has demonstrated that is the key to giving significant reduction of the power consumption, and, in general to reduce the demand of raw materials and greenhouse effect gases emissions.



Image 2: Bamboo, the new ecological mobile phone.

Source: <http://www.tuexperto.com/2008/03/08/telefono-movil-ecologico-hecho-de-bambu/>



Image 3: pieces of bamboo.

Source: <http://www.tuexperto.com/2008/03/08/telefono-movil-ecologico-hecho-de-bambu/>

This mobile can be charged manually, in 3 minutes using the handle that is incorporated in the device, it is possible to make a conversation. The best improvement is that you always rewind the battery.

The idea is very interesting, but surely it will not be successful because it is not technological advanced (the screen is black and white, for example) and it is very difficult to compete with the giant companies. [25]

On the other hand, **Samsung** created an ecological mobile phone manufactured from maize. The company take cares of the environment and the result is the model E200 Eco. This mobile is different to the above, because this has all the features available nowadays: MP3 player, MMS, 1.3 megapixel camera and other features. At this moment it is only possible to buy the mobile in Korea, but it is expected to sell it around the world. [26]



Image 4: Samsung ecologic mobile phone.

Source: <http://www.devedaily.com/wp-content/uploads/2008/08/samsung-e200-eco-03.jpg>

Samsung also is working on a new model called Blue Earth with runs with solar energy. The screen brightness will change depending on the sun and on the energy that the mobile has at the moment. The device has touch screen and all the features of a mobile phone today. [32]

Telefonica launched a **Nokia** mobile phone that is 50% ecological, because the company wants stop climate change. Also the company created an office with the objective of reducing their network consumption by 30% by 2015. That means the CO₂ emission should be reduced. They chose Nokia 3110 Evolve model, and with this package it will be possible to save 5,000 lorries for their transport, that means less fuel consumption and less emissions to the atmosphere. The mobile also has the features that are current today. [27]

Motorola is also present in the ecological mobile phone market. They presented Motorola W223, a mobile made with recycled plastic bottles. Is a “neutral in contamination” device, because Motorola compensates the emissions produced while the device is manufactured, distributed and running. The packaging of the device was reduced 22%, and all the paper that the package contains is recycled. [30]

Nokia, on their own are also working in the research of more ecological products, trying to reduce the battery consumption, all of these made with ecological materials. The new concept of “*Ecological mobile*” will arrive soon. [29]

Coral 200 Solar will be the cheapest solar mobile, without a battery, but without camera and lots of features. The device will be very simple and functional, and will be charged by solar energy. [33]

- Usability in IT products.

The usability in IT products is one of the most critical success factors, because all the devices/software must be accessible and easy to learn for everybody. The usability costs are small, compared with the cost of the errors in production. If you invest 10% more in usability, it is possible to convert to 80% more customers to your products (people who change to your company) (**Jakob Nielsen**, www.useit.com/alertbox/roi.html). During the software development there are situations that compromise the user, for example: search errors, time delays, difficult understanding of forms. The solution is to test the application lots of times before its commercialization and log all the actions always. [34]

All websites must be usable for the people, especially for future customers, and there are companies that help you in this task. An example of these companies can be Use IT (<http://www.useiteasy.com/index.html>), a company who work studying the case situations an how to help other companies applying better design for their software/webpage.

The Usability Professional’s Association (<http://www.usabilityprofessionals.org/>) is an association dedicated to fight for good usability in products. They offer some guidelines and study different applications of usability.

18th of November of 2008 was the “*Usability world day*”, organized by “*Grupo de Profesionales de Usabilidad de Argentina*”, different people and companies gone to demonstrate the good results that are possible if usability is well applied. More than 40 countries celebrate this day, and the **Usability Professional’s Association** (UPA) promoted the celebration of the day.

Once a year **UPA** organise conferences about usability, to investigate and improve the applied usability in products. There are different speakers in each conference, who are professionals in usability concerns. **UPA** put in the website of the conference different resources which are available to download. Companies can participate in this event if they want, only they must be registered and then they can participate in all the organized activities.

ISO (International Standard Organisation) have released a new standard for measuring the usability of everyday products, like ticket machines, mobile phones and digital cameras. This standard, [ISO 20282](#), includes test methods for quantifying the usability of consumer products to ensure they meet a pre-defined quality level. This development is exciting because the standard's focus on usability measurement reflects a sea change in the evolving practice of usability. [35]

4.5. Code of ethics in the IT profession

There exists an organization called “*National Academy of Engineering*” (**NAE**) [39], a private institution, independent and non-profit making, which investigates important topics about IT and engineering. This organization made a specialized website on the relationship between engineering and ethics. [40]

The site is called [Online Ethics Center](#) (**OEC**) [41], and it is designed to give engineers and engineering students all the necessary resources for the comprehension and management of ethical problems, because this is one of the most important problems that people have today. The business environment is in continuous change now for everyone related with IT word.

Ethics and engineering must always be linked because with the use of IT, engineers can research and develop new important and interesting improvements to existing devices, or new ones, as Accreditation Board for Engineering and Technology (**ABET**) argues.

As it is possible to see in the **OEC** website, there is a dedicated section on Computers and New Technology, containing different material for everyone who uses and studies IT. An

interesting topic that is studied in this webpage is privacy in Internet, because with existing technologies today it is easy to share information with others, and it is very difficult to control if this information is confidential or is open to public access. The site also deals with legal issues, such as privacy, intellectual property, and financial impropriety.

The following points are practical considerations in IT that can be affected by ethics.

- **Privacy and security threats.** This is one of the most classical subjects in ethics applied to IT. Today, one of the new elements of the privacy danger is researching information in the net (data-mining) or in databases, which is more extensive than traditional information searches.
- **Content and ethics code compliance.** IT professionals and workers are developing codes of conduct to guarantee ethical conduct of their partners or their organizations. This represents a constant challenge.

Most businesses argue that their responsibility ends when they deliver to society their own well worked ethics code and the entire international community can access it, but today the environment of the company is very important, and the companies should try to influence all of their environment to work with justice in their profession.

Other related aspects about ethics and IT are:

- Software ownership and poor quality goods responsibility assumption. Software is a new road to understanding intellectual property, because the legal protection of the software is different from the existing discussion about intellectual property. The non-piracy law defends the rights of software producers or people who can sell licences of use. The ethical problem is to find a new method to justify the rights of a new property form; the software, and also analyze if the law of intellectual property is correct or if it is necessary to find new forms to redirect these laws to benefit the general public.
- Computer decisions made by expert systems and the possibility of understanding system complexity. Since a few years ago, information systems can make and execute decisions. In few cases it has been demonstrated that such decisions are better than human decisions. The problem is whether the machines should always make the decisions. In other cases, the problem can be raised thus: if the expert

systems are complete, is it not moral to always use the machines? Another problem inside this topic is asking what we do about Internet search engines that exclude automatically, sometimes by error, sometimes by design, some websites benefiting others. The problems raised are not only technical, but also political.

- Restricted public access and relationship between computers and information power in our society. In this section the problem is information access and the question related to distributive justice, equity and fairness. It is mandatory to define who can and cannot access restricted data and what criteria are used to control access to information, integrity and inclusion of new information.
- Nature of society and information culture. The sentence “society/economy based in knowledge” tries to distinguish the relationship between Information Technologies and knowledge and economic development. IT development asks the questions: Who has the responsibility in this electronic society or cyberspace. How is the power divided? How the wealth redistributed or what is the social class benefited or injured? These are questions that it is necessary to rethink.
- Virtual reality and artificial intelligence. It is necessary to consider the anthropological approaches (how the conscience is understood, questions regarding freedom, and things like that), that have consequences to the ethical concept of humans.

The conclusion is that ethics in the IT world means to ask questions about concrete situations that are affected by the use of Information Technologies. [42]

4.6. CSR budget in IT companies

Now the entire earth is in economic crisis. Crisis is very important in the development of the businesses, because all the money should be invested well, now more than never. A good study in CSR can help companies to better survive the crisis. Most companies that had CSR programs, during 2009 will be following these programs.

Companies want to have the best corporate image that is possible, and they are concerned about how to obtain it. To achieve this it is very important to do marketing campaigns and CSR programs, and people will have good image of the company.

The UN Global Compact is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles, which are divided into three main sections:

Human Rights

- Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and
- Principle 2: make sure that they are not complicit in human rights abuses.

Labour Standards

- Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- Principle 4: the elimination of all forms of forced and compulsory labour;
- Principle 5: the effective abolition of child labour; and
- Principle 6: the elimination of discrimination in respect of employment and occupation.

Environment

- Principle 7: Businesses should support a precautionary approach to environmental challenges;
- Principle 8: undertake initiatives to promote greater environmental responsibility; and
- Principle 9: encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

- Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

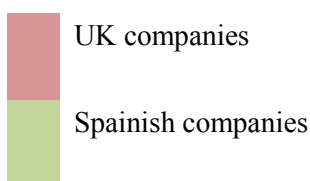
An extended version of the principles can be found on:

<http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/index.html>,

By doing so, business, as a primary agent driving globalization, can help ensure that markets, commerce, technology and finance advance in ways that benefit economies and societies everywhere.

The **United Nations Global Compact** is an organisation with the objective of the accomplishment of human rights. It groups companies that want to be CS responsible, because they are big businesses and want to have different standards. In the following table is possible to see a relation of different companies.

“On the occasion of the 60th anniversary of the Universal Declaration of Human Rights, we, business leaders from all corners of the world, call on governments to implement fully their human rights obligations. We also reiterate our own commitment to respect and support human rights within our sphere of influence. Human rights are universal and are an important business concern all over the globe.”[55]



COMPANY NAME	SECTOR	COUNTRY
Brasil Telecom S.A	Fixed Line Telecommunications	Brazil
France Telecom	Fixed Line Telecommunications	France
Deutsche Telekom AG	Fixed Line Telecommunications	Germany
Cable & Wireless Panama S.A.	Fixed Line Telecommunications	Panama
Telefónica S.A.	Fixed Line Telecommunications	Spain
MDD Comercio e...	Forestry & Paper	Brazil

Broedrene Hartmann A/S	Forestry & Paper	Denmark
Holmen AB	Forestry & Paper	Sweden
Radio Nova Mensagem	Media	Brazil
Publicis Groupe S.A.	Media	France
Richter Media Group	Media	Germany
Wiloto Corp. Asia Pacific	Media	Indonesia
MCI Communication Spain, S.A.	Media	Spain
Pearson plc.	Media	United Kingdom
Joint Stock Company Moldcell	Mobile Telecommunications	Moldova, Republic of
Integrated Research Limited	Software & Computer Services	Australia
Agoodcause.com	Software & Computer Services	Denmark
Cognitis Group	Software & Computer Services	France
Trans Business Machines Ltd.	Software & Computer Services	Kenya
Oakar Services Limited	Software & Computer Services	Kenya
Longitude 174 Limited	Software & Computer Services	New Zealand
Panda Security SL	Software & Computer Services	Spain
Forensic Pathways Limited	Software & Computer Services	United Kingdom
Danfoss Group	Technology Hardware & Equipment	Denmark
Areva	Technology Hardware & Equipment	France
Fuji Xerox Company Ltd.	Technology Hardware & Equipment	Japan
Al-Faris National...	Technology Hardware & Equipment	Jordan
Yamo SP. Z O.O.	Technology Hardware & Equipment	Poland
Altran Spain (Altran Estudios...	Technology Hardware & Equipment	Spain
Lexmark International Inc.	Technology Hardware & Equipment	United States of America

Table 4: United Global Compact IT businesses.

Source: http://www.unglobalcompact.org/Issues/human_rights/CEO_Statement_List.html

4.7. IT Magazines

In the annex III, there are different lists with information about magazines that can be read to obtain information about IT world. The project contains information about some of these magazines, because there are interesting articles in each magazine.

5. Analysis of Findings

5.1. IT companies and CSR

5.1.1. Green ranking of IT companies for Greenpeace



Image 5: Ranking verde de electrónicos. Greenpeace

Source: <http://www.greenpeace.org/espana/campaigns/contaminaci-n/electr-nicos-alta-tecnolog-a/ranking-verde-de-electr-nicos>

This initiative is made by *Greenpeace*. The first edition of the study was in August, 2006. In the ranking there are the 18 IT main manufacturers, and are ranked according to their policies about chemical products, recycling and collection of the wasted products and the climate change.

Today **Nokia** is the winner, because has an excellent voluntary programme to collect toxic waste. Is followed by: **Sony Ericsson**, **Toshiba**, **Samsung**, **Fujitsu Siemens**, **LG Electronics**, **Motorola**, **Sony** and **Panasonic**. The grades below 5 are for: **Sharp**, **Acer**, **Dell**, **HP**, **Apple**, **Philips**, **Lenovo**, **Microsoft** and at the bottom, **Nintendo**, because **Nintendo** has 0 points in a lot of features, except in power and residuals management. [28]

5.1.2. IT Companies. Relationship between the business dimension and CSR

Today there exist different ways to classify businesses, depending on different factors (number of shops, production per year, number of workers ...). Case in this way, now we can see a classification of the companies based on the number of workers that the company has.

There are four different types of companies, from a European Union point of view:

COMPANY SIZE (based on workers number, by European Union)	
<u>TYPE</u>	<u>NUMBER OF WORKERS</u>
Micro company	0 to 9
Small company	10 to 49
Medium company	50 to 249
Macro company	More than 250

Table 5: Company size (based on workers number, European Union).

This chart is a classification to all the European businesses, depending on the number of workers.

Companies today can use IT to manage their CSR programs. Several of these companies have an ERP(Enterprise Resource Planning), but without this application, the company may not gain value, and companies are researching this type of solution to achieve more competitive advantages. A rapid effect of this is that the CSR budget in these companies is increasing rapidly.

Depending on the company size, the CSR can be applied in different ways. CSR is a topic that the big companies must apply. Because the application of CSR programs costs lots of resources the smaller and the medium businesses, these companies cannot use them. CSR is not a priority in a small business, because probably they have little knowledge about different CSR practices.

CSR is new concept in Spain, because only since 1999 are there business forums to promote environmental and ethical topics and all of the companies that use these forums are big companies.

5.1.3. Can you measure CSR?

Today there is no definitive standard method to measure CSR, but there are different indicators to give to the companies' different graduation.

Examples of different methods are:

- **Sustainability Toolkit and Scorecard – Norm Thompson Outfitters[50]:** This sustainability toolkit and scorecard is designed to help retailers understand the implications that their product choices can have on the triple bottom line (economic, social and environmental aspects of business) and drive corporate sustainability goals throughout the organization. To see more information about it see the Business for Social Responsibility webpage (<http://www.bsr.org/insight/>). An example of who uses these indicators is the company **Norm Thomson** (<http://www.normthompson.com/>)
- **“Indicador ETHOS de RSE”:** this is a questionnaire that is organized in seven big topics: values, transparency and governance; corporate bodies; environment; suppliers; customers and clients; community and government; and society. Each of these topics is divided into different indicators, the objective is to help companies improve and develop in the indicated subjects from different points of view. [51] In the website of **Ethos*** it is possible to access to a list that contains the members of the website who apply these indicators.

[*http://www.ethos.org.br/DesktopDefault.aspx?TabID=3897&Alias=ethosEnglish&Lang=pt-BR](http://www.ethos.org.br/DesktopDefault.aspx?TabID=3897&Alias=ethosEnglish&Lang=pt-BR)

- “Un modelo para medir la Responsabilidad Social Corporativa en las empresas” [52] divides the indicators into four different blocks. The blocks are: Political, Social, Economic, and Business. In the next tables is possible to see the indicators and the ranking for the businesses.

CSR: INDICATORS AND INVOLVED PEOPLE

Resources		Objectives / Area of actuation			
		POLITIC	SOCIAL	ECONOMIC	BUSINESS
Information	QUANTITATIVE	Environment indicators	Social indicators	Economic indicators	Business indicators
	QUALITATIVE	People's opinion	Social actors	Economic actors	Business actors

Table 6: CSR: Indicators and involved people.

CSR can be divided into four areas of actuation. Each area needs resources, and the information that the company has of these areas can be quantitative or qualitative. With this study is possible to see where the are indicators and who is involved on each.

CSR VARIABLES TO MEASURE COMPOSITION

RESPONSIBILITY WITH

CRITICAL PARAMETER OF RESPONSIBILITY

VARIABLES THAT ARE CRITICAL PARAMETERS OF RESPONSIBILITY (COMPROMISES. NEEDS ON MESURE)

Shareholders

Transparent payment

- Properly inform.
- Addressing complaints and suggestions.
- Be transparent and truthful (no corruption).
- To preserve capital and make it grow.

Public administration

Meet legislation

- Comply with the legal system.
- Comply with tax law.
- Work positively with democratically constituted governments.

Customers

Transparent sincerity

- Accuracy of information and marketing.
- Comply with the guarantees offered.
- Addressing complaints and suggestions.
- Providing information to consumer organizations.
- Do not allow child labour.

Collaborators

Honesty

- Inform correctly.
- Comply with agreements.
- Respectful and not hurtful.
- No child labor.

Competitors

Respect of competition rules

- Do not create or disseminate false information.
- Do not attack with acts or messages.

Workers

Respect for human dignity

- Respectful and not hurtful relationship.
- Honesty and truthfulness.
- Respect for the product.
- Non-discrimination by sex, race, religion, physical or occupation.
- Salary suitable physical and / or mental.
- Integration and professional growth.
- Compatibility with professional family schedule.
- No work in precarious and unhealthy conditions.
- No child labour.
- Respect for the freedom of association and bargaining rights.
- Transparent and truthful (no corruption).

Environment

Sustainability

- Supporting preventive measures for the environment.
- Do not degrade with acts contrary to sustainability.

- Use of clean energy.
- Clean water.
- Impact on environment.
- Air pollution.

Suppliers

No extortion

- Inform in advance and properly plan actions.
- Do not establish unfair and degrading conditions.
- No work in precarious and unhealthy conditions.
- Do not allow child labour.
- Addressing complaints and suggestions.

In this table it is possible to find the different critical parameters to measure the CSR in a company depending on what the company does. Each value depends on the corporate environment and determines actions to obtain a good score.

<u>CSR Ranking</u>	
OBTAINED PUNCTUATION	GRADE
More than 75% of maximum	3 CSR
Between 51 and 75%	2 CSR
Between 26 and 50%	1 CSR
Less than 25% of maximum punctuation	0 CSR

Table 7: CSR Ranking.

With a higher score, better grade in CSR is achieved.

