Master Thesis

Real Estate and Facility Management Department TU Wien

FACILITY MANAGEMENT AND FACILITY SERVICES MARKET TRENDS IN SPAIN

MEMORY

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Information summary

Title: Facility Management and Facility Supplies market trends in Spain

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Motivation: Master Thesis

Summary

This project is part of a series of projects carried out by the University of Vienna and its Real State and Facility Management Department. The project seeks to complement the information obtained in similar studies that other students did in 2014 and 2016 on the departments of Facility Management of Spanish companies. The Spanish companies studied are from the Top 500 in terms of revenue and all have answered a questionnaire of 28 questions about their department, how they are organized, their outsourcing strategies and their IT programs.

Once analyzed and studied the evolution of each FM area in Spain, it has been compared with other European countries where it has been carried similar studies. The selected countries are: Switzerland, Germany, Austria and Romania.

To sum up, FM is an increasing area in Spain and it still has a lot to be developed in small and medium-sized companies. However, those who already have the department of FM integrated in their hierarchy recognise that it have benefits in both savings and productivity.

Keywords: Facility management, Spain, Europe, Added value, Outsourcing, Evolution.

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1 Introduction

1.1 Facility management contextualization

In the 70s, the term Facility Management was unknown for most of the professionals and the ones who worked in FM labours were not able to correctly identify their job. In 1978 a group of Facility Managers proposed to give a greater recognition and credibility to this discipline. They created the FMI (Facility Management Institute), which was renamed in 1980 to the actual IFMA (International Facility Management Association).

The FM was born in the US and arrived in Europe through England, Norway and Northern Europe. Finally, it arrived in Asia and South America.

The Facility Manager has become an important asset in the last years but today, in most of the large and medium-sized firms, this discipline has been fully integrated into its policies and strategies. In terms of future, the intention is to integrate the FM in the organizational structure of the rest of the small and some medium-sized companies. [1]

1.2 Why Facility Management?

Over the years, the change in the business vision towards reengineering and outsourcing, as well as the constant changes and the technological evolution that have modified the nature of the work, have facilitated that the discipline of Facility Management is becoming increasingly necessary.

Facility Management can be summarized as creating an environment that makes easier and more effective the realization of the core business of the organization through the management of facilities and support services, all that providing an integrated vision of the infrastructure, services and people. [1]

It is important to indicate that FM acts at all levels of the company: strategic, tactical and operational. This is because it helps to achieve the medium and long term objectives. Moreover, it creates the right environment for a comfortable day to day work.

FM provides organizations a multitude of different benefits. The main ones are presented as follows: [13]

- Improves the communication between supply and demand.
- Increases the effectiveness of the company due to the use of synergies between services, which improve performance and reduce costs.
- Clears internal and external responsibilities for the services that lead to systematic insourcing or outsourcing procedures.
- Reduces the number of conflicts between internal and external service providers.
- Promotes integration and coordination of all required support services.
- Provides transparent information for the end users on service levels and costs.
- Enhances an organisation sustainability by implementing a life cycle analysis for the facilities.

The different areas included in the FM can be grouped in 2 different groups, “Space & Infrastructure” and “People & Organisation”. The first one includes areas as accommodation, workplace, technical infrastructure, cleaning, etc. The second one contains areas as health, safety and security, hospitality, ICT (information and communication technology), logistics, etc. [14]

1.3 Objectives and Scope

This research aims to determine how deep FM is installed in the Spanish market. For that, it is relevant to know how much the Spanish companies know about FM and how well they use it. Furthermore, it is necessary to know the evolution of the FM market and compare it to other European countries studied.

For all of this, it has been established the following specific objectives with the intention to be answered during this study:

- How important is the FM for the Spanish companies?
- In which area is FM giving more savings and more profitability for Spanish companies?
- In which hierarchic level is mostly situated the FM department and how is it organized?
- Which are the biggest cost drivers in the field of real estate?

To answer those questions, this project will study the FM department (if they have it) of the Top 500 companies in Spain ranked by revenue.

This project will be supported by the University of Technology of Vienna because the university has made many research projects regarding FM market in different countries around Europe. Moreover, this project is not the first one that analyzes the Spanish market, that’s why it will focus on expanding the conclusions that previous projects have reached or confirm them.

1.4 Outline Structure

This project is divided in 6 parts, each one focused on a function, either informative or exposing results. These 6 parts are as follow:

- Point 1: Introduce Facility Management, explain the reason for creating this department and set out the objectives of this thesis.
- Point 2: Show the methodology of work, how the information has been acquired and how it has been analyzed.
- Point 3: Explain the state of the Facility Management in Spain to date. Analyze its contribution to the companies and its outsourcing opportunities. Finally, indicate which KPIs are used in the FM field.
- Point 4: Analyze the evolution of the different areas of Facility Management in Spain in the last years.
- Point 5: Once analyzed the Spanish sector, the aim of point 5 is to compare the Spanish situation with a number of European countries where similar studies are carried out.
- Point 6: A series of conclusions and overall results are presented once the project is completed.

2 Methodology

2.1 Literature Review and Identification of Knowledge Gaps

First of all, in all the projects like this, it is a key factor to review the state of literature related to the area of study. Many reviews analyze and discuss generally published reports about this knowledge. Its purpose is to provide a context and justification for the research to be carried out.

This part has several objectives: differentiate what has been done about what needs to be done, find important variables relevant to the topic, set the context of the issue or problem, improve and acquire vocabulary on the subject and identify the main methodology and research techniques that have been used. All these points are the most relevant for this thesis.

2.2 Data Collection

In this project, the main data that has been used is a standardized questionnaire with 28 questions, mixing open and closed questions, specifically chosen to know how implemented was the FM department in a company and its benefits to it. This questionnaire has given to the companies in Spanish, because this makes them easier to understand the questions.

The questionnaire is divided into 4 distinct parts which are as follows:

- FM organization: questions related to the fact whether companies have or don't have a FM department; number of employees, from the company and the department; position of the department in the hierarchy of the company and the communication between the department and the rest of the company.
- Value added: how many places (headquarters, productions plants, offices, etc) they supervise, what the cost drivers and savings through the introduction of FM in terms of personal, energy and cleaning exist and the increase of productivity obtained from FM in terms of personal, maintenance and administration.
- The way of service provision: number of external service providers, fields that are outsourced, types of contracts with the external providers, etc.
- IT support: questions related to the use of IT systems such as ERP or CAFM and what kind of processes these systems cover. Finally, our aim is to discover companies' opinion about this issue. [2]

In other projects related to this idea, the questionnaire was sent to fill it in paper format, but in this thesis, it has been deemed convenient to send it in online format to make it easier for the person in charge to answer it and thus save time.

Another important part of data collected and used in this project is data obtained from the government of the country, from organizations related to the field of study or from public information provided by the studied companies. These data has facilitated a deeper and better understanding of the studied companies in order to complement the information obtained through the questionnaire. This information includes the income of the companies, the number of employees and what position they occupy in the country regarding the sector.

2.3 The Setting of the Study

As it has been mentioned previously, this is not the first study to be carried out on this topic. Since 2005, the University of Technology of Vienna (TU Wien) and their Real State and Facility Management Department have been conducting studies such as this one in many European countries such as Germany, Austria, Switzerland and Spain among others. That is why this project seeks to complement the information obtained through those projects and thus improve their knowledge about this area.

In this case, like in previous years, the companies chosen for the study are among the Top 500 with the highest revenues in the country. From these 500, 21 have been chosen randomly.

The contact was firstly made through the phone trying to contact the person in charge of the FM department or, in case there was not a specific department, contact to the person who is responsible for the tasks associated to a Facility Manager in the company. Once having a contact person in the company, the questionnaire was sent via e-mail. In some specific cases, the person in charge was contacted directly through the social network “Linkedin” and the questionnaire directly sent through the platform. All contacts with the managers of the companies have been carried out by the same person in order to maintain the quality of the study. The data obtained through the questionnaires were transferred to an Excel file to be analyzed and studied in a deeper way.

3 Facility Management in Spanish market

3.1 State of the FM market in Spain

In the recent years, FM has gained more weight in the world and in Spain. The function of this area is that everything should work as expected, which is the same as having a perfect host who takes care of the details so that the corporate inhabitants feel at home. It is estimated that the sector in Spain represents a turnover of more than 70,000 million Euros and between managers and employees more than 225,000 people working in the sector, having as reference European studies. This represents a sector full of opportunities. [3]

Facility Manager began to be recognized relatively recently in Spain. It is currently beginning to have importance in leading organizations of the market. Nowadays, most large companies have integrated this discipline into their policies and strategies, but much work remains to be done in small and medium-sized firms.

The socio-economic situation of Spain requires more than ever the introduction of measures that make companies more efficient in their activity. According to a joint study with IFMA, a comprehensive and efficient management of the services that are part of the Facility Management offer would save 13,000 million Euros in Spain, including both public and private sectors. Nowadays rationalization of overheads could solve financial problems. However, as this study shows, using FM reduces costs and improves the profitability of the companies. That is why; this is the message that has to be sent to the market. Among others, this is a key point that has made the figure of the facility manager a full growth element. [3]

On the other hand, other trends indicate that, in the coming years, within the functions of the facility manager, many policies will focus on the development of sustainability plans. That area is increasingly gaining weight within companies. [3]

The fundamental challenge is to ensure added value in the proposals that service providers design, and determine facility managers to make strategic decisions in a complex environment. The economic situation of the country and of the companies themselves tends to lead to the award of a contract only in the field of short-term economic savings. This short-term strategy prevents service companies from providing a true differential value that actively supports the customer's core business. [3]

In conclusion, Facility Management is a booming discipline that is spreading throughout the business sector of Spain. The results of its implementation have demonstrated that this is a key tool in the companies' management of the 21st century. In Spain, there are several postgraduate courses that are specializing professionals to meet the challenges of this sector. For example, IFMA Spain has a training program for its partners which are having a great success which indicates a positive trend of FM.

Once analyzed the Spanish FM sector it is necessary to examine which contribution is giving the FM department to the Spanish companies. In the following section the added value in FM is presented.

3.2 Added Value in FM

The Value Added to Facility Management can be defined as a contribution to the improvement of the organization's performance regarding people, processes, finance and the environment.

Moreover, and extrapolating the 3 fundamental principles of "Added Value" to Facility Management, we can ensure that we will achieve cost reductions without deteriorating the service, when: [4]

- The Facility Management Department is supported with different kinds of information: economic, as well as strictly technological and technical.
- The Facility Manager works in an interactive and participative way with the rest of the departments of the company.
- The current conception of FM processes is called into question, so that Innovation can obtain savings generated from Facility Management.

Fulfilling these premises, a simplification of the management process and even, alterations in the conception of Facility Management is achieved; this would be considered a factor to generate “Added Value”. This leads to an increase of the production, an improvement of the relation Quality / Costs, and therefore of the profits of the company.

The added value is perceived by the different stakeholders, who can be grouped into 3 levels: users, departments and the organization itself (the Steering Committee). It is important to take into consideration the interests of these different groups and their different perceptions of the project.