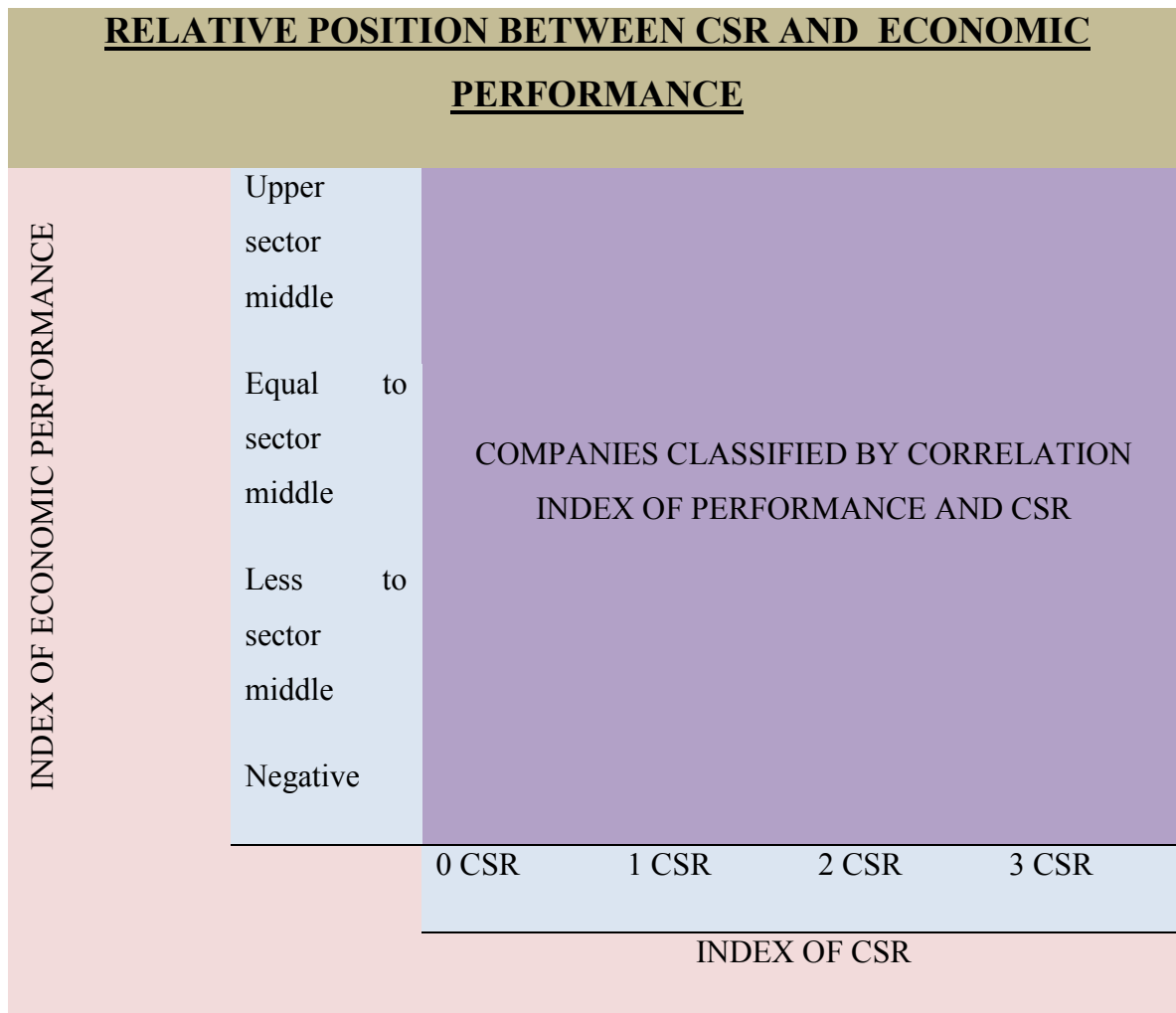
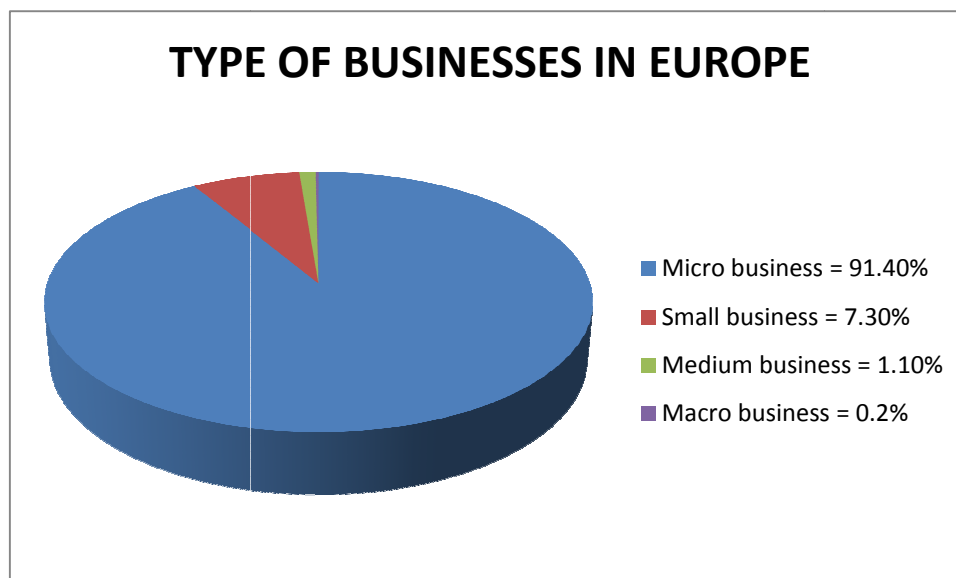


Table 8: Relative position between CSR and economic performance.

When the index is calculated, is possible to know the CSR rating of the company, and with this table, when the index is calculated, it is possible to see the economic performance of a business.

In Spain, some people think that the problem is that the government does not promote CSR and that organizations must promote some practices to encourage the use of CSR through collective negotiation. [14]

Now it is possible to see a graphic of the type of businesses that exist in Europe and how many of each type there are.



Graphic 1: Type of businesses in Europe.
Source: Eurostat.

This classification of type of businesses in Europe was made by Eurostat, based on the number of workers and financial balance.

The time to apply CSR is very different between macro business and small and medium business. The big companies have different departments, and in the most of the cases, one of these departments is focused on CSR, or all of them have the responsibility to apply CSR inside the organisation.

Usually the big companies include CSR programs in their budget, to dedicate some money of the annual profits for CSR implementation.

About the small and medium businesses, the widest opinion is that these companies should apply CSR programs in their environment, because economically it is the easiest, and it is sufficient, because their stakeholders can see the benefits to the business and think about the application of CSR for their company.

In accordance with the “*European Net of Small and Medium Businesses*” data, while more than 50% of Small and Medium European businesses are involved in certain aspects in his community, in the majority of cases, only are linked occasionally, not systematically,

consisting primarily in donations, and in rare cases related with strategic or business necessities.

CSR is not a synonym of altruism, but there is a “business case”, in other words, few business reasons recommend his development. It is a “win-win situation” on all the involved parts something is won.

A businessman of a SME will be easily persuaded for example, to develop a non-discriminatory employment selection policy (sex, religion, race,...) if can see the economic profitability associated with respect for the diversity of the labour strength (because that offers a new entrance to new customers groups, and a better comprehension about the diverse markets and a larger recruiting sources and employers selection), than if he only sees the CSR aspects. There are different practices to apply CSR, and all of the possibilities must be studied.

Looking the implication and compromise of the small and medium businesses with local communities in which they operate, the “Business in the Community” organisation had created in the UK a quality standard for this type of businesses called “Community Mark”. This standard evaluates the focus that the small and medium businesses adopt in his community activity and the results are given in twelve different areas. With these results and an analysis of how they were arrived at, the small and medium businesses can identify how to improve continuously.

All the important and known CSR cases are made by macro companies, but that does not mean that the CSR cannot be applied by the smaller and medium businesses, it is only because these companies are known throughout the entire world, and the good behaviours of them are very important. These companies have better strategies than the medium or small, because they have a large amount of resources to apply to CSR. In conclusion, the small and medium businesses can apply CSR, but probably in a different way than the biggest, because the SMEs usually made CSR policies centred on the workers and the company environment, trying to spend less money for the best possible profitability. The biggest companies do CSR projects focused on donations to the undeveloped world or helping the society in general, searching for more profit through marketing and corporate image.

Small and medium businesses develop in a business and social environment that is in permanent evolution. Yesterday's environment, had more stability, more uninformed multinationals, where the most important value was the business size, in which functional precedence, the control and the monitoring, the hierarchy and the financial pressure caused the isolation of SMEs. Today is a dynamic environment, always reported globally, where the two ends of business coexist: the biggest and the smallest. Today's business environment is related to knowledge and talent management with emphasis on involvement and empowerment of both customers and employees, based on networking with objectives oriented to the needs of the customer, which generates an SME related to the needs of its customers, partners, etc..

Business sector of the SMEs today is far removed from the policies, practices and government of big companies that are developing practices for CSR.

CSR concept in SMEs today is not sufficiently mature, in general, for the direct implementation of CSR management systems in all the companies.[15]

The European Commission created a Campaign to sensitize the businesses, in particular the European SMEs, about the importance of CSR. With this Campaign, the Commission wants to reach the 25 million SMEs that exist in Europe. The European competitiveness depends, largely on these small businesses, which, as you can see in the above graphic, which represent about 95% of European businesses. They are an essential source of employment creation, a breeding ground for business ideas and are the principal engine of the business spirit. The SMEs play an important role in the business economy of the EU, providing approximately 2/3 of the employment and 60 per cent of the added value in the EU. [16]

Europa Press, is a new company that provides information in an electronic newspaper about CSR and SMEs. One of the new items says: the president of the "*Asociación Española para la Calidad*"(AEC), Jaime Lloret, confirms that "the SMEs are working together on the introduction of CSR principles inside their social actions policies". In an article sent to Europa Press, Lloret states that now is the time to "adapt this process to the SMEs", an essential part of the economy "to learn the real dimension of CSR and assume

the desirability of implementing it in their business”. Lloret says that CSR is not a fashion for the big businesses, now is a “key factor” inside the social policies that companies develop.

To sum up, different types of CSR exist, and also there are different types of businesses (depending of different classifications). A big company can use lots of resources for CSR, and it benefits their marketing and sales, because people can know different brands depending on their actions, and the big companies can use a specific department to apply CSR, or apply other improvements to have CSR in all the departments, but the SMEs should apply CSR differently, because they have not the same budget, and in the majority of cases, cannot spend resources by CSR, because there are necessities to other type of things. In his environment, SMEs can apply CSR with little effort, because the CSR that they apply is very different than the big companies, and probably makes more profit, because the most important thing is to obtain results applying knowledge, and not searching always make money.

Different companies who pertain to the IT world do different practices of CSR. Today there exist guidelines to apply it in a business, and many companies that help to apply different CSR practices. A very good example is when a company renews all his equipment and all the old equipment goes to non developed countries, because it is good practice to because other people can use it to make profit, or use it for education. For example, **Bit Bit**, an IT company who’s remit is to give the obsolete IT material to social causes, It is a company that accepts IT material from companies and manage its donation to associations or people that needed it. [38]

5.2. Comparison between GB – Spain

5.2.1. Surveys

The main objective of this project is to get the opinion of society about CSR, by doing surveys and studying the obtained results, and compare them between the two countries of the study (*UK and Spain*).

A very important objective is to obtain one hundred different surveys from each country people, students, workers and old people. In this study the younger people are not considered, because they do not have sufficient knowledge of the topic, but a very important point to consider is that these people uses lots of new devices (for example all the *iPod* family products).

It is interesting to hear the opinion of IT workers and all the people (probably people that not work) to see the different vision of this important topic today and how is applied in the companies and how the public see it.

The surveys are very short, and can be answered in few minutes. Some people have found some of the questions difficult, because they do not know anything about CSR, and also, at time to do the survey, some did not know about the CSR programs in the big companies.

There are 10 different questions in the survey, divided into three big sections. The first section is called “*about you*”, and in this section there are few questions to find out if the respondent is working, their age range and other interesting questions that are explained later. The next two sections are: “*Social Responsibility and Corporate Social Responsibility*” and “*Well-known brands and CSR*”. Social Responsibility and Corporate Social Responsibility tries to ask all the people if they know what CSR is and to whom/how it applies. About well-known brands, the survey has two questions that gives the respondent the opportunity to tell his opinion about the brands that he/she thinks are Responsible, and what is the most important point when deciding whether a company is responsible.

All the questions are “closed” questions, because is easier to answer, and this topic has difficulties at time to write about it.

The survey can be answered in 10-15 minutes (one minute per each question and little more to think about it, or to order the brands and the preferences).

The methodology used to make the survey is summarized in the following table:

SURVEY METHODOLOGY	
Method of data collection	Individual surveys of people
Universe	Government workers. SME workers. General public. Students.
Scope	UK and Spain.
Sample size	80 surveys. - 40 Spanish people. - 40 British people. Some of these surveys are answered by students, other by workers.
Screenplay of the survey	Made with different questions, some of these are ideas that others surveys have.
Team	Person capable of answer all type of doubts in this topic.
Controls	There is not any control, because some people do not know the topic.
Date	Since April 1 to April 26 of 2009.

Table 9: Survey methodology.

In the following five pages is possible to see the survey, and later all the questions will be explained.

The main objective of this survey is to know the customers opinion about CSR (Corporate Social Responsibility) concept and its application in the IT world. Also intended to compare the citizens awareness about two countries: UK and Spain about this topic. These questions try to know the people’s opinion and his sensibility about CSR (about himself and the IT companies).

(Rounded the right choice)

About you

Nationality:

UK	Spain
----	-------

Gender:

Male	Female
------	--------

Age:

0-16	17-25	26-45	46-65	65 +
------	-------	-------	-------	------

Do you work?

Yes	No
-----	----

(If no, the next questions are not for you)

Where?

Big company	Small or medium
-------------	-----------------

For who?

For the government	Self-employed	For a company
--------------------	---------------	---------------

Social Responsibility and Corporate Social Responsibility

1. What do you think about CSR (Corporate Social Responsibility)? (mark one)

- | | |
|--------------------------|---|
| <input type="checkbox"/> | I do not know what it means. |
| <input type="checkbox"/> | IT companies not take care with all the related with this. |
| <input type="checkbox"/> | It is an optional practise and does not help to gain advantages. |
| <input type="checkbox"/> | IT companies should apply it. |
| <input type="checkbox"/> | Companies apply CSR because is mandatory today by the government. |

2. Do you think the SME's (Small and Medium Enterprises) apply CSR? (mark one)

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Yes, to win competitive advantage. |
| <input type="checkbox"/> | Yes, to abide by law. |
| <input type="checkbox"/> | Yes, to improve their corporate image with respect to environmental issues. |
| <input type="checkbox"/> | No, these businesses do not apply CSR and damage the environment without measure. |
| <input type="checkbox"/> | No, because it is not necessary. |
| <input type="checkbox"/> | No, CSR only can be applied by the big companies. |

3. Are you social responsible (doing donations) and environmental responsible (recycling)? (mark one)

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Yes, it is mandatory by the law to avoid sanctions. |
| <input type="checkbox"/> | Yes, all my practices are voluntary. |
| <input type="checkbox"/> | No, I have not profit with it application. |
| <input type="checkbox"/> | No, CSR is optional, not mandatory. |

4. When you buy a new IT product what do you do with the product that you replace? (mark as you want)

- The product goes to the rubbish bin without more importance.
- The shops where I buy my new product take the old and recycle or apply donations programs with it.
- The government give the option to put our old IT products in a place and recycle it.
- I donate my oldest product.
- I save my old product to reuse when is necessary.

5. Do you know any CSR projects promoted by IT companies in your country? (mark as you know)

- Aids to workers.
- Conciliation of family life.
- Sponsorship of a sport team.
- Computers donations.
- Financial helps.
- Forestations.
- Other (write it):

No, I do not know.

6. When buying a new product, do you take power consumption into account? (mark one)

- Always.
- Often.
- Seldom.
- Never.

7. Today somebody invented a new mobile charger that is universal and runs with solar energy. Do you think people would continue using the current charger or you think people want to use the new because does not use power? (mark one)

- | | |
|--------------------------|---|
| <input type="checkbox"/> | It depends on the price of the charger. |
| <input type="checkbox"/> | Yes because people are aware of it. |
| <input type="checkbox"/> | If the charger is included in the new products, people will use it. |
| <input type="checkbox"/> | People will use alternately both chargers (electric and solar) |
| <input type="checkbox"/> | No because people prefer to connect it to the power, it is faster. |
| <input type="checkbox"/> | Depends on the speed of charge. |

8. You need a new printer to your home. You are looking for two printers with the same features. The only difference is that one is £15 more expensive than the other, but the company of the expensive one has a program to help the society investing in various projects to help people or save the environment. What product do you buy? (mark one)

- | | |
|--------------------------|---|
| <input type="checkbox"/> | I looked the features: power consumption, number of pages with the same cartridge and its de same, but I prefer the socially responsible because helps the society. |
| <input type="checkbox"/> | I looked the features: power consumption, number of pages with the same cartridge and its de same, but I prefer the cheapest. |
| <input type="checkbox"/> | The product of the most recognised brand. |
| <input type="checkbox"/> | I do not know because it depends on the moment. |

Knowledge brands through CSR

9. What do you think about is more important at time to positively assess a brand or company? Enumerates between 1 and 5 its position (1 more important, 5 less important).

	Famous brand.
	Seniority in the market.
	Company not involved in any scandal.
	Have production in my country.
	Others (write it):

10. Order these companies by the most CSR responsible to the less CSR responsible (1 the more responsible, 5 the less).

	IBM.
	SONY.
	Hewlett-Packard.
	NOKIA.
	Fujitsu-Siemens.
	Others(write it):

The survey has 3 important sections: About you, Social Responsibility and Corporate Social Responsibility and well known brands. All the sections are explained in the following table.

- The **first section** is to classify the surveyed person for the later study of his answers.
- The **second section** put the surveyed in different situations, giving the opportunity of chose one.
- The **third section** is organized to make it easier to complete.

<u>Question</u>	<u>Explanation/Objective</u>
ABOUT YOU	
This section is formed by 6 questions for the workers, 4 for the non workers. The nationality is asked to divide the surveys in the two different sectors that the study is interested in. Also the gender is asked, the range of the age and if the person works. If they work they are asked the size of the company and if they work for the government or not.	
SOCIAL RESPONSIBILITY AND CORPORATE SOCIAL RESPONSIBILITY	
1. What do you think about CSR (Corporate Social Responsibility)?	The question intends to know if the responder knows what CSR is.
2. Do you think the SME's (Small and Medium Enterprises) apply CSR?	To know the SME's CSR impact in the society. This question makes a distinction between business sizes.
3. Are you socially responsible (giving donations) and environmental responsible (recycling)?	Different options about if the responder is responsible. Question to position the surveyed opinion.
4. When you buy a new IT product what do you do with the product that you replace?	What do people do with old products? To position surveyed into recycle about IT world.
5. Do you know any CSR projects promoted by IT companies in your country?	Impact of CSR programs applied and knowledge about it. Check the existence of CSR programs in their environment.
6. When buying a new product, do you take power consumption into account?	Importance of the use of energy demonstration. Helps to question 4.