It should be possible to measure the added value contributed to the organization. We must set our sights on the ultimate goal of our mission, which is to bring value to the organization. From that moment, indicators related to the objectives of the organization will appear. Experience has shown that from the reformulation of the product / service, using the "Added Value Analysis", the economies will reach at least 10%, but not forgetting that it will also let to: [4]

- Organizational improvements.
- Reduction of administrative tasks and elimination of bureaucracy.
- Improved communication between the Facility Manager and the rest of organizations of the company.
- Sensitization of managers and cadres as a result of the actions of information and training.

After assessed the added value of FM, it is necessary to analyze one of the most important aspects of FM, outsourcing. Therefore, the following section focuses on studying the Spanish outsourcing market.

3.3 Outsourcing in Spain

As companies are beginning to realize the strategic importance of Workplace Management, outsourcing of the CRM / CREM is expected to move towards service transformation. This situation redefines and shapes business results, leads to a cultural change and help in attracting talent and new skills. However, all this is marked by the traditional approach of cost reduction, a fact that has blinded large company owners about the true strategic potential of Facility Management. [7]

"Companies in Spain have started outsourcing late, they have not implemented it until they have no choice for their costs," said Javier Mañueco, director of GTS Strategic Sales at IBM. With a growth rate of 4.5%, outsourcing is now presented as an attractive option beyond economic savings, said Mañueco: "Outsourcing has added value". [6]

Furthermore, according to an annual study conducted by Quint Wellington Redwood in collaboration with Whitelane Research on the outsourcing market in Spain, outsourcing continues to grow in Spain and reflects an increase in the level of maturity in the management of outsourced services. In addition, outsourcing is identified as a lever of transformation, compared to the exclusively operational role and oriented to the short term that traditionally characterized outsourcing.

In a strategic level, the report reflects that, while outsourcing practices continue to increase, the enhancement takes place at a slightly lower pace, as a result of the greater maturity of the outsourcing Spanish market. In fact, only 6% of client companies (the ones that are outsourcing/receiving the service) intend to reduce services related to this area, compared to the 4% last year.

Regarding the reasons for outsourcing, the evolution of the last 3 years indicates that while the reduction of costs is still the main driver to outsource, it has lost relevance to aspects such as business transformation. Other indicators such as cost transparency or financial flexibility also lose relevance.

Indeed, this does not indicate that these aspects are no longer important for companies. However, efforts made in recent years to achieve such transparency and cost flexibility have led companies to an acceptable situation. This has resulted into this loss of relevance when it comes to tackling a new outsourcing initiative. [5]

Once reviewed both the Spanish FM market and the added value that FM provides, it is required to present the evolution and the improvement of FM in a company. Therefore, the next point exposes how the indicators have to be and what the most relevant ones are.

3.4 Key Performance Indicators in FM

"What cannot be measured cannot be controlled, what cannot be controlled cannot be managed". The metric is very important for the activity of an organization, since it impacts directly on the attitude and behaviour of its members. It places them in a point of evaluation with respect to the objectives set and achieved.

At the present time, evaluation methods are necessary to enable the capture of both quantitative and qualitative information because the exclusively financial metric systems do not allow determining with certainty the magnitude of this information. Furthermore, they neither allow enhancing the competences and abilities that are demanded to the current organizations.

The success of a continuous process improvement depends on a large extent on the strength of its feedback process, that is, the ability to adjust what is needed on the go. For this, it is required to contrast the projected results with the current progress. The feedback in this kind of process is generated from the function of control and verification. [8]

When choosing the KPIs to use to evaluate a continuous process improvement, it is necessary to follow a number of conditions. These conditions are as follows: [8]

- Specific: It should be as concrete as possible. Anyone who knows the goal should know exactly what to do and how.
- Measurable: It must be measurable, so it must be a quantifiable goal. In some cases, it is complicated but it must be assessable in order to analyze the strategy.
- Achievable: It must be ambitious and challenging for the company but possible. It is necessary to give the possibility to readjust the objectives if there are any changes in the environment.
- Realist: The Company must have KPIs within their possibilities (both for their available resources and for their motivation to achieve this goal).
- Time phased: It is necessary to have a temporal line established. Each KPI must be defined in time. This will help them to mark the different stages that will allow them to reach what they want to achieve.
- Assigned to: The responsibility for monitoring and managing the feedback from KPIs must be assigned to specific unit/position.
- Balanced: They must be balanced by offering indicators that measure quality and quantity; effectiveness and efficiency; including indicators that measure objective and subjective domains.

In the area of Facility Management, the currently 20 most used KPIs are: [9]

- € Gross FM Costs (TCO) / 1 m² of Gross Floor Area (GFA), annually
- % Return on Investment
- € Operational Costs / 1 m² of GFA or per 1 user/tenant
- € Capital Costs / 1 m² of GFA
- € Maintenance Costs / 1 m² of GFA
- % Maintenance Cost / Replacement Cost

- % Planned maintenance vs Reactive maintenance Ratio
- € Utility Consumption Costs / 1 m² of GFA or per 1 user/tenant
- € Cleaning Costs / 1 m² of GFA
- € Security Costs / 1 m² of GFA
- % Occupancy rate (Net Floor Area)
- % Net Floor Area from Gross Floor Area
- % Utilization rate of Working Places
- # Net Floor Area in m² / 1 working place or per 1 user
- # Electric Energy Consumption – kWh / 1 m² of GFA or per 1 user
- # CO_2 Emissions, ton, annually
- % Employees Turnover
- % Churn Rate of Customers with Subscriber Based Contracts
- # End User Complaints
- % Degree of Satisfaction of Users from FM Service

After analyzing the FM market as a whole, the following section describes the evolution of the Spanish market in each of the areas included in the FM separately.