<p>7. Today somebody invented a new mobile charger that is universal and runs with solar energy. Do you think people would continue using the current charger or do you think people want to use the new one because it loses less power?</p>	<p>Are people aware on the possibilities to help the environment? Or is not important aspect to people?</p>
<p>8. You need a new printer in your home. You are looking for two printers with the same features. The only difference is that one is £15 more expensive than the other, but the company of the expensive one has a program to help the society investing in various projects to help people or save the environment. What product do you buy?</p>	<p>Are people really voluntary in CSR? Or do people only look the money? Priority related with incomes. Possibility of hypothesis confirmation.</p>
<p>WELL-KNOWN BRANDS AND CSR</p>	
<p>9. doWhat do you think is more important at the time to positively assess a brand or a company? Number the importance between 1 and 5</p>	<p>What is important about CSR for people? What do they want?</p>
<p>10. Order these companies by how CSR responsible they are</p>	<p>Knowledge about different big companies in CSR topic. To relate IT companies with people’s knowledge.</p>

Table 10: Survey questions explanation.

5.3. CSR comparison in smaller – bigger businesses

It is necessary to do a comparison between SMEs and big companies at this point to understand why such companies, depending on their interests, do different things. For example, the interests of big companies will be very different than the SME businesses, because the business environment is totally different.

Big companies, as is explained before in this document, are companies that have more than 250 workers. These companies have more investments than the SMEs, and can deliver too many more people than small companies.

SMEs companies can deliver to fewer people than macro companies, but they can also do good programs in CSR, because, if the planned programs are well applied and the company do the right things (employers with advantages, take care with environment and not make scandals), the actuation of these companies are good, and they are doing CSR well without using big quantities of money. With time, good actions in CSR bring competitive advantages and money to the business.

On the other hand, the big companies today must invest in CSR, because they have revenues to do that. Today there are big differences between responsible companies and not responsible companies, because the customers are demanding, increasingly, that companies help the world doing good actions.

Big companies take trace faster and easier than SMEs, because the impact that they can make in society is more foreful than the smaller companies can. For example, big companies can do marketing campaigns that are delivered to millions of people on TV, Internet, radio, newspapers and all the communications media that we can imagine, but the small businesses only can target a few people, because the business environment is very different and they cannot spend large quantities of money in marketing and announcements.

The SMEs must apply CSR, and that helps give these companies a competitive advantages and value to the company, but they should develop CSR in the following areas:

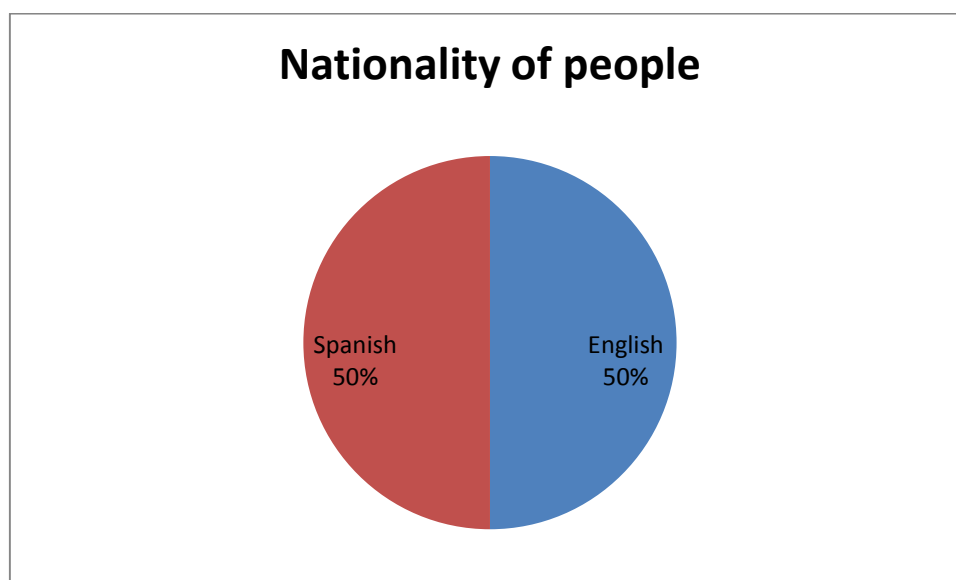
- **Economic-financial:** the companies should be transparent in accounting, in their financial policies and in legal compliance.
- **Social:** the company always should work with ethics and must be responsible with their employers, unions, suppliers, distributors, customers, institutions, media, shareholders, financiers and throughout its business environment.
- **Environment:** all the actions and resources used by the company should be responsible.

6. Evaluation of Results

The survey has been passed to 80 people in total, 40 British and 40 Spanish people. In annex IV there are some examples of it. There are some differences between the collection of data between Spain and UK, because the role of the people is different in both countries (in UK more university students/workers, in Spain people that is working and also students).

People were chosen randomly, to family, friends and colleagues. Also the survey was passed to different teachers and students at university, to get different results about different roles of people.

At the beginning of the project, the process to get surveys was manual, talking to people and explaining the idea of the project, but at the end it was possible to do the survey via the Internet, and the collect of data was easier, because the process was all computerized.



Graphic 2: Nationality of people.

The collected data can be summarized in a table:

COLLECTED DATA					
		BRITISH SURVEYS		SPANISH SURVEYS	
		MALE	FEMALE	MALE	FEMALE
		45 %	55 %	62.5 %	37.5 %
AGE	17-25	50%	27.27 %	36 %	66.7 %
	26-45	38.9 %	59.10 %	48 %	33.3 %
	46-65	11.1 %	13.64 %	16 %	0 %
	65+	0 %	0 %	0 %	0 %
WORKING	YES	39.3 %	60.7 %	75 %	25 %
	NO	66.6 %	33.3 %	37.5 %	62.5 %
FOR WHO?	GOVERNMENT	45.45 %	13 %	5.6 %	0%
	SELF-EMPLOYED	9.1 %	17.65 %	38.9 %	0%
	COMPANY	45.45 %	70.6 %	55.6%	100 %
WHERE?	BIG COMPANY	54.55 %	35.3 %	11.1 %	16.7%
	SME	27.3 %	64.7 %	88.9%	83.3 %

Table 11: Collected data.

The profile of the surveyed people can be differentiated. In UK more females than males, were surveyed (but almost 50% of British surveys was given to each gender). In Spain there are more male samples than female samples (more or less 1/3 of the surveyed people was female and 2/3 male).

In UK, about the male surveyed, half of them were people between 17 and 25 years old, more or less the 40% to people were between 26 and 45 years old and only 10% between 46-65

About the UK female gender, the most representative group was 26-45, with 60 % participation, followed by 28% of 17-25 age, and at last 46-65, with 15%.

About the total of people that is working, there are working 40% of the male and 60% of the female, and not working 66% of male and 33% of female. That means that more female than male of the UK surveyed people were working, and about the people that are not working, 2/3 of the surveyed people are male.

In UK surveyed males it is possible to see that the same value of people work for the government as for a company, but the number of self employed is minimal in comparison to the other two options. The females, in most of the cases, work for a company, and the number of self-employed or government-employed is very similar.

There are more UK males working in big companies than SME companies, and, more females working in SMEs than big companies.

Looking the Spanish people, the male group most represented is the 26-45, with almost the half of the total, followed by the 17-25 group and the last the 46-65. The females surveyed were for the most part 17-25 with 2/3 parts, and the rest of the samples were 26-45. There are no samples for 46-65 in Spanish females group.

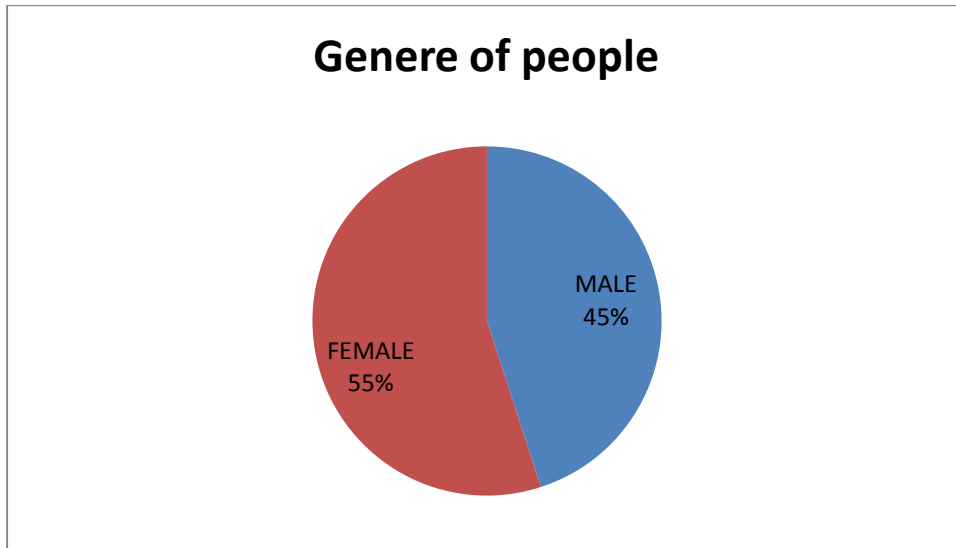
Of the Spanish surveyed people that were working, $\frac{3}{4}$ parts of them were male, and there are more samples of females that are not working than male (more or less 63%).

Government workers are insignificant number in the Spanish surveys, because males only are 5.6% and females have no presence. Also there is no self-employed presence in the females group, but this is very significant in the males group, with 40% of the people. The rest of surveyed people work for a company, with 55% to the male, and the entire samples to female group (100%).

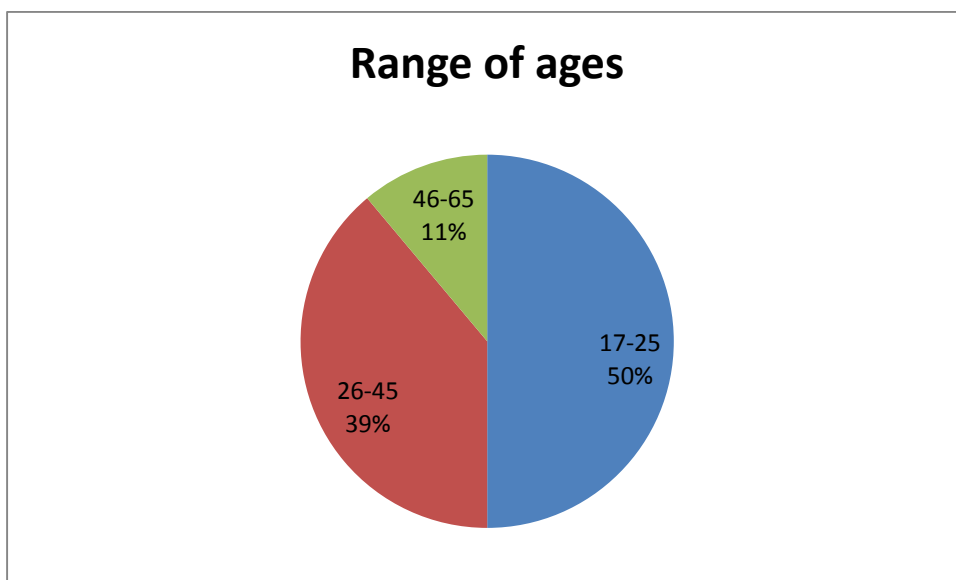
About whom people work for, in Spain the results were very similar; because there is many more people working for a SME (80%-90%) than working in a big company (10%-15%).

BRITISH

Of the 40 British people there are 18 male and 22 female.

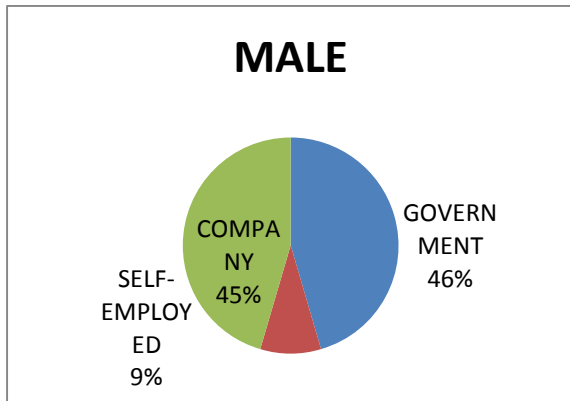


Graphic 3: Gender of people. UK.

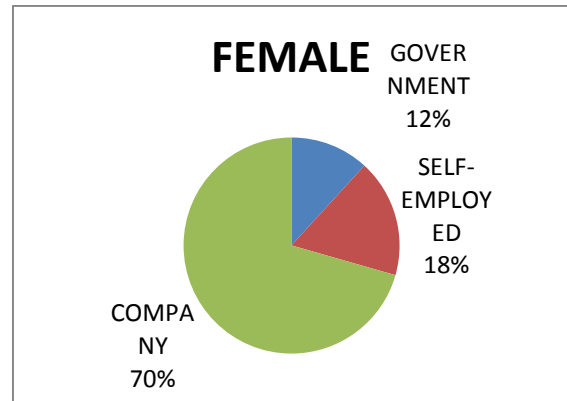


Graphic 4: Range of ages. British survey.

There are 28 working people, and 12 not working people. Here it is possible to see for whom people work.



Graphic 5: For whom work British male people?

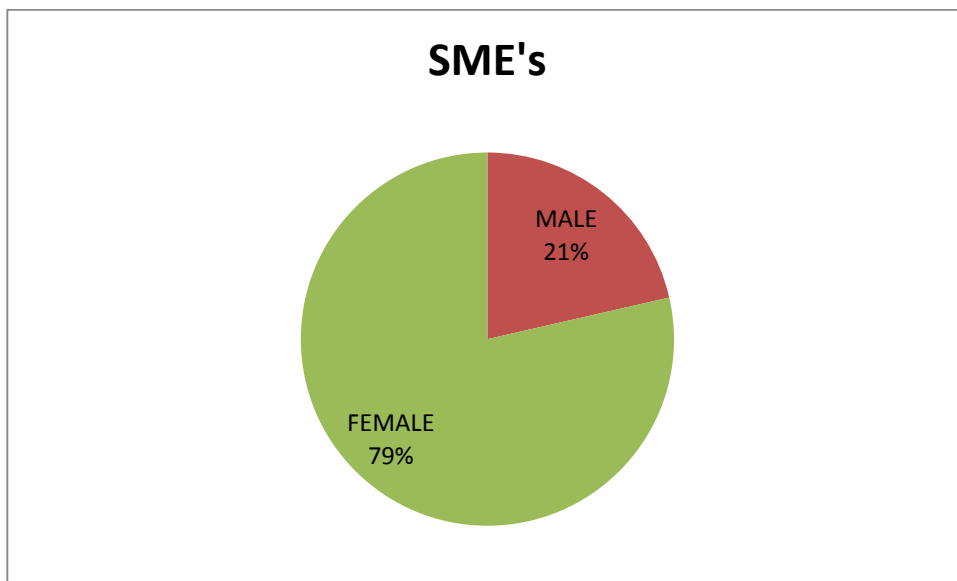
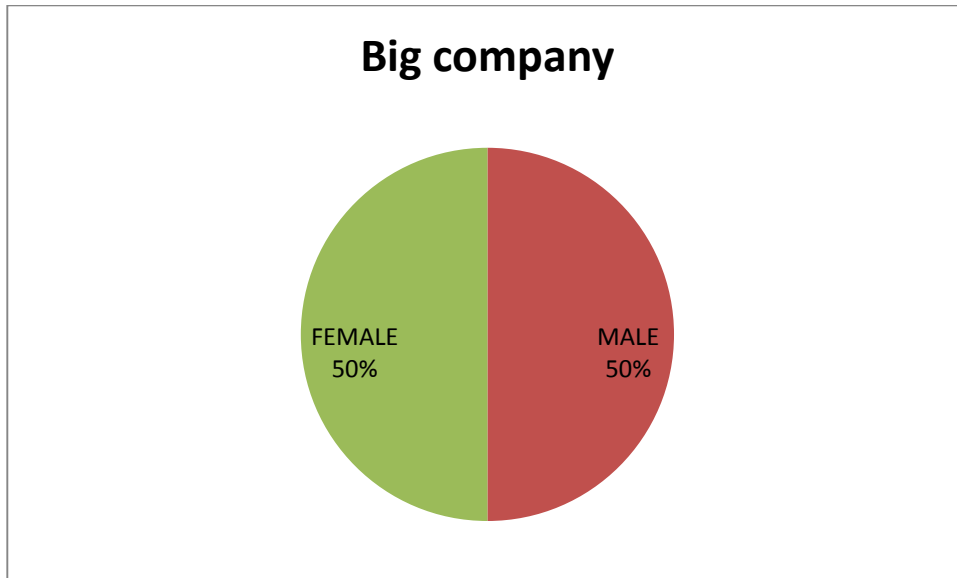


Graphic 6: For whom work British female people?

In UK, the most representative group of people was 17-25, because it was the easiest range to be surveyed (at university there are hundreds of them, and the possibility was good to do the surveys), and the following representative group was 26-45, because at university were people with this age (workers and students).

About the place of work of surveyed British people, there are significant differences between male and female group. There are more male workers that work for the government than female. By other hand, there are the double of female self-employed than male people. There are 35% more of female workers for a company than male workers.

Where work people?



Graphics 7 and 8: Big company, SMEs gender of people working.

In the British available results there is the same number of men and women working in big companies, but there are many more girls working in SMEs than men. The men's profiles in the data collected are students, who are not working, or work for the government (at university or similar work, few hours a week). The women's profile is different, because they are employees of a SME, in the major part of the surveyed people.

And about the questions the results are:

1. What do you think about CSR (Corporate Social Responsibility)? (mark one)

18	I do not know what it means.
0	IT companies not take care with all the related with this.
4	It is an optional practise and does not help to gain advantages.
17	IT companies should apply it.
1	Companies apply CSR because is mandatory today by the government.

2. Do you think the SME's (Small and Medium Enterprises) apply CSR? (mark one)

3	Yes, to win competitive advantage.
5	Yes, to abide by law.
12	Yes, to improve their corporate image with respect to environmental issues.
5	No, these businesses do not apply CSR and damage the environment without measure.
1	No, because it is not necessary.
2	No, CSR only can be applied by the big companies.

3. Are you social responsible (doing donations) and environmental responsible (recycling)? (mark one)

3	Yes, it is mandatory by the law to avoid sanctions.
29	Yes, all my practices are voluntary.
5	No, I have not profit with it application.
2	No, CSR is optional, not mandatory.

4. When you buy a new IT product what do you do with the product that you replace? (mark as you want)

3	The product goes to the rubbish bin without more importance.
7	The shops where I buy my new product take the old and recycle or apply donations programs with it.
5	The government give the option to put our old IT products in a place and recycle it.
11	I donate my oldest product.
18	I save my old product to reuse when is necessary.

5. Do you know any CSR projects promoted by IT companies in your country? (mark as you know)

2	Aids to workers.
2	Conciliation of family life.
8	Sponsorship of a sport team.
13	Computers donations.
2	Financial helps.
2	Forestations.
1	Other (write it): Cultural actions.

17	No, I do not know.
----	--------------------

6. When buying a new product, do you take power consumption into account? (mark one)

8	Always.
11	Often.
11	Seldom.
9	Never.

- 7. Today somebody invented a new mobile charger that is universal and runs with solar energy. Do you think people would continue using the current charger or you think people want to use the new because does not use power? (mark one)**

13	It depends on the price of the charger.
4	Yes because people are aware of it.
12	If the charger is included in the new products, people will use it.
6	People will use alternately both chargers (electric and solar)
2	No because people prefer to connect it to the power, it is faster.
2	Depends on the speed of charge.