4 Evolution of the main areas of FM in Spain

In this chapter the evolution of the different areas included in the Facility Management has been analyzed below. The selected areas are those included in the IFMA (International Facility Management Association) study of the sector.

4.1 Security

The security treated in this thesis is only the private one. This, by definition, is provided by security services companies in order to protect the set of goods and rights for which they have been contracted. These protected interests are usually private: buildings, warehouses, homes, land, etc.

The private security sector incomes in Spain, specifically the surveillance area, suffered a further decline in total turnover in 2014, standing at around 2,121 million. The general negative trend since the beginning of the crisis in 2009 is maintained to date, with a cumulative drop of -24%. [10]

Furthermore, the number of private security companies in 2014 reached 1.539, of which 420 were surveillance and protection companies. There's a stagnation of the number of companies between 2012 and 2015, as figure 4.1 shows, probably due to the drop of revenues explained in the previous paragraph. According to INE (Statistics' National Institute) data, most of the companies dedicated to private security were small; 83% had less than 50 workers.

Moreover, the regions where the largest numbers of companies in the sector were concentrated in Madrid and Catalonia, followed by Andalusia and Valencia. This information is not surprising since they correspond to the most important autonomous communities and the ones with the strongest economy.

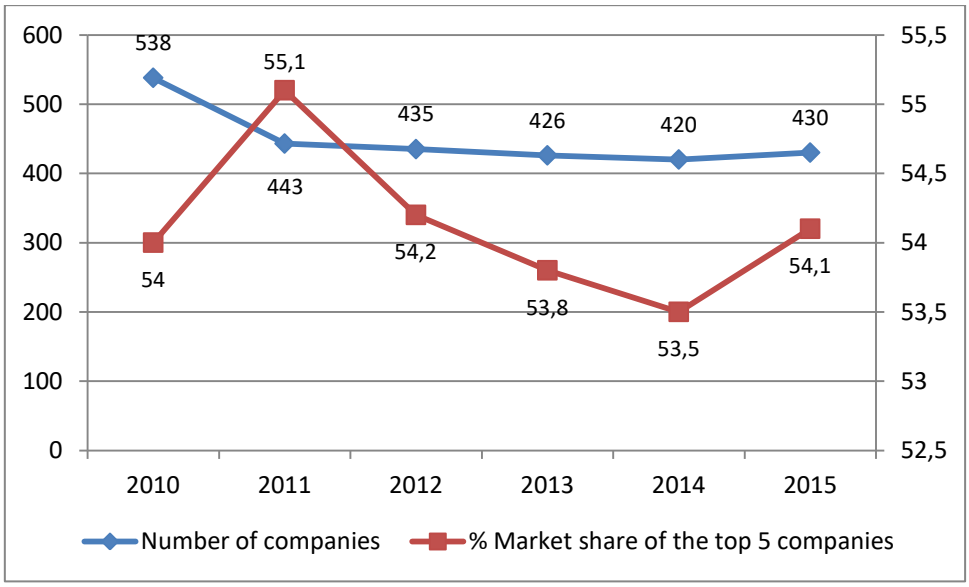

Fig. 4.1: Evolution of the number of companies compared to the market share of the top 5 companies [10]

The main areas that demanded monitoring services in 2014 were commerce (18.70%), industry, energy (17%) and financial institutions (16%).

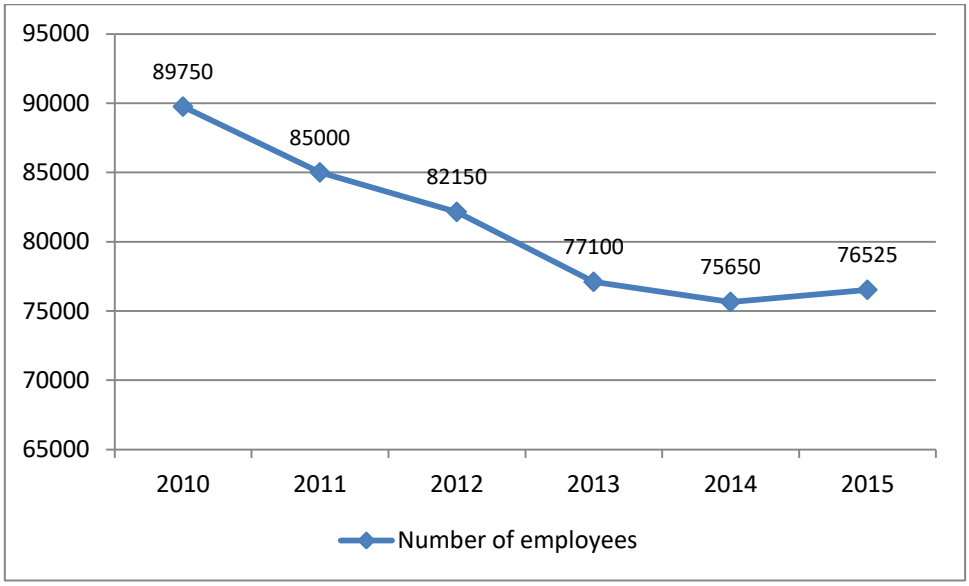

Fig. 4.2: Evolution of the number of employees in the security sector [10]

What can be seen in Figures 4.1 and 4.2 is that while the number of companies has not decreased during these years, the number of employees has done so. This is due to the series of cuts that companies from the sector made. This situation is a result of, among other things, the economic crisis. As D. Ángel Córdoba Díaz, President of the Professional Association of Private Security Services Companies says, what most concerns him is not only the fall of revenues, which could be as expected, but the reduction of profit margins, which could become negative. This may lead to a profitability decrease and it may cause problems to the company.

4.2 Cleaning

It is known that the cleaning sector is one of the main services associated with Facility Management and outsourcing. To this, it must be added that, in Spain, it is undoubtedly the area that generates more activity within the FM sector. The turnover of companies in the sector increased by 0.5% in Spain and 0.4% in Portugal, with the value of the Iberian market reaching 9,637 million Euros, of which 9,080 million corresponded to Spain (94.2%) and 557 million to Portugal (5.8%). [10]

In a more favourable economic scenario, the business of cleaning companies in the Iberian market experienced a moderate rebound in 2015, even if the strong pressure on prices was a brake to the growth rate. At the end of 2016, the trend of smooth business growth is expected to continue, with some acceleration in the case of Spain, with an estimated variation of around

1.3% in the overall Iberian market. The first five operators in the Spanish market together generated around 18% of global turnover in 2015

According to D. Jesús Martínez Nogal, President of Associations, Federations and Cleaning Companies (AFELÍN), the economic crisis has also affected the cleaning sector due to cuts in public administrations and private companies, motivated by the reduction of budgets. This situation has caused companies to undertake deep restructuring. However, they have to say that in the last two years there has been a slight change in trend.

This scenario has made that companies are trying to be more competitive, professionalizing their workers and betting for higher quality services.

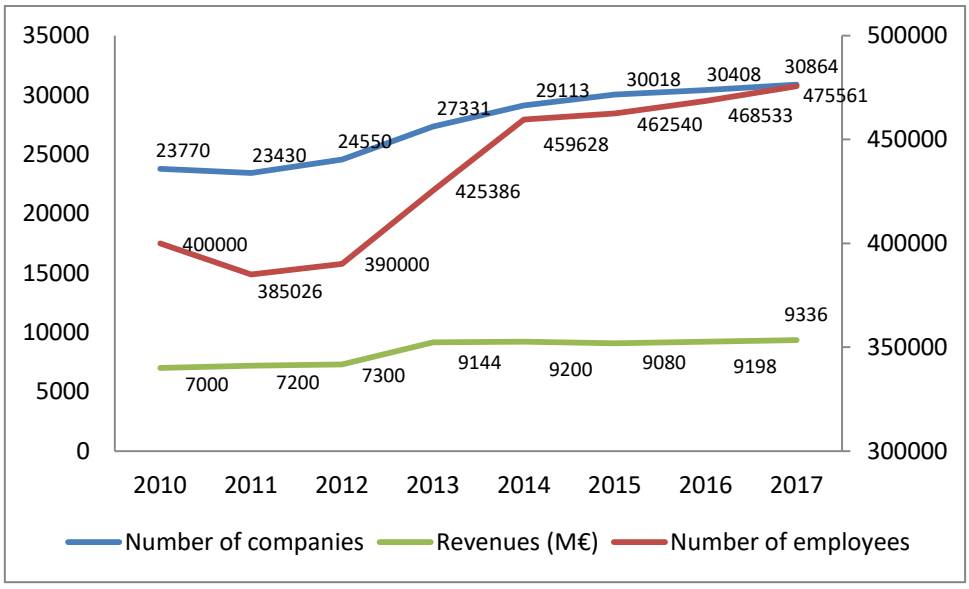

Fig. 4.3: Evolution of the number of companies, number of employees and revenues of the cleaning sector [10]

As we can see in figure 4.3, both the number of companies and the number of workers have been increasing during these years, although this increase has been decreasing. In terms of revenues, it has also slightly increased. If we focus on the number of employees per company, we see how that number has been decreasing. That is due to the cuts that have had to make the companies due to the mentioned crisis.

Finally, if we see the average revenues per company we can also see how it has been decreasing, which was expected by what was said about the crisis and the cuts.

4.3 Catering

It is understood that catering for the professional service is mainly dedicated to the external provision of the service of prepared food. It also can take part in supplying of the entire necessary thing for the organization of an event.

In Spain, the sector recorded in 2016 an increase in its turnover of 3.7% over the result for the year 2015, reaching a figure of 3,375 million Euros, as it shows the Figure 4.4. The expected growth for this year 2017 is slightly higher than 3%. This confirms the recovery trend started in previous years. In addition, the number of companies also recorded an upward data, with a higher increase in percentage to the billing. It was estimated that in 2016, the number of companies will exceed one thousand, as it is shown in the Figure 4.4. The market share of the first 10 companies is 53%, being important to emphasize that almost 40% was concentrated in 5 of them. [10]

The Figure 4.5 shows that the average number of employees per company remained the same as in the previous years, but the total number of employees increased.