- 8. You need a new printer to your home. You are looking for two printers with the same features. The only difference is that one is £15 more expensive than the other, but the company of the expensive one has a program to help the society investing in various projects to help people or save the environment. What product do you buy? (mark one)**

15	I looked the features: power consumption, number of pages with the same cartridge and its de same, but I prefer the socially responsible because helps the society.
9	I looked the features: power consumption, number of pages with the same cartridge and its de same, but I prefer the cheapest.
10	The product of the most recognised brand.
6	I do not know because it depends on the moment.

Knowledgeed brands throught CSR

9. What do you think about is more important at time to positively assess a brand or company? Enumerates between 1 and 5 it position (1 more important, 5 less important).

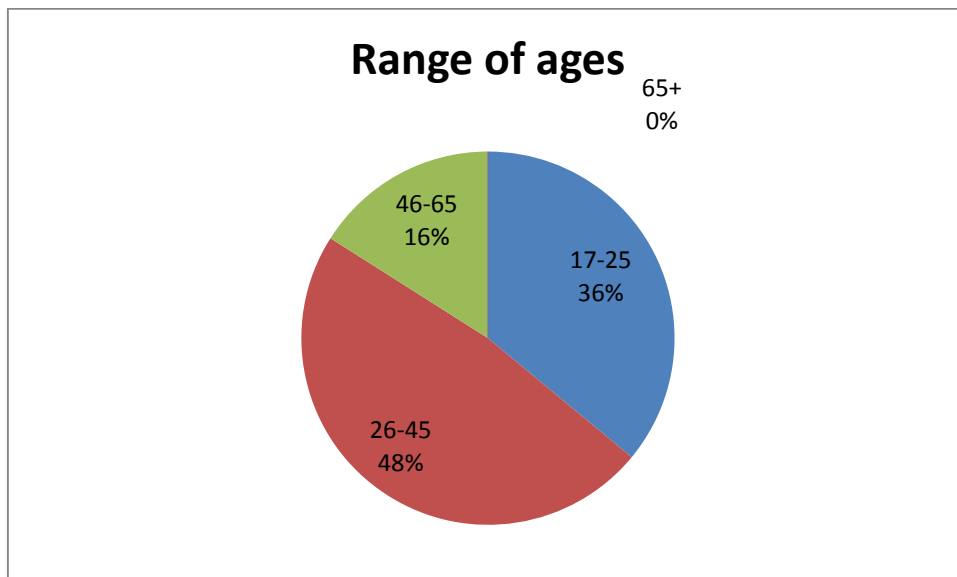
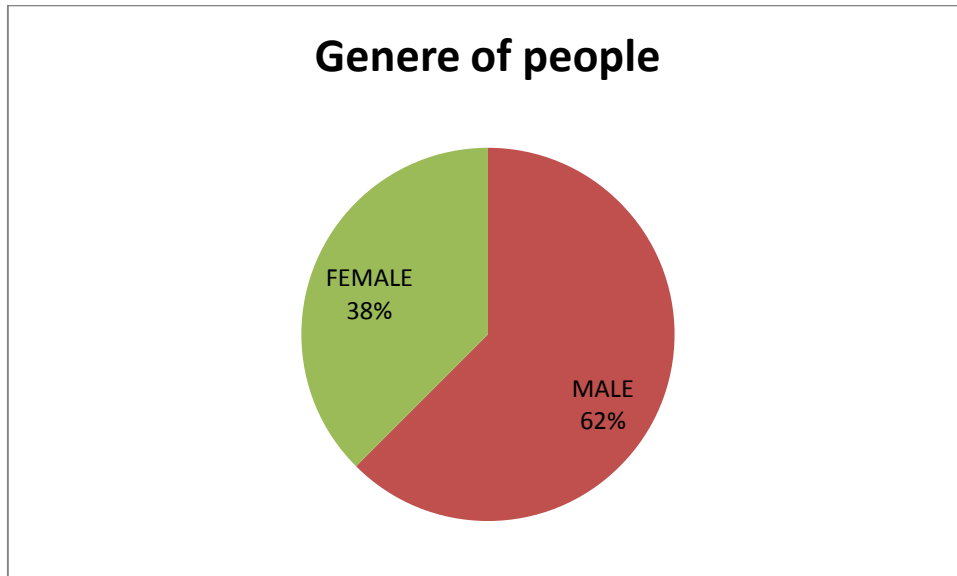
1	Famous brand.
3	Seniority in the market.
4	Company not involved in any scandal.
2	Have production in my country.
5	Others (write it): <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> Company that I have used before successfully. Environmental responsibility. Web reviees, customer / user reviews on the Internet. Quality of product + reliability. </div>

10. Order these companies by the most CSR responsible to the less CSR responsible (1 the more responsible, 5 the less).

5	IBM.
1	SONY.
2	Hewlett-Packard.
3	NOKIA.
6	Fujitsu-Siemens.
5	Others(write it): <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> Microsoft </div>

SPANISH

There are 40 surveyed people, 25 male and 15 female.

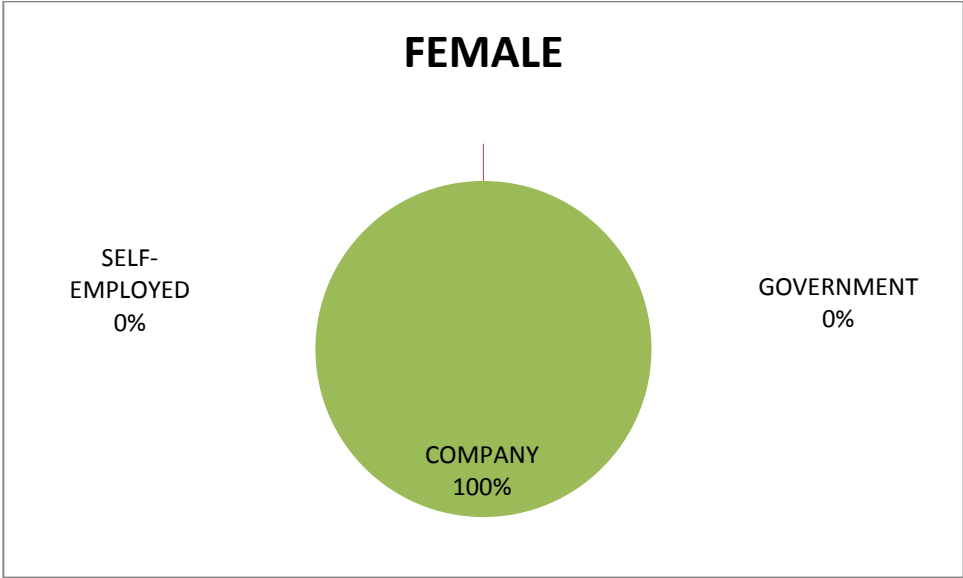
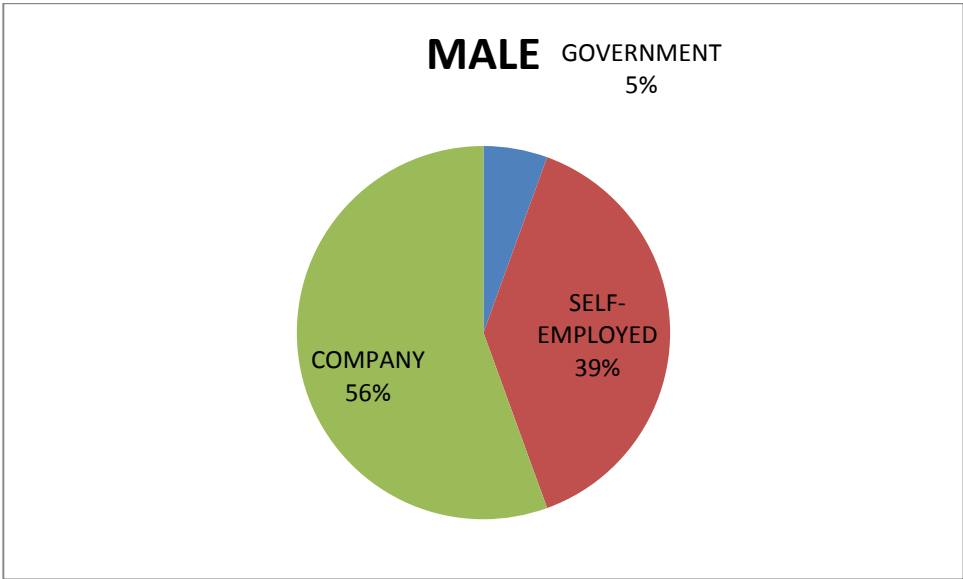


Graphics 9 and 10: Gender of people and range of ages.

There are 25 working people, and 15 people not working. In the Spanish surveys there are many more male examples than female (62% male, 38% female). The

most significant group age is 26-45, with half of the samples, followed by the 17-25 range, with 36%.

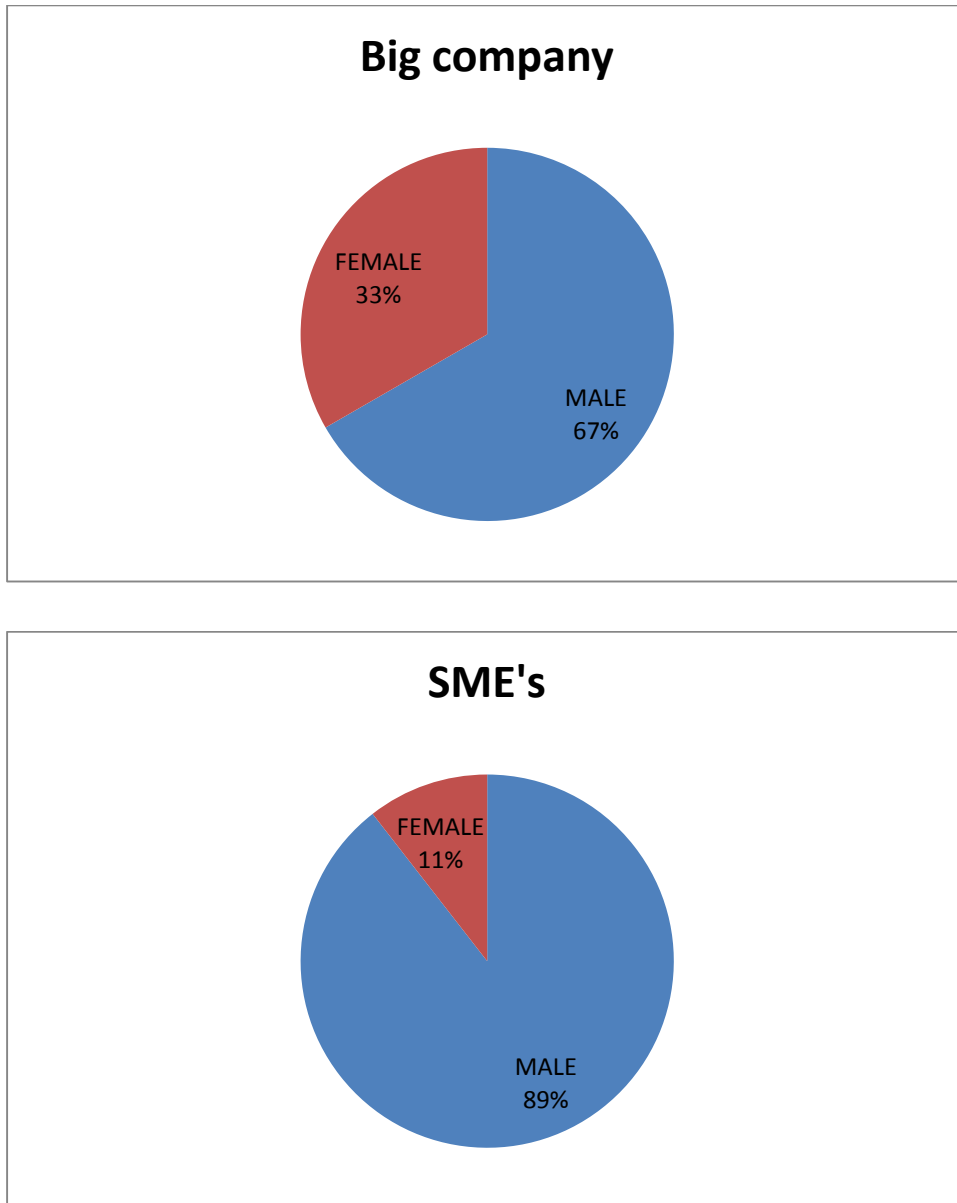
Who are people working for?



Graphics 11 and 12: For who works people?

With these graphics, is demonstrated that the surveyed men work, as is possible to see in the first graphic, work mainly for a company and in the next largest sector they are self-employed, and the government has the smallest portion of the graphic. On the other hand all the surveyed women work for a company, but as employees, because they are not self-employed.

Where do people work?



Graphics 13 and 14: Classification of where works people by sex.

In the Spanish results, big companies employ 2/3 of the surveyed men, and 90% of the SMEs workers are men. The results contain few examples of women workers, because there are only 6, and it is impossible to make conclusions with this data.

Now here are the Spanish surveys with the final results entered into the corresponding blank boxes. The language is Spanish because this is an example of the original Spanish survey.

1. ¿Qué piensas sobre la RSC(Responsabilidad Social Corporativa)? (marca la opción correcta)

6	No sé qué significa.
1	A las compañías IT (Tecnologías de la Información) no les interesa nada relacionado con este tema.
5	RSC es una opción adicional y no ayuda a ganar ventajas competitivas.
19	Las compañías IT deben aplicar RSC para mejorar el entorno.
8	Las compañías aplican RSC porque es obligatorio hoy en día (el gobierno vela por su cumplimiento).

2. ¿Piensas que las PYMES (Pequeñas y Medianas Empresas) aplican RSC? (marca la opción correcta)

4	Sí, para obtener ventajas competitivas.
6	Sí, para cumplir con la ley.
13	Sí, para mejorar su imagen corporativa con respecto a cuestiones medioambientales.
6	No, estos negocios no aplican RSC y dañan el medioambiente sin medida.
6	No, porque no es necesario.
3	No, la RSC solo puede ser aplicada por las grandes compañías.

3. ¿Te consideras socialmente responsable (haciendo donaciones) y medioambientalmente responsable (reciclado)? (Escoge una opción)

3	Sí, es obligatorio por la ley para evitar sanciones.
28	Sí, todos mis actos son voluntarios.
6	No, no me beneficio aplicando estas prácticas.
3	No, RSC es opcional, no obligatoria.

4. Cuando compras un nuevo producto IT, ¿Qué haces con el producto que reemplazas)? (Marca la opción apropiada)

0	El producto va a la papelera sin ninguna consideración.
11	Las tiendas donde compro mis productos se encargan de reciclar el viejo o aplicar programas de donaciones con el mismo.
7	El gobierno nos da la opción de reciclar productos IT.
5	Dono mi producto viejo.
17	Guardo mi Viejo producto para reusarlo cuando sea necesario.

5. ¿Conoces algún proyecto RSC patrocinado por compañías IT en tu país? (marca las opciones necesarias)

1	Ayudas a los trabajadores.
2	Programas de conciliación familiar.
6	Patrocinador de un equipo de deporte.
5	Donaciones de ordenadores.
7	Ayudas económicas.
3	Repoblaciones forestales.
2	Otras (por favor, especifica): <div style="border: 1px solid black; padding: 5px; margin-top: 5px;">Fundación Caja Murcia, CAM. The Phone House.</div>

18	No, no conozco ninguna.
----	-------------------------

6. Cuando compras un nuevo producto, ¿Tienes en cuenta el consumo energético? (escoge una opción)

8	Siempre.
12	A menudo.
14	Rara vez.
4	Nunca.

7. Alguien ha inventado un cargador de teléfono móvil que es universal y funciona con energía solar. ¿Crees que la gente seguirá usando el cargador eléctrico o crees que la gente usará el nuevo invento porque se pierde menos energía y usa energía solar? (escoge una)

17	Depende del precio del cargador.
1	Sí porque la gente está concienciada en este aspecto.
16	Si el cargador está incluido en los nuevos productos, la gente lo usará.
5	La gente usará alternativamente los dos cargadores (eléctrico y solar).
0	No porque la gente prefiere usar la electricidad, es mejor (más cómodo).
1	Depende de la velocidad de carga.

8. Necesitas una nueva impresora para tu casa. Estas mirando dos impresoras con las mismas características. La única diferencia es que una es 15€ más cara que la otra, pero la empresa de la cara tiene un programa de ayuda a la sociedad invirtiendo en varios proyectos para ayudar a la gente o salvar el medioambiente. ¿Qué producto compras? (escoge una opción)

12	He considerado las características: consumo de energía y número de páginas impresas con el mismo cartucho y son iguales, pero prefiero la socialmente responsable porque ayuda a la sociedad.
10	He considerado las características: consumo de energía y número de páginas impresas con el mismo cartucho y todas las características son las mismas, pero prefiero la barata.
5	El producto de la marca más conocida.
16	No lo sé porque depende de mi situación económica del momento.

RSC y marcas reconocidas

9. ¿Qué piensas que es más importante a la hora de valorar una marca o empresa? Enumera la importancia entre 1 y 5 (1 más importante, 5 menos importante).

1	Marca conocida.
3	Antigüedad en el Mercado.
4	Compañía no involucrada en ningún escándalo.
2	Compañía que dispone de plantas de producción en mi país (proporciona trabajo y beneficios en mi ciudad).
5	Otras (por favor indicar): <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>Experiencia personal o de personas cercanas con productos adquiridos de la misma marca. Relación calidad-precio adecuada. Compañía que ayuda a la sociedad.</p> </div>

10. Ordena estas compañías por como de Responsables Socialmente son (1 la más responsable, 6 la menos responsable).

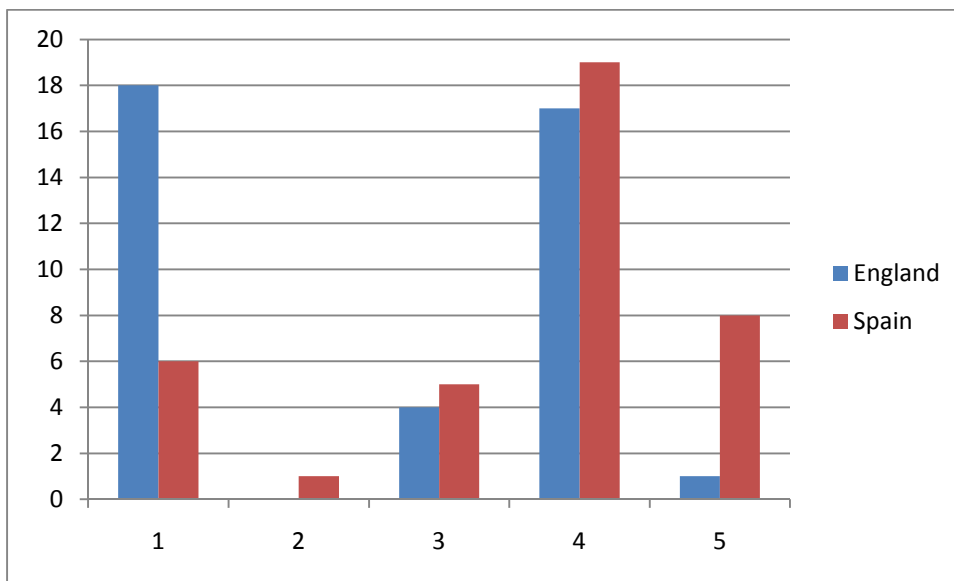
3	IBM.
5	SONY.
2	Hewlett-Packard.
1	NOKIA.
4	Fujitsu-Siemens.
6	Otras (especifica): <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>Microsoft. Samsung.</p> </div>

COMPARASON OF COUNTRIES BASED ON SURVEY

In all the following graphics, the x-axis is the number of the question, and the ordinate is the number of people that answered.