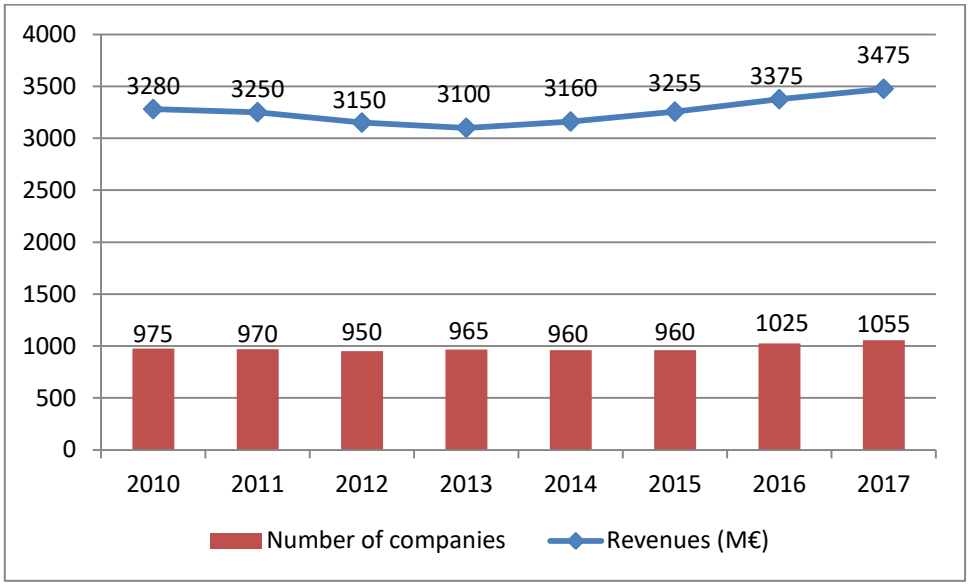

Fig. 4.4: Evolution of the number of companies and revenues in the Catering sector [10]

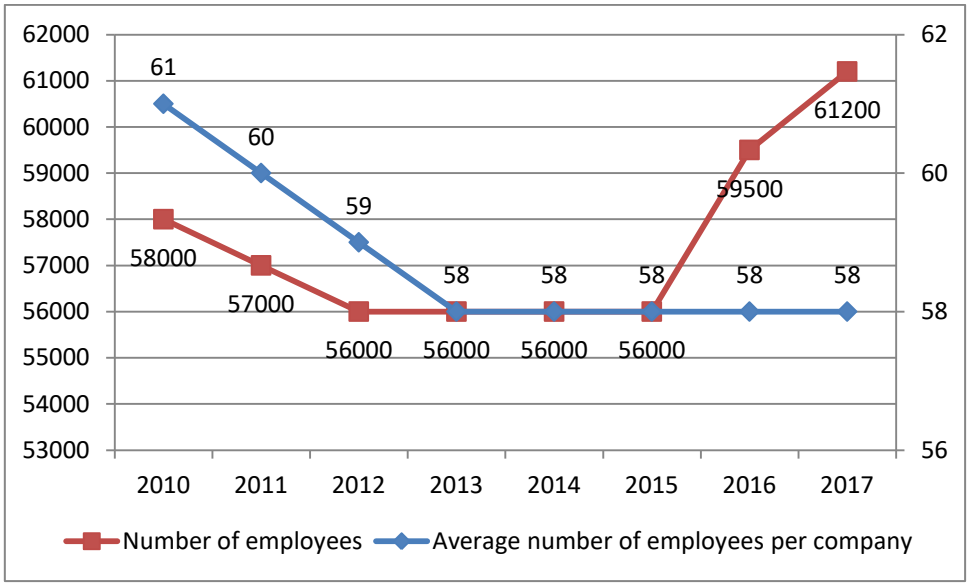

Fig. 4.5: Evolution of the number of employees and the average number of employees per company in the catering sector [10]

According to D. Antonio Llorens, President of F.E.A.D.R.S. (Spanish Federation of Associations dedicated to Social Restoration), the sector continues its growth as it has been happening since the year 2014 thanks to the gradual exit from the crisis. Although the number of consumers increases, there is a strong pressure on prices.

New technologies play a key role in the transformation process of the sector:

- Deployment of computers in kitchens and restaurants
- Digital technical data sheets, precosting, productivity, control of real-time inventories, etc.
- Logistics changes in procurement
- Sophisticated, automated and high production machinery
- Development of new products in partnership with providers.

Differentiation is an important point to consider. Nowadays, the society demands social responsibility, sustainability and healthy diets: ecological, healthy / natural, waste control, Km "0". The model is also shifting from B2B (Business-to-business) to B2B2C (Business-to-business-to-consumer). [10]

4.4 Waste

In 2015, 18.5M tonnes of waste were recycled in Spain. From that 18.5M, more than 1.3M tonnes correspond to domestic containers (74%). This represents a 4.5% increase over the previous year 2014. Only the management of urban waste treatment and disposal plants generated a turnover of € 1,400m in 2015, a figure similar to that achieved in 2014. The turnover of Spanish companies dedicated to the management of urban services exceeded € 5.1 billion, including areas such as collection and transport of waste or road cleaning. [10]

In addition, of 175,000 jobs linked to waste, about 42,000 were in the waste recycling sector. By type, the products that achieve the highest recycling rate were metal waste (about 60%), followed by the paper and cardboard segment (25%) and finally, the recycling of wood, glass and plastic. [10]

Moreover, as it shows the Figure 4.6, the number of authorized companies registered in the CNAE (National Classification of Economic Activities) for industrial waste recycling and urban waste recycling in 2015 was more than 850, which was an increase over the previous year. By Communities, the ones that most collected urban waste were Andalusia, Catalonia and Community of Madrid, followed by Valencia. It might surprise the appearance of Andalusia at the top but that is because it is the most populated autonomous community.

Furthermore, the market was still polarized, being mainly led by the subsidiaries of construction companies. In 2015, the top five operators had a market share of 70% of the business. 60% of the companies from the sector had fewer than 10 employees in their workforce and most of them were specialized in the recycling of a single material.

Additionally, the activity of waste recycling companies has been favoured in the last two years by the improvement of the economy which has led to an increase in waste generated. For the next two years, an increase in the volume of recycled waste of around 4% is expected.