Question 1:

In this graphic it is possible to see that more British people than Spanish people do not know what CSR means, and many more Spanish people than British people think that CSR is applied because is enforced by government. The results not commented are very similar to both countries.



Graphic 15: Question 1.

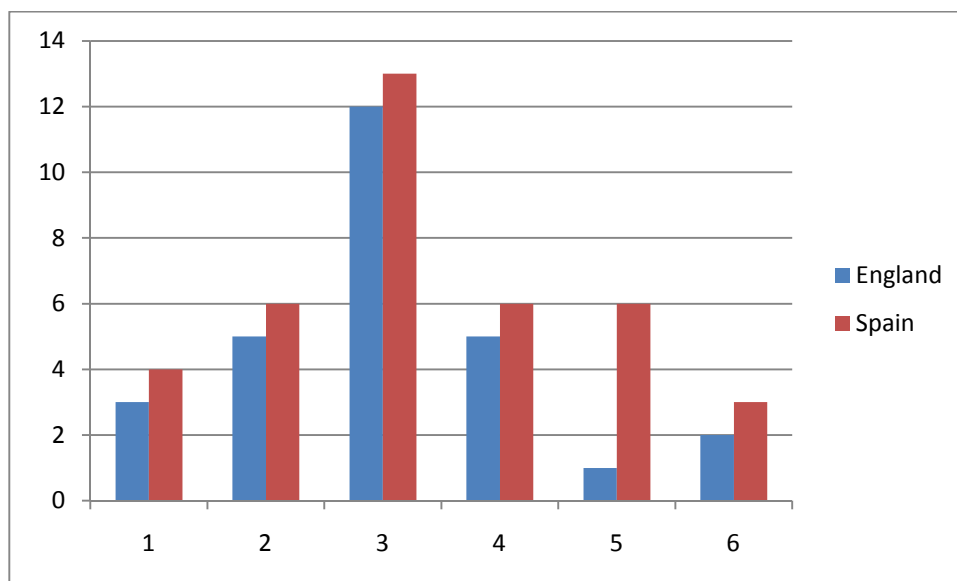
In UK the most chosen option was “I do not know what it means”. In second place, there is the “IT companies must apply RSC” option, while in Spain, this is the most scored option, and in Spain only few people not know what CSR means.

The option “IT companies not take care with all the related with this” (2nd option) is the less chosen in both countries, while approximately the same number of people think that is an additional option and it not helps to gain competitive advantages.

In Spain many more people than in UK think that IT companies apply CSR because it is mandatory.

Question 2:

The most relevant difference in this question between the two countries is in the fifth question, in British people think that SMEs should not apply CSR because it is not necessary.



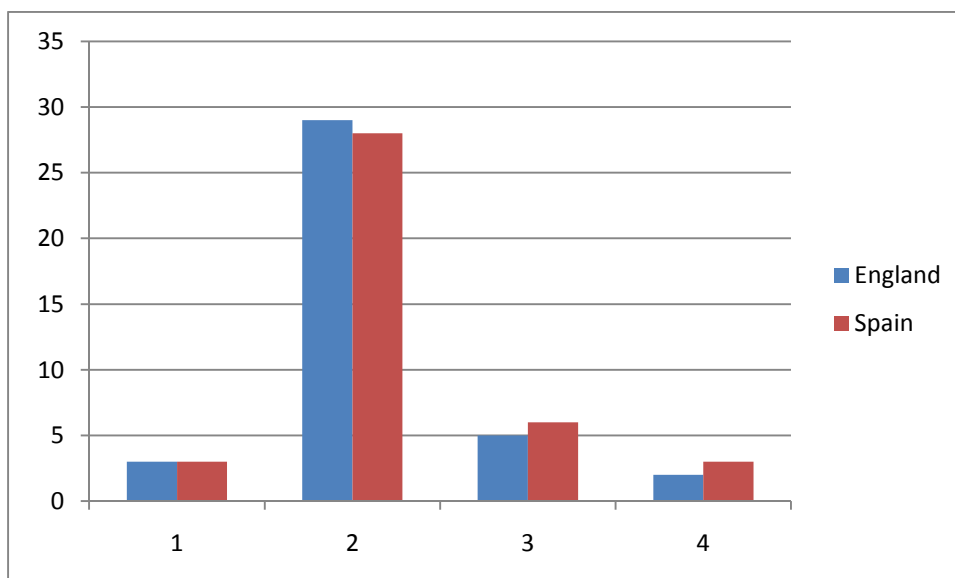
Graphic 16: Question 2.

The predominant option in both Spain and UK is that RSC is applied by companies to improve their corporate image.

Most Options show a similarity between Spain and the UK (particularly option 2 and 4), apart from a clear difference between Spain and UK in the option 5, because, many surveyed Spaniards thinks that not, because it is not necessary, and only one British person thinks that. Options 1 and 6 are voted are very equal in both countries.

Question 3:

This question is very similar in all the answers.



Graphic 17: Question 3.

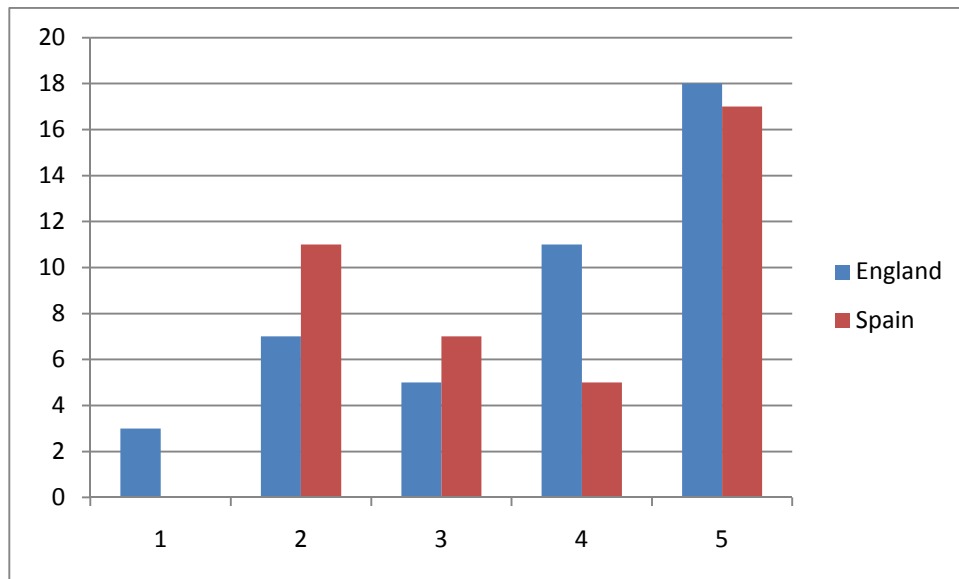
All people in both countries think that they are responsible, because the option most chosen was the second one. The next option was, with big difference of votes the third, and about the first and the fourth, few people marked it. In UK the 1st and the 4th had the same score.

Question 4:

Here there are significant differences, because Spanish people do not waste a product when it is obsolete, as survey reflects, and there are shops that are responsible with environment, because they manage all the IT waste and it is not necessary that the customer does anything.

Also in Spain more is known that the government helps you by providing recycling for different material.

On the other hand, British people are more generous, because they donate the oldest product that they have when they renew it.



Graphic 18, Question 4.

The most chosen option in both countries was the option of save the product for future use, and also in both countries the least chosen option was the first one.

In Spain the second option was that shops manage the recycle of the products, and in UK the donations was the second more chosen option.

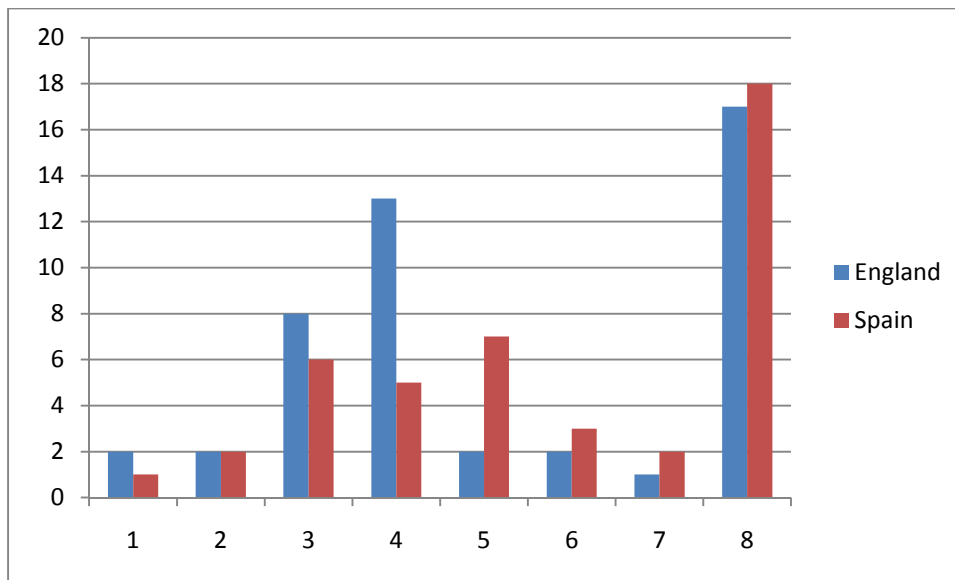
The options that give us the government (3) were the third most voted in Spain, the fourth in UK.

In conclusion, this question demonstrates that people are concerned about recycling and its importance, but people sometimes save products that are broken, and never more they will use it, and at the end the product goes into the rubbish.

Facilities offered by government are important here, and people do not know that they exist, or it is not widely known, because they not use it. Probably better advertisements of the offered services can help society, or give incentives to people that use them.

Question 5:

British people know more projects promoted by IT companies than Spanish people, in terms of aids to workers and sponsorships of sports teams, more significantly in computer equipment donations. Spanish people know financial helps or forestation plans.



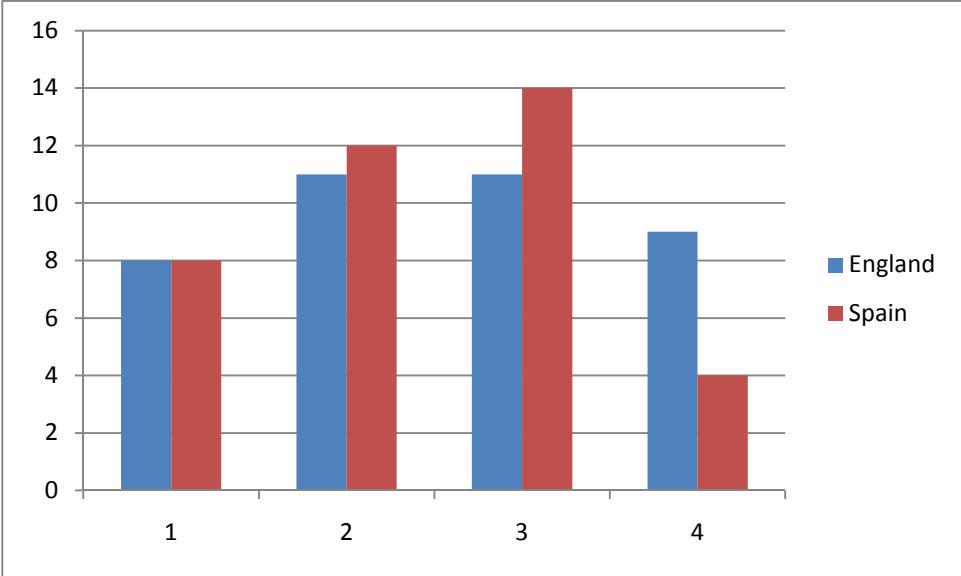
Graphic 19: Question 5.

In both countries, generally people do not know CSR programs, but in UK the most chosen option was the computer donations, while in Spain it was financial help.

The third most chosen option by people was sponsorship of a sport team, and the following options in UK were tied, except the last one, that was the option “others”. In Spain there were no significant differences, but in the “others” option people knew many other programs, and they are well informed about the programs.

Question 6:

In this question about considering power consumption the major difference is between seldom and never. It does not matter, because the results are very similar.

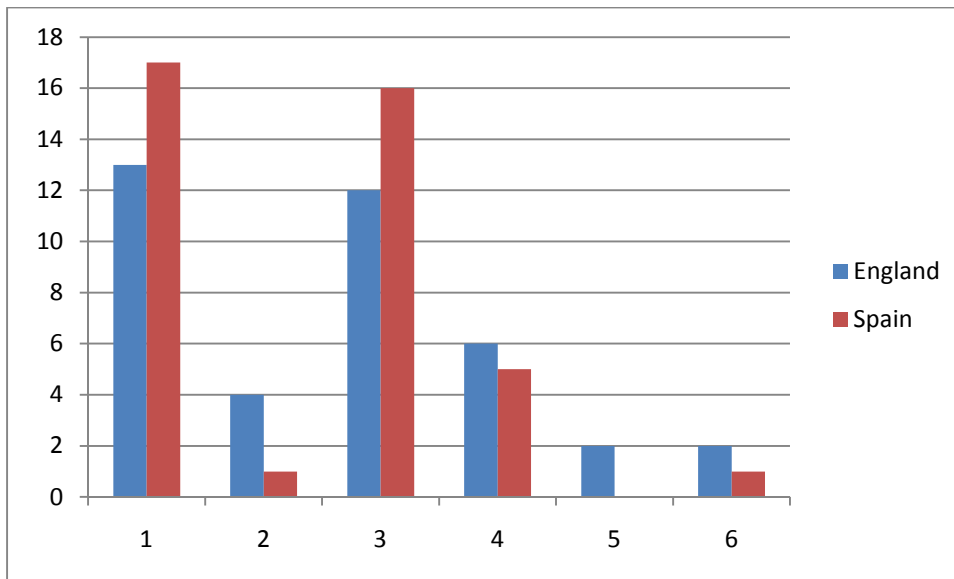


Graphic 20: Question 6.

Power consumption is seldom considered by people in both countries. The next most popular option was “Often”, also in both countries. In UK, the option “Seldom” has the same importance than “Often”, while in Spain the least chosen option was “Never”. “Always” has the same voters in both countries, but was only selected by 20% of the surveyed people.

Question 7:

Spanish people think that the price of the new charger is important, because the answers reflect it, but it is significant that Spanish people not think that a solar powered charger is better. British people think that people are aware of the power problems. The conclusion is that depending on the charger's price people probably will use it.

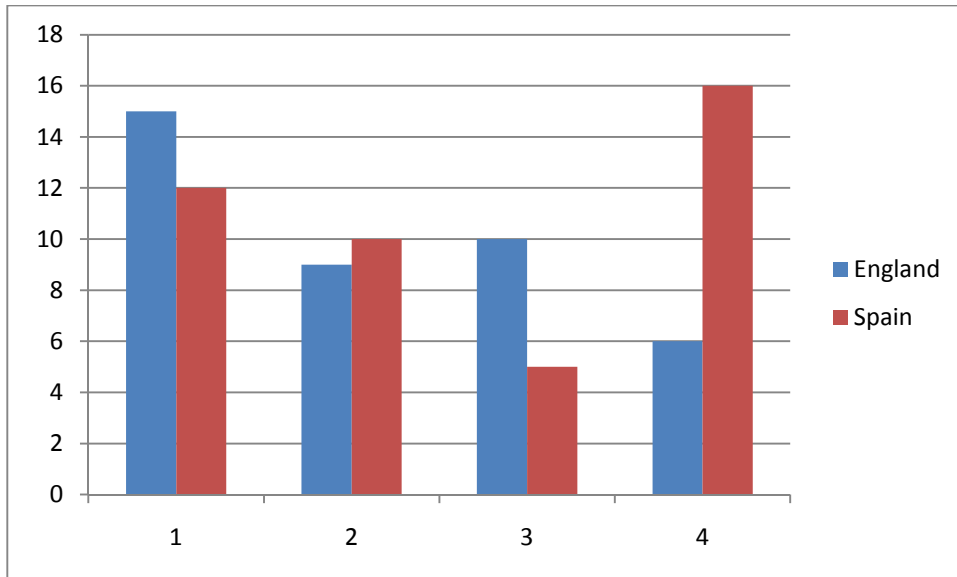


Graphic 21: Question 7.

This question had similar results in both countries, but in UK, the 5th and 6th answer about the speed of charging had the same low importance, while people in Spain thought the awareness of people and the charge speed more important. People in Spain do not prefer solar power because its better (It is the last chosen option, with 0 votes).

Question 8:

Lot of UK people prefer the CSR responsible product, but they also look at the brand of the product before the purchasing. Spanish people are more likely to decide at the moment of purchasing.



Graphic 22: Question 8.

To Spanish surveyed people, the most important result was that they do not know, because it depends on the moment. The next more chosen option was the social responsible device, followed by the cheaper, and the last chosen option was the “most well-known brand”.

To UK people the results were very different, the first chosen option being the most responsible company, followed by the most well-known brand, but only three votes separate the cheaper (second) option, and the last one (“Depending on the moment”) which was the first for the Spanish surveyed people, and had little importance to UK people who answered the survey.

The following two questions were the most difficult to answer for the surveyed people (Spanish and British). The model to answer was generally not understood by people, and another difficulty was the knowledge about brands, because people usually did not know the different brands that were possible to choose in the answers, and therefore the CSR programs of these brands.

People thought that they should rank each option by 1 to 5, while the intended result was a ranking of all the available options, from the most important to the less important.

Question 9:

The preferred order to the surveyed people is:

<u>QUESTION 9 RESULTS</u>	
UK	SPAIN
1.- Famous brand.	1.- Famous brand.
2.- Company that have production in my country (give workers and benefits to my town society).	2.- Company that have production in my country (give workers and benefits to my town society).
3.- Seniority in the market.	3.- Seniority in the market.
4.-Company not involved in any scandal.	4.- Company not involved in any scandal.
5.- Others.	5.- Others.

Table 12: Question 9 results.

To summarize this table, all the results chosen as the number one by the surveyed people were counted. The final result was obtained ordering in descending order all chosen options.

The conclusion of this question is that both cultures think the similar in terms about the importance of CSR, and what is the most important at time to search a new product.

Question 10:

The established order by the surveyed people is:

<u>QUESTION 10 RESULTS</u>	
UK	SPAIN
1.- SONY.	1.- NOKIA.
2.- Hewlett-Packard.	2.- Hewlett-Packard.
3.- NOKIA.	3.- IBM.
4.- IBM.	4.- Fujitsu-Siemens.
5.- Others.	5.- SONY.
6.- Fujitsu-Siemens.	6.- Others.

Table 13: Question 10 results.

People were unable to answer this question because they did not know how responsible were the brands available to chose or they did not know the CSR programs of these companies. Probably a good alternative to this question would have been an “open” question, asking what company/companies they knew that have CSR programs, or what programs they knew.

There are little differences at time to choose the brands, but usually people have little idea about CSR programs of different companies.

The answers of both countries are summed up on the following table:

QUESTION	SIMILARITIES	DIFFERENCES
1	<p>2. IT companies not take care with all the related with this: 0 British people and only 1 Spanish voted it.</p> <p>3. It is an optional practice and does not help to gain advantages: Only 1 vote of difference.</p> <p>4. IT companies should apply it: only 2 votes of difference.</p>	<p>1. I do not know what it means: In UK much more people than in Spain do not know.</p> <p>5. Companies apply CSR because it is mandatory by the government: There are significant differences on this option. In Spain 8 people thought that, while in UK only 1.</p>
2	<p>All answers except number 5 were similar.</p>	<p>This question only has one big difference, in the option 5, that is “No, because it is not necessary”. In Spain more people think that SMEs do not apply CSR because it is not necessary.</p>
3	<p>All answers were similar. The most chosen option was “Yes, all my practices are voluntary”. That demonstrates that people is concerned with recycling.</p>	-
4	<p>Option 5: “I save my old product to reuse it when necessary”.</p>	<p>Spanish people do not discard a product when they no longer need to use it. All the other options were very different between both countries.</p>
5	<p>In both countries the most voted option was “I do not know”.</p> <p>Except 4 and 5, all the options were very similar.</p>	<p>4- Computer donations: In the UK is more known than in Spain.</p> <p>5- Financial help: in Spain there are more known programs than in the UK.</p>
6	<p>All answers except the 4th option.</p>	<p>4. Never: In Spain there are many less people that choose this option than in the UK.</p>
7	<p>4. “People will use alternately both chargers (electric and solar)”</p> <p>6. “Depends on the speed of charge”</p> <p>Only one person of difference in both options between countries.</p>	<p>5. “No because people prefer to connect it to the power, it is faster”. Nobody in Spain chose this option.</p> <p>All the other options with big difference between the surveyed cultures. Spanish people look at the price and UK citizens the convenience.</p>
8	<p>2. “Cheapest” option</p>	<p>All the other options are very different. In Spain the most significant is that “depends on the moment”, while in the UK the brand is much more important.</p>
9	<p>IDENTICAL ANSWERS</p>	-
10	<p>2nd option: Hewlett-Packard.</p>	<p>All ordering of brands except 2nd option.</p>

Table 14: Similarities and differences.

7. Critical evaluation of project

At the beginning of the Project course, ideas were quite different to the final version. Not in concept, but in the way of working. The original idea was to conduct surveys of people related in some way to the IT world, but the final version has surveys of both people in the IT world and also people in society. The work is now based on a series of surveys made to people who work in companies in the IT world, teaching or developing software, selling devices or similar products. During the development of the project, when the research of information was started, we began to see the reality of the work involved to carry out the surveys was different and it was a very time consuming activity, and the focus of the project was changing little by little due to the constraints of the time.

The intention of this project was to introduce CSR, with a brief history of it, its application in IT companies (since the standardization of the Internet, for example), but time was running and the collected information was not sufficient to do good research and analysis.

When the possibility of using the Internet to gather the information (with the explanations that was necessary about that), the study started to make sense.

The main objective of the project was a comparison between two cultures in terms of CSR. Now the accomplished objective was a comparison and study of the cultures, looking for the similarities and differences.

The title of the project was changed, because the first title (CSR – Impact on society) was not related with IT world, and did not make clear the topic of the project. Now the title is “CSR – Impact on the IT world”, and is more specific and related to the content of the study.

Time was the main limiting resource during the development of this project, passing the survey to people and waiting for the answers was costly. For this reason to do this project as it was originally scoped would need much more time, but hopefully the work has raised awareness of what CSR is about.

To make the questionnaire was needed more time than estimated, because at the beginning the questions seemed easy to write, but some of these can be misunderstood. The drafting of the questions was started in January, and was finished in April, dedicating time to correct the sentences and to search better questions to give more useful results.

Researching of information was started in September, and was finished in March. Available time to do the project was portioned in two big blocks: the information research and study and the dedicated part of surveys and results. The second block was started in January, and the first finished in March, but from January to March the higher priority was the questionnaire and the study of the survey results.

To survey people the more useful practice was to send an e-mail chain to various people, and some of them answered the day after the sending. This was very useful to Spanish people, and some of the questionnaires were passed face to face.

In the UK, the fastest method was the face to face option, and some people did not want answer. That was the more difficult process, but on average, the time was 15 minutes per surveyed person.

The average time to answer one questionnaire was 15 minutes in both Spanish and English languages. $15 \text{ minutes} \times 80 \text{ surveys} = 600 \text{ minutes} \times \frac{1 \text{ hour}}{60 \text{ minutes}} = 10 \text{ hours}$.

The data analysis process started by copying all obtained results into a spreadsheet. This led to a late work, and when the spreadsheet was completed, one entire day was needed to do all graphics and conclusions.

At the end of the development of the project, a better way to do polls was devised, because this was slow and inefficient work. It was decided to put the survey in a website, so that people could answer it online. It is easier for the surveyed, because, for example, they would know how many answers can be marked, and the format of the survey was more understandable. The development of the webpage consumed much time, and now can be improved, but the idea came very late. Web development was one working week (40 hours).

Literature review can be found at *Annex 1: Literature review*.

<u>OBJECTIVES OF THE PROJECT IN THE LITERATURE REVIEW</u>	
CHANGED	MANTAINED
Differences between British and Spanish consumers in terms of buying IT products. This objective was changed because the survey now only has questions related to it and the questions try to determine the most important feature for the people when buying an IT product.	Survey.
Global Compact: at the beginning the objective was to explain lots of relevant aspects of the United Nations Global Compact.	Comparison between large, small and medium sized companies applying CSR.
Companies that help in applying CSR. Not enough information found to speak about it.	What is CSR?
Budget of IT companies in CSR: Not enough information found about it.	
Why is CSR important nowadays? Not really changed, but the focus now probably is different and Green IT is also considered.	

Table 15: Objectives of the project in the literature review.

The importance of this topic and of the work to the people is the same, because this topic is very interesting and there is not enough information to study and analyze it. Each company creates their own practices, there is no standardized approach, and this is a topic with a very profitable future. This project can help people understand the relationship between IT and CSR.

The planning that was followed to do this project was good, because all weeks there was some new information to put in the project, and this information was analyzed. Also the project was always followed by the supervisor, and the researched information that not was correct was discarded very quickly.

The idea was to give the questionnaire to 100 British people and to 100 Spanish people, but at the end only 40 British and 40 Spanish people returned the questionnaire. It was very difficult to find people that would answer the questionnaire, with different range of ages. Also, the target set at the beginning of the project that aimed to survey IT workers and IT related people was not possible. Now the surveys are made of the general public, IT workers and students.

The development of the project also had some problems. There were people who did not want to answer the survey, or people who answered only one or two questions. The process was complicated as people did not know exactly what CSR was. It was necessary to give explanations about CSR, because although people knew things about this topic, but they did not know what it was called. When some explanations were given, people were more interested in the survey, because they learned about the topic with all the questions. There is necessary more information about CSR, because people are not concerned with its possibilities.

The surveys were very difficult for some people, and we received some criticism about the questions, or the possibility of giving other answers. Some other people disliked the format of the survey, and others founded it nonsense in various parts. The adopted solution at the end of the project was the development of an online survey, because many of the problems were resolved using this format.

When the idea of develop a online survey was appeared, it was also thought to include information about the project in the website. The idea now is to put more information about CSR and the entire project in this website and convert the website in an interesting place of information about this subject, with the possibility of increasing the available information, adding more interesting information and doing better analysis of the collected data on the surveys.

8. Conclusions

CSR is very important today and companies should apply it. There are several existing guidelines to help achieve this, and there are companies that advise on CSR practices. This topic has existed since the 1960's, and at this moment, there are a large number of people on the world that know nothing of its existence.

On the other hand, the CSR concept is not always well understood because there are people who know companies that help society doing forestation plans or being sponsorship of football team, but they do not know the some companies do this or whether it is good or bad.

Surveyed British people know of some company initiatives, but they do not relate it with CSR concept.

But, what is understood by CSR? CSR is a term that is defined by different people in different way, depending on the vision that they have. A single definition of the term is not possible, because it depends on the culture, religion or tradition of each society. Everyone can make a different definition of CSR. One good definition could be: CSR is a compromise made by companies to find the balance between the interests of stakeholders and the environment. Companies must treat their workers and the society correctly and ethically to receive the same tract. In this definition, the different stakeholders are who allow analyzing the CSR using the different stages point of view. This definition allows different stakeholders in CSR their individual points of view.

What do surveyed people think about CSR? Depending on the studied country, the answer is different. In the UK, some people not know the mean of CSR, and many people think that IT companies should apply it. The other answers was not representative to the analysis, except the non existence of the answer "IT companies not take care with all the related with this". In Spain, the most people chose "IT companies should apply it", and some people think that IT companies apply it because it is mandatory by law. Only few people do not know what CSR means. The conclusion is that in UK the knowledge about CSR is different than in Spain, because usually people in UK do not know what it means,

and in Spain they do, but in both countries different practices are used to apply CSR, and people are not concerned with this aspect.

Regarding similarities and differences between UK and Spanish surveys, the analysis of the answers concludes:

- In Spain there are more people that know the meaning of CSR.
- In Spain many people think that IT companies apply CSR because it is mandatory by law.
- Spanish people do not use the rubbish bin when a IT product is broken.
- In Spain the speed of charge in a product is not important, it is more important that the charger is included in the package.
- In the UK the use of power is thought to be less important than in Spain.
- Main concerns of IT companies are:
 - o Launch to the market new products that help in saving power.
 - o Philanthropy in the third world.
 - o Substituted products recycling.
- Main benefit of IT companies that apply CSR programs is the improvement of corporate image.
- Main recipients of CSR are: shareholders (if the corporate image is improved, more economic benefits in long term incomes), workers (better learning means better work environment), society (environment protection).
- Consumers usually must pay more for CSR responsible products.
- To measure CSR there are different methods, but none is universally accepted. Companies can adopt one as they want.

IT companies applying CSR usually want to get a good corporate image. They want a good image in society, because it is society who will buy the products/services that these organizations develop. There are different companies that by applying CSR obtain other advantages, such improvements in the work quality, which helps the company obtain more investments, because people are more motivated and work more efficiently. Companies can receive awards if CSR programs are well applied, because there are different organizations that award companies who take care with the environment, their workers, or

with society in general. These awards are good for a company because they demonstrate that the company is concerned with social issues, but that not mean these companies can do other badly things, or hide bad past actions or cover scandals.

Among others, companies can gain many benefits, such as: awards, motivation of workers, aids from the government, budget improvements, improved corporate image, confidence of society and satisfied customers.

With the application of CSR programs, the entire environmental organization can gain advantages and will benefit.

- **Companies;** because they have a better corporate image.
- **Governments;** because there are companies in the country that are responsible, the environment; because it is less damaged.
- **Society;** because it will receive aids.

The group that benefits most are the companies, because their image is improved and over a long period of time the benefits are better.

Society should not forget that the IT world is a good environment to apply CSR programs, and that will help other companies, because today all companies use technology for everyday tasks.

Some experts have developed way to measure CSR application in organisations. The result is a system that helps in the classification of businesses applying CSR, but there are different models. During the development of this project there were different contacts that used different CSR indicators, but none of these were helpful, because their commercialization was a failure.

Looking the project, the most difficult problem at the beginning was to focus well on the entire work, because in one month the objectives were changed three times. When the focus was well defined, the project started to run with the usual problems, not many but some.

People are aware of recycling, reusing and disposing of old IT products in ways that can be dangerous to the environment, but sometimes they forget these practices. It is also very

important to not forget the first objective of a company, which is to make money. When a new IT product is for sale, some people discard their old device, such CRT TV, and some shops not do anything with the old products. People must be careful with old products, because it will probably be damaging to the environment and perhaps it not was necessary it change it.

One of the biggest problems to developing this study was the surveys, because the question-making was very difficult (to chose good questionnaire it took more than three months), and when the survey was ready, to find lots of people to answer the questionnaire also was very difficult, because at the beginning the objective was survey IT companies, and at the end the survey was of people in general.

In conclusion this project is very useful and a good study, because in it is reflected people's opinion about a topic on which people are concerned and how companies are doing actions to do CSR.

“We all need to get a better world, using technology that is within our power to achieve”.

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Annex I: Literature review

1. Introduction

The social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time.
Archie B. Carroll, 1979 (Economist and writer).

Today, it is essential to consider the environment, as it is important for the well-being of future generations.

All companies must act responsibly and should consistently understand that the protection of the environment is an obligation for everyone. Also it is important to educate all the employers about it and use all the possible methods to avoid unnecessary waste.

When a person listen to talk about an IT company, he does not stop to think if it meets with legal requirements and ethical considerations, because it is financially cheaper, so it is important to create an awareness of all these issues.

This project aims to be a comparative study of two countries; Spain and Great Britain, because I think I have the opportunity to do this now (I can acquire information from Spain and from Britain, and with this information I can work on different aspects of my project).

Also, it is important to raise awareness about this topic and I think is very interesting to study this, because nowadays there is little information about it, and is a very real and important topic.

2. Why I chose this topic for my Project?

I chose this topic because I think is very important nowadays, especially in the IT sector. One reason for that is the hardware becomes obsolete very quickly, and the companies

have policies for example to renew all this hardware in periods of three years. Is it necessary to have knowledge about what do we do with the obsolete hardware? Is it correct to discard it and do nothing more?

Also we can think about the energy used to work with computers, can we save part of this energy? Are we aware of the waste? Nowadays it poses a big problem for society, because all the companies in the developed world use IT to work (hardware, electronic office equipment, fax, etc.).

To me, this is a topic that has no importance for lots of people, but nowadays I think is very important to have lots of knowledge about it, because it becomes an important competitive advantage, and if is applied correctly it is possible to save money. The customers also can see the company is interested in not damaging the environment, and this can be a vital source of information for new customers in their choice of company.

3. Why I chose the title CSR - Impact on society?

This title is shocking, because this principal objective is to draw the attention of to the reader. The reader can ask himself: What is CSR? Does CSR really impact on society? Is CSR important to companies?

I want to answer these questions and give lots of interesting information for everyone who is interested in it. I think this title is the key for my entire project, because it contains the important words to understand it: CSR (Corporate Social Responsibility), Impact and society.

CSR is important in the title because it is in an abbreviated format, to cause intrigue to the reader. The reader can be intrigued because he does not know the meaning of these letters, and if he wants he can know what it is by reading a little.

Impact is important here because it is an “aggressive” word, because the sensation of the reader when he reads it is: “Oh, this work could be interesting, because speaks about an impact on society and the world today”.

4. Objectives

I wanted to consider and analyse different questions in my project, to clarify them and to study interesting and important things about some of them. The principal objective of this project is to stress the importance of CSR for a company/business today, and care of the environment. The IT sector is a good sector to study in this subject, because it creates a lot of waste all the time, produced by the change of equipment or the acquisition of faster hardware. When hardware is obsolete it is cheaper to renew it, and the companies do not care about the old material.

Some of the big points in my project can be:

- *What is CSR?*

This is a point about the formal definition of CSR and few explanations of it. It is an interesting point to clarify what is meant by these capital letters. I try to solve all the problems related to this topic. Probably the definition of CSR of one economist or one person who works on this subject can help us to explain it.

- *Differences between British and Spanish consumers in terms of buying IT products.*

In this topic I want to find some differences between the two countries at the time of purchase of new IT products. Probably the price, the quality, the marketing, the characteristics, the post-sales service, the guarantee or more of these characteristics are the key to find the differences.

- *Global Compact.*

Pointing this section it is necessary to explain what the Global Compact is. The United Nations (<http://www.un.org/english/>) has one compact that is global to all business and people. This document tries to standardize operations and strategies in the human rights, labor, environment and anti-corruption areas. For that reason, the document contains the 10 universally accepted principles (you can see the document at <http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/index.html>).

One of the most important topics for the international businesses and for all the companies is the Global Compact, because it regulates lots of things relating to business law. The Global Compact has definitions of CSR and principles for all the businesses that form it. This is an interesting point to help understand globalisation and the acceptance of CSR rules.

- *Companies that apply CSR.*

This part of the work aims to demonstrate that some companies around the world apply good CSR. I give examples of big companies and the things that they do to promote thought and interest of the customers in the environment.

- *Companies that help to apply CSR.*

Here I try to give companies around the world a set of guidelines and reference to consulting services. These companies can apply in your business a set of guidelines or advise you in your efforts to apply good CSR and win new customers or competitive advantages. It can be an intangible asset for your company, for your business, and for you. With this asset you can gain financial advantage, customers and a good image.

- *Survey.*

This is the point where I undertake the surveys of people in Britain and in Spain and study lots of different points about this work. People's opinion is very important on this topic, because ultimately it is the customers who buy the products that have the final opinion about the companies. It is a very interesting point to study the actual situation about this topic. There are many people who do not know what CSR is, or how to apply it and whether it is necessary to do business nowadays.

- *Comparison between small and medium sized companies applying CSR.*

There are many differences between small and medium sized companies. Among the most important are the budget, and the production. Depending of the budget it is possible do more or less things with the money and the small business implement CSR differently than medium sized firms. This section aims explain and make comparisons between these businesses.

- *Budget of IT companies in CSR.*

How much do the companies dedicate of their total budget to CSR? Dedicates an important part of this? Is it important to apply part of it in CSR? I try to solve these questions and to speak about this topic in this part of the work. This is to discover if CSR is an important intangible activity for these companies or is it not applied nowadays.

- *Why is CSR important nowadays?*

We have arrived at the moment to speak about the importance of applying CSR nowadays in a business. This point can be interesting because some people think: “This is not important, only for spending lots of money on unimportant things...” other people can think: “The budget in CSR is very important to respect the environment, to save energy and to save material for the future”. I try to explain and study here the importance of CSR in a company, because it can be very valuable intangible activity, and depend on the case what is the best thing to do for good marketing in a company, for awareness of the environment of the company. Porter (USA economist) spoke and wrote lots of books with topics about economy and CSR (since 1979). There is lots of information of big and medium companies applying this knowledge, and how applying it the business became better (wins customers, takes production chipper and save in costs).

Moreover these objectives, I will try to not do boring work, because the topic is interesting and I can explain lots of different things. My principal objective is closer people to the reality nowadays and make it aware with things like that, because nowadays is most important than before, and the people does not knows nothing about this.

5. What is important on this topic?

The most important point is to know what is CSR exactly, why is important to apply this on businesses and what is the best option to do it. There are most important things to know, for example the impact of the environment in the IT businesses, or the importance of save energy and materials. When a person who reads this project understands well what is CSR

another important think is try to awareness he in this subject, to give more people interested on it.