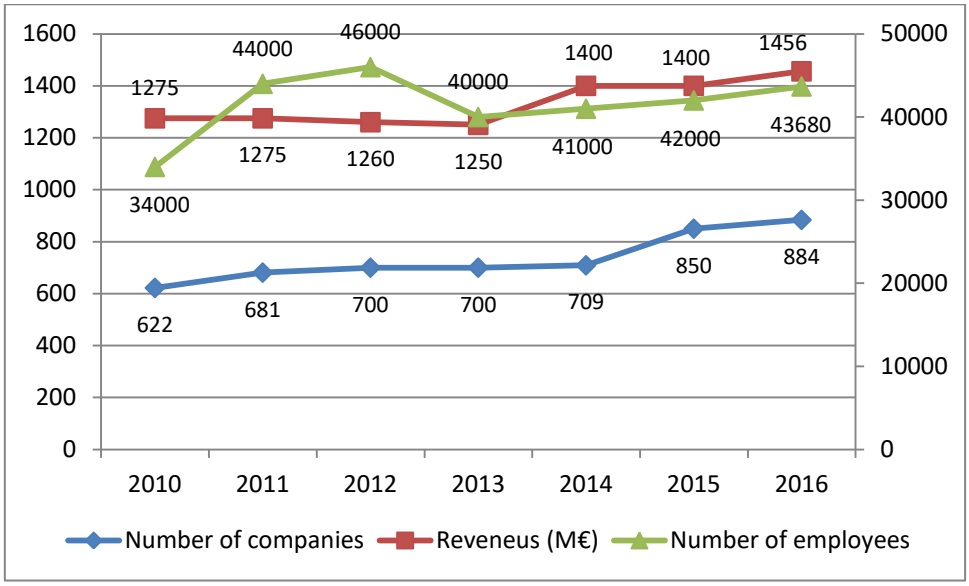

Fig. 4.6: Evolution of the number of companies, number of employees and revenues of the waste sector [10]

As for the statistics, Spain is positioned at the back of recycling in Europe. Óscar Martín, CEO of Ecoembes, indicates that in the UE there are different models to account for recycling and each country chooses the one that prefers according to its organizational model. Consequently, for many years, the statistics are not comparable. And while they can be used to reveal trends, they are not reliable either. That is why statistics can never give us the basis of strategies. Fortunately, one of the measures carried out by the EU's circular economy package is to start homogenizing the statistics.

Finally, and according to Óscar Martín, there is a study by the Ellen McArthur Foundation that going from an economy of using and throwing to a circular one would mean savings of 480 billion Euros, between 3% and 4% of European GDP. Of those, 21 billion would be in Spain. Moreover, it is also a social opportunity. There are 175,000 jobs linked to waste, of which Ecoembes contributes 42,000.

4.5 Real Estate

As can be seen in figure 4.7, the volume of investment has doubled from 2014 to 2015, reaching € 5,500m in 2015.

Madrid continues above the rest of the Spanish cities, concentrating most of the investment, 83%, followed by Barcelona, with 17%. Gross contracting in the office market has reached values of more than 570,000m2, with forecasts for this year's increase to 595,000m2. [10]

Regarding the offices, the largest number are still concentrated in Madrid and Barcelona, with an approximate stock in 2015 of more than 13 million m2 in Madrid and around 6 million m2 in Barcelona, followed, but a little apart from other cities such as Seville, where the market remains stable, Bilbao or Valencia.

The incomes' increase in Madrid and Barcelona has been widespread in all areas, with maximum incomes of € 27 / m2 and € 21 / m2 respectively in central districts. The average

monthly rent is in these cities around 13.5 € / m2. On the other hand, the average monthly income in the rest of Spain is lower, around € 6.3 / m2 in Seville or € 9 / m2 in Valencia. [10]

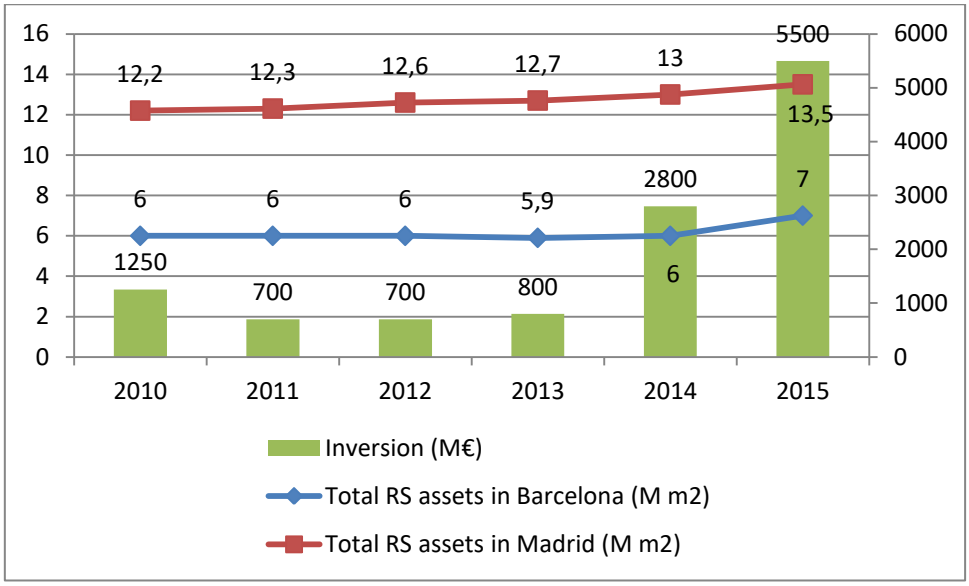

Fig. 4.7: Evolution of the inversion and the assets in Madrid and Barcelona in the Real Estate sector [10]

According to figures 4.7 and 4.8 and the last results of the real estate sector, the year 2015 and the first quarter of 2016 confirm the improvement experienced in the sector since 2013.