Other important point is the surveys, because it reflects the people's opinion, and this topic is very interesting, because starting with these opinions, is possible do a conclusion with the nowadays vision about the importance of the CSR in all the business.

6. Is important my work to the people?

This piece of work aims to be an interesting project about CSR and his application in the companies nowadays. In the companies exists two types of actives, the tangible and the intangible ones. The tangibles are very easy to have, because buying things that is all, but the intangible are very difficult to have. The intangibles can not buy, because the knowledge is very difficult to sell. Porter says the environment is very important to do good business, and to control and manage it is very important to have knowledge.

The ideas are intangibles, and the use of CSR also is. Is very difficult to get this type of actives, because it depends of the employers and the people related with the company. To give more value in a company is interesting to have lots of this knowledge, and I think this work is important to people that does not know what is CSR.

The people who know the mean of this famous letters can learn more about this topic, because this work will contain surveys and comparison between two countries. This work contains information about the companies that applies nowadays CSR and how applies it. It is very interesting to know the actual situation of this subject in the two countries.

Also this work helps you if you need to apply CSR in your business, because has some companies that helps you on that. Is very interesting point to know who can help you in all of these things.

Other important point is to know the importance of these subjects around the world. Here you can find information about Global Compact. The Global Compact is signed by lots of

companies and with the time becomes bigger. These companies are trying to aligning their operations and strategies for do business around the world.

Annex II: interview with José Luís Fernández

Interviewer	Interviewed
<p>Seemingly CSR is a concept that only can be developed by the big companies.</p>	<p>CSR Concept is misleading, because “corporate” refers to a big company, and in Spain more than 90% of the companies are SMEs (small and medium companies). SMEs companies think that CSR is focused on big companies. The first task to do is to clarify the concept.</p>
<p>How you define the concept of CSR?</p>	<p>CSR concept means to manage well three different aspects. Firstly, the economical-financial, followed by considerate the impact of the company in the environment, and at last, the impact of his activity into the social concerns (workers).</p>
<p>In this area, what importance gives the companies to the conciliation of familiar and laboral life?</p>	<p>The family is a social institution absolutely essential. If falls the family, new important social problems are created. The big challenge of a company that wants to conciliate the familiar and labour life is to search running modes that allows people to not stay in his work lots of ours. If a company accomplished it, is contributing with three good things: happiness of workers, contributing to win more money and to improve the “social tone”.</p>

But; do companies have to practice all this? There is a goal that is not achieved, because probably never will be accomplished. CSR is not a trend; is the future and the competition tool more obvious.

There are some critical people who say that CSR is, in the end, way to promote the company, and in consequence one way to make money. Yes and this people think well, because lots of companies enter in CSR without knowledge about it and to be not old-fashioned. With the time companies improves with the CSR application, but they do CSR to improve their image company.

CSR and globalization become in parallel? Absolutely. Globalisation has done to accelerate the changing process and transform the companies' paradigm.

When talking about CSR, often there is talk about new concept: emotional intelligence. All people should learn about emotional intelligence in three important places: family, education sites and in companies. Companies can contribute to learn knowledge in this.

Annex III: Magazines

In Spanish there are these magazines:

- **ARROBA** <http://www.megamultimedia.com/arroba/>
- **BPE** Publicaciones <http://www.bpenet.com/>
- **BYTE** Avda. de Roma, 157, 9º 08011 BARCELONA <http://www.mcediciones.es/byte/>
- **COMPUTERWORLD** <http://www.idg.es/computerworld/>
- **COMPUTER INDUSTRY ALMANAC** <http://www.c-i-a.com/>
- **COMPUTER IDEA** <http://www.vnunet.es/computeridea/>
- **EN.RED.ANDO** <http://enredando.com/cas/index.phtml>
- **HOTWIRED.** <http://hotwired.lycos.com/>
- **IACTUAL** <http://www.iactual.com>
- **IKIOSKO** (IFACTORIA) <http://www.ikiosco.com/>
- **IWORLD** <http://www.idg.es/iworld/>
- **IDG** Publicaciones. <http://www.idg.es/>
- **NOVATICA.** Revista de la Asociación de Técnicos de Informática (ATI) <http://www.ati.es/novatica/2000/145/nv145sum.html>
- **PC ACTUAL** <http://www.bpenet.com/pcactual/>
- **PC MAGAZINE** <http://www.zdnet-es.com/pcmagazine/>
- **PC WORLD** <http://www.idg.es/pcworld>
- **SINERGY.** Revista sobre teletrabajo. <http://www.telecat.org/sinergy/>
- **TOWER.** Publicaciones: NET, PCMedia... <http://www.towercom.es/>
- **VNUNET.** Portal de Tecnologías de la Información. Editora de PCActual, Computer Idea... <http://www.vnunet.es/>
- **+ WEB** <http://www.partal.com/web>
- **WIRED** <http://www.wired.com/wired/current.html>

About Education Technology and Information Society:

- **ADIE. Revista de Enseñanza y Tecnología.** Asociación para el Desarrollo de la Informática Educativa. ISSN: 1134-3478 <http://www.uclm.es/educa/adie/>
- **IQUA.** Agencia de Calidad de Internet <http://www.iqua.net/>
- **ALTERNATIVAS,** documentos, experiencias, reflexiones y entrevistas realizadas a especialistas vinculados a las temáticas educativas y comunicativas. S. <http://www.e-alternativas.edu.ar/objetivos.htm>
- **ATLANTIDA.** <http://www.proyecto-atlantida.org/>
- **Aula Interactiva** <http://www.aulainteractiva.es/>
- **AULA MEDIA** <http://www.aulamedia.org/aulamedia0304/>
- **BENET** Boletín Electrónico de Noticias de Educación a Distancia de la Cátedra UNESCO de Educación a Distancia (CUED) de la UNED) <http://www.uned.es/bened/>
- **BIBLIOTECA VIRTUAL DE TECNOLOGÍA EDUCATIVA.** (UB) <http://www.lmi.ub.es/te/>
- **BIBLIOTECA VIRTUAL INFOEDU** <http://www.geocities.com/Athens/Forum/7543/biblio.htm>
- **BITS CIBERESPIRAL.** Revista electrónica de la asociación ESPIRAL, Educación y Nuevas Tecnologías. <http://www.ciberespiral.org/>

- **BRITISH JOURNAL OF EDUCATIONAL TECHNOLOGY.** Revista cuatrimestral que desde 1970 publica el National Council for Educational Technology (NCET), Milburn Hill Road, University Science Park. Coventry, CV4 7JJ, UK, London W1. ISSN: 0007-1013. <http://www.blackwellpublishers.co.uk/asp/journal.asp?ref=0007-1013>
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- [Faulkner & Gray - Smartcard newsletters](#)
- [Federal Computer Week](#)
- [FierceWireless.com - the weekly Mobile Commerce Report](#)
- [FileMaker Magazine](#)
- [Filemaker Pro Advisor](#)
- [The FontSite - Magazine for the Type & Graphics Professional](#)
- [FORM Magazine](#)
- [FoxPro Advisor Magazine](#)
- [FoxTalk Online](#)
- [From Now On](#)
- [Frontline Solutions Today](#)
- [ft.com - Connectis](#)
- [Future-Fab.com](#)
- [FuturePublishing \(UK\) - computer titles](#)
- [Game Developer Magazine](#)
- [Geo Information Systems](#)
- [GeoPlace.com](#)
- [Global Technology Business](#)
- [globalcontinuity.com](#)
- [Gnutella News - Gnutella News and Information](#)

- [Government Computer News](#)
- [Government Computing](#)
- [Government Executive Magazine](#)
- [Government Technology Magazine](#)
- [GPS World](#)
- [Graphic Communications Today](#)
- [Groupware-Online: Magazin für effizienten Groupware- und Intranet-Einsatz](#)
- [Groupware & Communications \(G&C\)](#)
- [Handheld PC Magazine](#)
- [Handheld Systems](#)
- [HDI-Online](#)
- [Health Informatics Journal](#)
- [Healthcare Informatics Online](#)
- [HOW Magazine](#)
- [HP Chronicle](#)
- [HP Professional](#)
- [HP World](#)
- [Human-Computer Interaction](#)
- [IBM Journal of Research and Development](#)
- [IBM TCdigest](#)
- [IBM WebSphere Advisor](#)
- [Iconocast: Market Intelligence for Intelligent Marketers](#)
- [ID Systems Online](#)
- [IDG Products](#)
- [IDG WebWereld](#)
- [IEEE Magazines](#)
- [IEEE Robotics and Automation Magazine!](#)
- [iMacworld](#)
- [Imaging and Document Solutions](#)
- [ImagingMagazine.com](#)
- [Indian CompuTrade News](#)
- [Industrial Computing Magazine](#)
- [Industrial Computing News](#)
- [The Industry Standard - critical, timely information about the Internet Economy](#)
- [Information Age \(Australia\)](#)
- [Information Highways Magazine](#)
- [Information Security](#)
- [Information Security Magazine](#)
- [Information Strategy](#)
- [Information Systems Control Journal](#)
- [Information Week](#)
- [Information World](#)
- [InfoSecurity News](#)
- [InfoStor Magazine - the Information Source for Storage Professionals](#)
- [InfoWorld](#)
- [Insanely Great Mac](#)
- [Inside Healthcare Computing](#)
- [The Inside Line](#)
- [inside Microsoft Access](#)
- [Inside Microsoft Excel](#)
- [Inside Microsoft FrontPage](#)
- [Inside Microsoft Office 2000](#)
- [Inside Microsoft PowerPoint](#)
- [Inside Microsoft Windows 2000](#)
- [Inside Microsoft Windows 98](#)
- [Inside Microsoft Word](#)

- [Inside NetWare](#)
- [Inside Photoshop](#)
- [Inside Technology Training](#)
- [Inside Visual Basic](#)
- [InTech \(The International Journal for Measurement and Control\)](#)
- [Integrated Solutions magazine](#)
- [Integrated Solutions Magazine](#)
- [Integrated System Design](#)
- [Intelligence, a newsletter covering research and commercial developments in advanced computing technologies.](#)
- [Intelligent Enterprise Magazine](#)
- [Intelligent Software Strategies](#)
- [Intelligent Systems Report \(ISR\)](#)
- [IntelligentERP](#)
- [International Journal of Call Centre Management](#)
- [International Journal of Computer Vision](#)
- [International Journal of Customer Relationship Management](#)
- [International Journal of e-Business Strategy Management](#)
- [International Journal of Project Management](#)
- [International Journal of Software Eng. & Knowledge Eng.](#)
- [International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems \(IJUFKS\)](#)
- [Internet Advisor](#)
- [The Internet Index](#)
- [Internet Intern \(Germany\)](#)
- [Internet Magazine \(UK\)](#)
- [Internet News](#)
- [Internet Product Watch](#)
- [Internet Professionell \(Germany\)](#)
- [Internet Resources Newsletter](#)
- [Internet Security Advisor](#)
- [Internet Security Review](#)
- [Internet Web Source](#)
- [Internet Week](#)
- [Internet World](#)
- [InternetTelephony](#)
- [Internetworld \(Sweden\)](#)
- [Inter@ctive Week Online](#)
- [Intranet Design Magazine](#)
- [The Intranet Journal\(sm\)](#)
- [InxUtil - for Informix professionals](#)
- [ISP-Planet - Resources and Information for ISPs and Internet Access Providers](#)
- [ISP Business News](#)
- [IT-Business \(Germany\)](#)
- [IT Asia](#)
- [IT Director](#)
- [IT Malaysia](#)
- [IT Manager's Journal](#)
- [IT Metrics Strategies](#)
- [IT Recruiter](#)
- [IT Singapore](#)
- [IT Support News](#)
- [IT Training Magazine](#)
- [IT Week \(UK\)](#)
- [IT World Canada](#)
- [ITBusiness.ca](#)
- [ITselling.com](#)

- [ITSupport News -- The Newspaper for Computer ITSupport](#)
- [iX - Magazin für Professionelle Informationstechnik](#)
- [Java Developer's Journal](#)
- [Java Report Online](#)
- [JavaWorld](#)
- [JBuilder Developer's Journal](#)
- [JIBC - Journal of Internet Banking and Commerce](#)
- [JOOP - for programmers and developers working in object technology](#)
- [Journal of Artificial Intelligence Research](#)
- [Journal of Business Continuity](#)
- [The Journal of Conceptual Modeling](#)
- [The Journal of Electronic Publishing](#)
- [Journal of Electrostatics](#)
- [Journal of Intelligent and Fuzzy Systems](#)
- [Journal of Internet Banking and Commerce](#)
- [Journal of Library Automation - JOLA](#)
- [Journal of Machine Learning Research](#)
- [Journal of Management Information Systems](#)
- [The Journal Of Open Computing](#)
- [Journal of Scientific Exploration](#)
- [KDNuggets™ News](#)
- [KMWorld - Creating and Managing the Knowledge-Based Enterprise](#)
- [Knowledge and Innovation Journal](#)
- [Knowledge Management Magazine](#)
- [Knowledge Management Magazine \(UK\)](#)
- [Knowledge Management News](#)
- [KnowledgeBoard](#)
- [KURIER online](#)
- [LAN Times](#)
- [Light Reading - The Global Site For Optical Networking](#)
- [Linux-Magazin](#)
- [Linux Gazette](#)
- [Linux Journal](#)
- [Linux Magazine](#)
- [Linux Magazine UK](#)
- [Linux Today](#)
- [Linux Weekly News](#)
- [Linux World](#)
- [Linux World Australia](#)
- [LinuxFocus](#)
- [LinuxPlanet](#)
- [Lotus R5 Domino and Notes Advisor](#)
- [Mac Magazin](#)
- [The Mac Observer](#)
- [Mac Online Tech Journal](#)
- [Mac Tech Magazine](#)
- [Mac Today: The Graphics Mag for Macintosh](#)
- [MacAddict](#)
- [MacDirectory](#)
- [Machine Learning](#)
- [MacInTouch](#)
- [Macromedia User Journal, the must-have resource for users of Macromedia software products.](#)
- [MACup online](#)
- [MacUser OnLine!](#)
- [MacWEEK](#)

- [Macwelt Online - Profi-Wissen für Mac & Publishing](#)
- [Macworld](#)
- [Macworld UK](#)
- [Magazyn INTERNET \(Poland\)](#)
- [Magazyn Linux & UNIX](#)
- [Magazyn x86 \(Poland\)](#)
- [Managing Information - Your Eye On The Information World](#)
- [Manufacturing and Logistics IT Magazine](#)
- [Manufacturing Marketplace](#)
- [Maximum Linux](#)
- [Maximum PC Network](#)
- [MbizCentral, Gateway to the Mobile Economy](#)
- [MessageQ.Com](#)
- [Messaging Magazine \(EMA\)](#)
- [Methods & Tools - a FREE PDF-based newsletter for software development professionals](#)
- [MICRO Magazine](#)
- [Micro Mart, UK](#)
- [MicroDesign Resources](#)
- [Microprocessor Report](#)
- [Microsoft Certified Professional Magazine Online](#)
- [Microsoft Internet Developer \(MIND\)](#)
- [Microsoft Product Insider](#)
- [Microsoft SQL Server Professional Online](#)
- [Microsoft Systems Journal](#)
- [Microsoft Visual J++ Informant Online](#)
- [MicroStation Manager Magazine](#)
- [Microwave Journal](#)
- [Midrange Computing - for AS/400 Professionals](#)
- [MIDRANGE Systems](#)
- [Military & Aerospace Electronics](#)
- [MIS Quarterly](#)
- [MITs Technology Review](#)
- [Mobile Commerce World](#)
- [Mobile Computing and Communications Magazine Online](#)
- [Mobile Computing & Wireless News](#)
- [Monitor - a Free, Monthly, Data Acquisition Newsletter](#)
- [MOS - Memoires, Optiques & Systemes](#)
- [Motion Control Magazine](#)
- [MOTION Magazine](#)
- [MozillaZine! Your Source for Mozilla News and Advocacy](#)
- [MSPNews - Defining Managed Services](#)
- [Multi-CAD Magazine \(Australia\)](#)
- [Multichannel News: The Cable TV Industry Book Of Record](#)
- [Multimedia Futures](#)
- [M+K Computermarkt](#)
- [NCNS: Network Computer News Service](#)
- [NCSA Access Online](#)
- [Net Guide \(Australia\)](#)
- [Net Market Makers - The insider's guide to growing net markets](#)
- [Net Profit](#)
- [Net \(Netherlands\)](#)
- [NetBusiness](#)
- [Netcommerce Magazine](#)
- [NetGuide Live](#)
- [NetGuideWeb \(New Zealand\)](#)
- [NetMag \(Pakistan\)](#)

- [Netscape World](#)
- [NetWare Connection](#)
- [Network Briefing](#)
- [Network Computing Online](#)
- [Network Magazine](#)
- [Network News](#)
- [Network World Fusion](#)
- [NetworkWorld Germany](#)
- [Net.Worker](#)
- [Neural Network News \(Mailing lists and NewsGroups\)](#)
- [New Scientist](#)
- [New Zealand InfoTech Weekly](#)
- [newmedia.com](#)
- [Newsletters - Computers](#)
- [NEWS/400](#)
- [NewtNews](#)
- [Nikkei Electronics Asia](#)
- [NOSPIN Magazine](#)
- [Notebook & Organizer \(Germany\)](#)
- [Notes Magazin - Erfolgreiches Informationsmanagement im Unternehmen](#)
- [NT Magazin](#)
- [OFFICE Journal \(Germany\)](#)
- [Office VBA.com](#)
- [OfficeCert.com](#)
- [On-line Journal of Computer Controlled Systems](#)
- [ONLINE Magazine](#)
- [Online Reporter](#)
- [OnlineLearning Magazine!](#)
- [Optoelectronics World](#)
- [Oracle Developer Online](#)
- [Oracle Magazine Interactive](#)
- [Oracle View](#)
- [OS News: Exploring the Future of Computing](#)
- [OSDN: Open Source Development Network](#)
- [The Outlook](#)
- [OutsourcingJournal](#)
- [Palmtop-Pro \(German language\)](#)
- [Palmtop magazine](#)
- [PC AI](#)
- [PC Answers](#)
- [PC Computing](#)
- [PC Data Online Reports](#)
- [PC Dealer](#)
- [PC Direct \(UK\)](#)
- [PC How To](#)
- [PC Magazin \(Germany\)](#)
- [PC Magazine](#)
- [PC Magazine \(UK\)](#)
- [PC MOBIL - Das Magazin für Mobil-PCs und -Kommunikationssysteme](#)
- [PC Network Advisor](#)
- [PC Plus On-line](#)
- [PC Support Advisor](#)
- [PC Today](#)
- [PC Utilities \(UK\)](#)
- [PC Week](#)
- [PC Week Online Australia](#)

- [PC World Online!](#)
- [PC World \(Australia\)](#)
- [PC World \(Hong Kong\)](#)
- [PC World \(UK\)](#)
- [PCGuide](#)
- [PCs In Easy Steps](#)
- [PCWatch - Daily Technology News Summary](#)
- [PCWeek USA](#)
- [PEI magazine \(Photo Electric Imaging\)](#)
- [Pen Computing Magazine](#)
- [Performance Computing \(formerly Unix Review\)](#)
- [The Perl Journal](#)
- [Personal Computer World](#)
- [Phillips' ISP Business News Service](#)
- [PMN Publications](#)
- [Portable Computing](#)
- [Portable Design - The Authority For Mobile Technologies and Products](#)
- [PowerBuilder Developer's Journal](#)
- [Printed Circuit Design Magazine Online](#)
- [Professional Graphics World \(formerly Silicon Graphics World\)](#)
- [PROJECT CONSULT Newsletter](#)
- [Project Magazine](#)
- [Project Management Journal](#)
- [Project Manager Today](#)
- [Pro/E - for the Pro/ENGINEER User](#)
- [Publish RGB](#)
- [PUBLISHER - Schweizer Fachzeitschrift für Elektronisches Publizieren](#)
- [Quality Today - For The Quality Professional](#)
- [Real-time Engineering](#)
- [Real-Time Magazine](#)
- [Redherring.com - Technology Business News, Analysis, and Research](#)
- [The Register](#)
- [Risk Management Bulletin](#)
- [ROBOT Science & Technology Magazine - Robotics articles and information for Educators, Students, Hobbyists & Enthusiasts](#)
- [SAP Technical Journal](#)
- [SCAN: The DATA CAPTURE Report](#)
- [Scientific American](#)
- [Scientific Computing World](#)
- [Scientific Computing & Instrumentation](#)
- [SCO World](#)
- [Scout Report](#)
- [Secure Computing Magazine](#)
- [Security Advisor Magazine](#)
- [Security Management Online](#)
- [Security Sales - Management Resource for the Professional Installing Dealer](#)
- [Semiconductor Business News](#)
- [ServerWatch - Bringing You News, Reviews, and Downloads for Web Servers and Internet Servers](#)
- [Server/Workstation Expert](#)
- [Service Provider Weekly](#)
- [ShowMeLinux! - Bringing Linux News to Business Executives and Enthusiasts Alike](#)
- [SIGS Publications](#)
- [Simulation Practice and Theory](#)
- [Slashdot:News for Nerds. Stuff that Matters](#)
- [smalloffice.com](#)

- [Smart Access Online](#)
- [Smart Card Central - The source for information on smart cards](#)
- [Smart Card News : Welcome to SCN's On-Line News Service](#)
- [Smart Cards & Systems Weekly](#)
- [Smart Computing](#)
- [Smart Shopper \(UK\)](#)
- [SMT - Magazine - Surface Mount Assembly of Printed Circuit Boards](#)
- [Soft & Surf - tägliche News zu Software, Suchmaschinen, Promotion](#)
- [Software \(Poland\)](#)
- [Software Futures](#)
- [Software Process, Quality & ISO 9000](#)
- [Software Quality Journal](#)
- [Software Testing, Verification and Reliability](#)
- [Soldering & Surface Mount Technology](#)
- [Solid State Technology](#)
- [Solutions Integrator](#)
- [Sounding Board](#)
- [SQL Server Magazine](#)
- [SQLWire - SQL Server News & Information Source](#)
- [The State of the Macintosh](#)
- [Storage Management Solutions Magazine](#)
- [Storage Networking World Online](#)
- [STQE Magazine: For The Developer, Tester, QA Analyst & Manager](#)
- [streaming business magazin - Streaming Technology, Content & New Media Business](#)
- [Sun Server](#)
- [SunWorld](#)
- [SysAdmin](#)
- [Systeme Online](#)
- [Tasty Bits from the Technology Front](#)
- [TechMall -- The Technology News And Information Resource Site](#)
- [Technical Support Magazine](#)
- [Technology in Government](#)
- [Technology News of America - Technology News Ltd](#)
- [Technology Review](#)
- [Technology Strategies](#)
- [TechWeb](#)
- [TechWeek](#)
- [TelecomClick](#)
- [Telecommunications](#)
- [Telecommunications Electronic Reviews - TER](#)
- [Telecommunications Reports](#)
- [Teleconference Magazine](#)
- [Teleconnect Magazine](#)
- [Telemanagement: The Angus Report \(Canada\)](#)
- [Telemedicine and Telehealth Networks Magazine](#)
- [Telemedicine Today Magazine](#)
- [Telephone International - The Telecommunications industry's monthly buyer guide.](#)
- [Tele.Com Online](#)
- [Teradata Review](#)
- [THE INFORMATION SOCIETY Journal](#)
- [THE VIEW, the technical journal for Lotus Notes and Domino](#)
- [the Xbase Files, Software Development e-zine](#)
- [TotalTelecom - World News](#)
- [Unicenter TNG Advisor](#)
- [Unigram.X](#)
- [Unisys World](#)

- [UnixWorld Online Magazine](#)
- [Upside Today](#)
- [U.S. Tech](#)
- [VBPJ - the Visual Basic magazine](#)
- [Video Conferencing Insight](#)
- [Videography Online](#)
- [The View - hardware reviews & news](#)
- [Viewz](#)
- [The Virtual Reality Society Journal](#)
- [Virus Bulletin Home Page](#)
- [Visual Basic Developer Web](#)
- [Visual Basic Online](#)
- [Visual Basic Programmers Journal](#)
- [Visual Basic Web Magazine](#)
- [Visual C++ Developer Online](#)
- [Visual C++ Developers Journal](#)
- [Visual Studio Magazine](#)
- [Visual Studio Magazine](#)
- [VisualStudioWire](#)
- [VLSI Design](#)
- [VMEbus Systems Magazine](#)
- [VNUNet - VNU Business Publications](#)
- [VRML Developer's Journal](#)
- [Wall Street & Technology](#)
- [Washington Technology Online](#)
- [Web Builder Magazine](#)
- [Web Commerce Today](#)
- [The Web Developer's Journal](#)
- [Web Guide](#)
- [Web Marketing Today](#)
- [Web News and Reviews for Suits, Ponytails, Prop Heads - Web Developer's Journal](#)
- [Web Review](#)
- [Web Techniques](#)
- [Web Wereld \(Netherlands\)](#)
- [WebBusiness \(Australia\)](#)
- [WebDeveloper.com](#)
- [WebNovice Online](#)
- [WebServer OnLine Magazine](#)
- [What's New in Electronics - information for electronics engineers](#)
- [whatlaptop and handheldpc](#)
- [Wideband online](#)
- [Win 2000 Magazine](#)
- [WindoWatch](#)
- [Windows 2000 magazine](#)
- [Windows CE Magazin](#)
- [Windows CE Power Magazine](#)
- [Windows Developer's Journal](#)
- [Windows NT Professional](#)
- [Windows NT Magazine](#)
- [Windows NT Magazine - UPDATE Technology & Industry Newsletter](#)
- [Windows NT Systems](#)
- [Windows NT & 2000 Explorer \(UK\)](#)
- [Windows Sources](#)
- [Windows TechEdge - Realizing IT Strategy](#)
- [WinPlanet](#)
- [WinUser](#)

- [Wired News](#)
- [Wireless Developer Network](#)
- [Wireless Integration](#)
- [Wireless Internet Report](#)
- [Wireless Today - Wireless News & Analysis](#)
- [WWWiz Magazine](#)
- [XML Developer's Journal](#)
- [XML Developer Online](#)
- [XML.COM](#)
- [Yahoo! Internet Life](#)
- [ZDNet AnchorDesk](#)
- [.NET 247](#)
- [.net magazine \(UK\)](#)
- [.netculture - closer to the digital spirit](#)
- [Inside Microsoft Access](#)

Annex IV: Surveys

The main objective of this survey is to know the customers opinion about CSR (Corporate Social Responsibility) concept and its application in the IT world. It is also intended to compare the citizens awareness between two countries: UK and Spain about this topic. These questions try to know the people’s opinion and his sensibility about CSR (about himself and the IT companies).

(Rounded the right choice)

About you

Nationality:

UK	
----	--

Gender:

Male	
------	--

Age:

17-25	26-45		65 +
-------	-------	--	---------

Do you work?

Yes	
-----	--

(If no, the next questions are not for you)

For who?

	Self-employed	
--	---------------	--

Where?

	Small or medium
--	-----------------

Social Responsibility and

Corporate Social Responsibility

1. What do you think about CSR (Corporate Social Responsibility)? (tick the appropriate box)

- | | |
|-------------------------------------|---|
| <input type="checkbox"/> | I do not know what it means. |
| <input type="checkbox"/> | IT companies are not concerned with issues related to this subject. |
| <input type="checkbox"/> | It is an optional practise and does not help to gain advantages. |
| <input checked="" type="checkbox"/> | IT companies should apply it. |
| <input type="checkbox"/> | Companies apply CSR because it is mandatory today (enforces by the government). |

2. Do you think the SME's (Small and Medium Enterprises) apply CSR? (tick one)

- | | |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | Yes, to gain competitive advantage. |
| <input type="checkbox"/> | Yes, to abide by law. |
| <input type="checkbox"/> | Yes, to improve their corporate image with respect to environmental issues. |
| <input type="checkbox"/> | No, these businesses do not apply CSR and damage the environment without measure. |
| <input type="checkbox"/> | No, because it is not necessary. |
| <input type="checkbox"/> | No, CSR only can be applied by the larger companies. |

3. Are you socially responsible (giving donations) and environmental responsible (recycling)? (tick one)

- | | |
|-------------------------------------|---|
| <input type="checkbox"/> | Yes, it is mandatory by law to avoid sanctions. |
| <input checked="" type="checkbox"/> | Yes, all my practices are voluntary. |
| <input type="checkbox"/> | No, I have not benefitted with it application. |
| <input type="checkbox"/> | No, CSR is optional, not mandatory. |

4. When you buy a new IT product what do you do with the product that you replace? (tick as appropriate)

- The product goes to the rubbish bin without any consideration.
- The shops where I buy my new product take the old and recycle or apply donation programs with it.
- The government give us the option to re-cycle IT products.
- I donate my oldest product.
- I save my old product to reuse when necessary.

5. Do you know any CSR projects promoted by IT companies in your country? (tick as appropriate)

- Aids to workers.
- Conciliation of family life.
- Sponsorship of a sport team.
- Computers donations.
- Financial helps.
- Forestations.
- Other (please state):

No, I do not know.

6. When buying a new product, do you take power consumption into account? (tick one)

- | | |
|---|---------|
| ✓ | Always. |
| | Often. |
| | Seldom. |
| | Never. |

7. Today somebody invented a new mobile charger that is universal and runs with solar energy. Do you think people would continue using the current charger or do you think people want to use the new one because it loses less power? (tick one)

- | | |
|---|--|
| ✓ | It depends on the price of the charger. |
| | Yes because people are aware of it. |
| | If the charger is included in the new product, people will use it. |
| | People will use alternately both chargers (electric and solar) |
| | No because people prefer to connect it to the power, it is faster. |
| | Depends on the speed of charge. |

8. You need a new printer in your home. You are looking for two printers with the same features. The only difference is that one is £15 more expensive than the other, but the company of the expensive one has a program to help the society investing in various projects to help people or save the environment. What product do you buy? (tick one)

- | | |
|---|---|
| ✓ | I considered the features: power consumption, number of pages with the same cartridge and are equals, but I prefer the socially responsible because it helps the society. |
| | I considered the features: power consumption, number of pages with the same cartridge and all the features are similar, but I prefer the cheapest one. |
| | The product of the most well-known brand. |
| | I do not know because it depends on the moment. |

Well-known brands and CSR

9. What do you think is more important at the time to positively assess a brand or a company? Number the importance between 1 and 5 (1 being more important, 5 less important).

1	Famous brand.
3	Seniority in the market.
2	Company not involved in any scandal.
4	Company that have production in my country (give workers and benefits to my town society).
	Others (please state): <div style="border: 1px solid black; height: 100px; width: 100%;"></div>

10. Order these companies by how CSR responsible they are (1 being more responsible, 5 the less).

?	IBM.
?	SONY.
?	Hewlett-Packard.
?	NOKIA.
?	Fujitsu-Siemens.
1	Others(write it): <div style="border: 1px solid black; height: 60px; width: 100%; padding: 5px;"> The Cooperative group of companies </div>

Spanish survey

El objetivo principal de esta encuesta es conocer la opinión de los consumidores acerca el concepto RSC (Responsabilidad Social Corporativa) y su aplicación en el mundo de la Tecnología de la Información(TI). También se pretende comparar el conocimiento sobre este tema de los ciudadanos entre dos países: España y Gran Bretaña. Estas cuestiones pretenden conocer la opinión y sensibilidad sobre RSC.

(Redondea la opción correcta).

Sobre ti

Nacionalidad:

UK	España
----	---------------

Género:

Masculino	Femenino
------------------	----------

Edad:

17-25	26-45	46-65	65 +
--------------	-------	-------	---------

¿Trabajas?

Sí	No
----	-----------

(En caso negativo obviar las siguientes preguntas)

¿Para quién?

Gobierno	Autónomo	Para una compañía
----------	----------	----------------------

¿Dónde?

Gran compañía	PYME
------------------	------

Responsabilidad Social y Responsabilidad Social Corporativa

1. ¿Qué piensas sobre la RSC(Responsabilidad Social Corporativa)? (marca la opción correcta)

	No sé qué significa.
	A las compañías IT (Tecnologías de la Información) no les interesa nada relacionado con este tema.
	RSC es una opción adicional y no ayuda a ganar ventajas competitivas.
	Las compañías IT deben aplicar RSC para mejorar el entorno.
	Las compañías aplican RSC porque es obligatorio hoy en día (el gobierno vela por su cumplimiento).

2. ¿Piensas que las PYMES (Pequeñas y Medianas Empresas) aplican RSC? (marca la opción correcta)

	Sí, para obtener ventajas competitivas.
	Sí, para cumplir con la ley.
	Sí, para mejorar su imagen corporativa con respecto a cuestiones medioambientales.
	No, estos negocios no aplican RSC y dañan el medioambiente sin medida.
	No, porque no es necesario.
	No, la RSC solo puede ser aplicada por las grandes compañías.

3. ¿Te consideras socialmente responsable (haciendo donaciones) y medioambientalmente responsable (reciclando)? (Escoge una opción)

- Sí, es obligatorio por la ley para evitar sanciones.
- Sí, todos mis actos son voluntarios.
- No, no me beneficio aplicando estas prácticas.
- No, RSC es opcional, no obligatoria.

4. Cuando compras un nuevo producto IT, ¿Qué haces con el producto que reemplazas)? (Marca la opción apropiada)

- El producto va a la papelera sin ninguna consideración.
- Las tiendas donde compro mis productos se encargan de reciclar el viejo o aplicar programas de donaciones con el mismo.
- El gobierno nos da la opción de reciclar productos IT.
- Dono mi producto viejo.
- Guardo mi Viejo producto para reusarlo cuando sea necesario.

5. ¿Conoces algún proyecto RSC patrocinado por compañías IT en tu país? (marca las opciones necesarias)

- Ayudas a los trabajadores.
- Programas de conciliación familiar.
- Patrocinador de un equipo de deporte.
- Donaciones de ordenadores.
- Ayudas económicas.
- Repoblaciones forestales.
- Otras (por favor, especifica):

- No, no conozco ninguna.

6. Cuando compras un nuevo producto, ¿Tienes en cuenta el consumo energético? (escoge una opción)

- Siempre.
- A menudo.
- Rara vez.
- Nunca.

7. Alguien ha inventado un cargador de teléfono móvil que es universal y funciona con energía solar. ¿Crees que la gente seguirá usando el cargador eléctrico o crees que la gente usará el nuevo invento porque se pierde menos energía y usa energía solar? (escoge una)

- Depende del precio del cargador.
- Sí porque la gente está concienciada en este aspecto.
- Si el cargador está incluido en los nuevos productos, la gente lo usará.
- La gente usará alternativamente los dos cargadores (eléctrico y solar).
- No porque la gente prefiere usar la electricidad, es mejor (más cómodo).
- Depende de la velocidad de carga.

8. Necesitas una nueva impresora para tu casa. Estas mirando dos impresoras con las mismas características. La única diferencia es que una es 15€ más cara que la otra, pero la empresa de la cara tiene un programa de ayuda a la sociedad invirtiendo en varios proyectos para ayudar a la gente o salvar el medioambiente. ¿Qué producto compras? (escoge una opción)

- He considerado las características: consumo de energía y número de páginas impresas con el mismo cartucho y son iguales, pero prefiero la socialmente responsable porque ayuda a la sociedad.
- He considerado las características: consumo de energía y número de páginas impresas con el mismo cartucho y todas las características son las mismas, pero prefiero la barata.
- El producto de la marca más conocida.
- No lo sé porque depende de mi situación económica del momento.

RSC y marcas reconocidas

9. ¿Qué piensas que es más importante a la hora de valorar una marca o empresa? Enumera la importancia entre 1 y 5 (1 más importante, 5 menos importante).

1	Marca conocida.
3	Antigüedad en el Mercado.
2	Compañía no involucrada en ningún escándalo.
2	Compañía que dispone de plantas de producción en mi país (proporciona trabajo y beneficios en mi ciudad).
	Otras (por favor indicar): <div style="border: 1px solid black; height: 40px; width: 100%;"></div>

10. Ordena estas compañías por como de Responsables Socialmente son (1 la más responsable, 6 la menos responsable).

2	IBM.
3	SONY.
1	Hewlett-Packard.
4	NOKIA.
5	Fujitsu-Siemens.
	Otras (especifica): <div style="border: 1px solid black; height: 40px; width: 100%;"></div>

Annex V: Resumen

Este proyecto es un estudio acerca Responsabilidad Social Corporativa y la aplicación que tiene hoy en día en el mundo TIC. Trata de analizar el conocimiento que tiene la sociedad acerca este tema y la aplicación que se hace de él, así como lo que se percibe que hacen las empresas.

Se pretende definir el concepto clarificando qué es realmente y qué no es la RSC, para así despejar cualquier tipo de dudas sobre el concepto.

Se estudian en él distintos productos tecnológicos que aplican criterios de Responsabilidad Social Corporativa, así como compañías TIC que están mentalizadas en la aplicación de RSC.

Uno de los puntos más fuertes del estudio es la comparativa entre dos países sobre la aplicación de RSC (Reino Unido y España), ya que ha existido la posibilidad de realizar 40 encuestas en cada país, para poder comparar puntos de vista.

Tras realizar las encuestas se procede al estudio de los resultados obtenidos, obteniendo así la visión que tiene la sociedad en cuanto a empresas TIC se refiere, su posición en cuanto a si se es responsable o no y su conocimiento global acerca del concepto.

Se explica también la existencia de indicadores sobre RSC, clarificando que existen varios tipos de ellos y la posibilidad de aplicarlos en cualquier tipo de empresa TIC que se precise, obteniendo una puntuación que permite clasificar las empresas siguiendo unos criterios.

También se incluye un apartado acerca “Green IT”, que trata todo lo relacionado con cuidar el medioambiente tratando de disminuir el daño que se le hace y disminuyendo las emisiones de CO₂ así como el uso de papel.