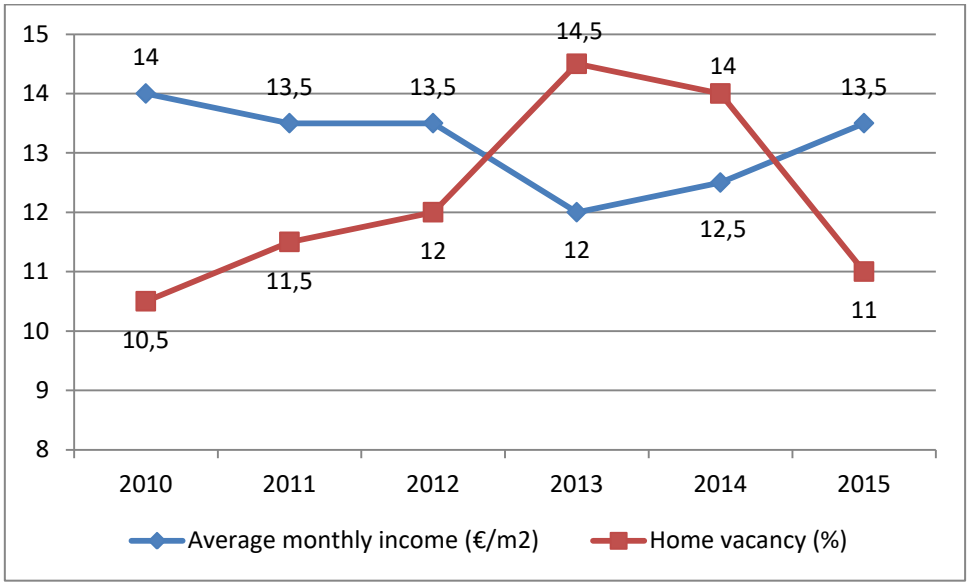

Fig. 4.8: Evolution of the Average monthly income and the home vacancy in the Real Estate sector [10]

In terms of home vacancy, as we can see in the figure 4.8, there's a downward trend in 2015, standing at approximately 11% in Madrid, 13% in Barcelona, 21% in Valencia and around 35% in Seville, where the rate continues to rise.

Finally, there is a general lack of quality offices in the centre of the cities, with a high potential in the rehabilitation of buildings. Practically all of the new surface expected for 2016 will come through renovation works of buildings. Madrid and Barcelona will continue to record higher growth in prime incomes in these areas.

4.6 Maintenance

Maintenance is defined as all actions that aim to preserve or restore something to a state in which it can carry out some required function. These actions include the combination of the corresponding technical and administrative actions.

Among the companies in the building maintenance sector, it is worth mentioning the presence of multiservice companies specializing in the provision of auxiliary services to companies. In many cases, these operators are subsidiaries of construction companies, which diversify their services inside and outside this sector to meet the demand for global offers that concentrate the services in a single supplier.

The building maintenance sector accounted for 59% of the market value of total maintenance and invoiced in Spain in 2014 around € 4,650 million. This represents an increase of 1.1% compared to the previous year 2013. In general, this market registered a positive increase after dragging five years of consecutive drops in the billing. By activity segments, the one that accumulates more billing continues being the maintenance of elevators (24%), followed by the maintenance of industrial machinery (18%) and the maintenance of electrical installations and lighting (17%). [10]

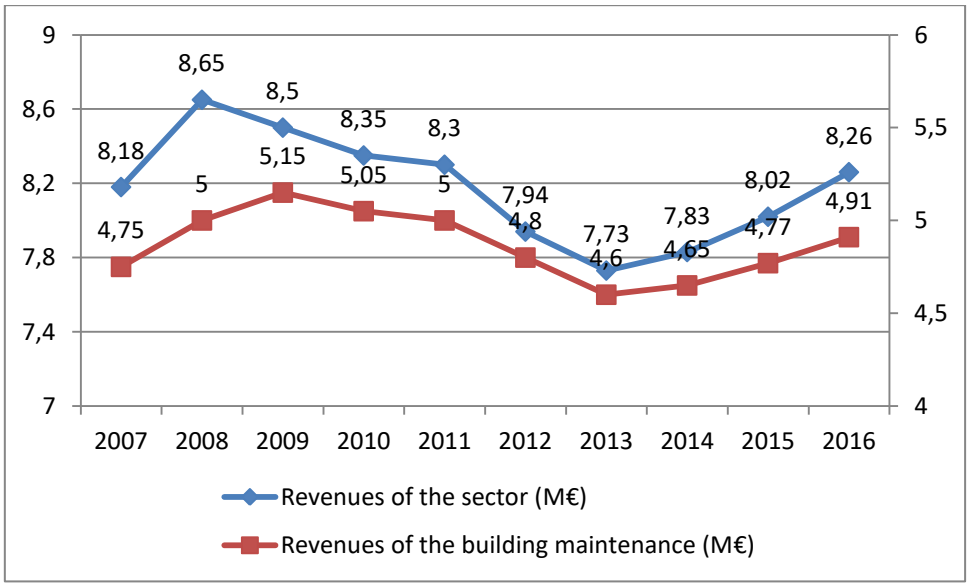

Fig. 4.9: Evolution of the revenues in the sector and in the building maintenance for Maintenance sector [10]

As it can be seen in Figure 4.10, the number of workers in this sector falls slightly compared to the figure in 2013, reaching 148,000 workers (including workers who are dedicated to the maintenance of other types of facilities as well as buildings). On the other hand, the forecasts

in 2014 for the following years were positive and gave a change of tendency towards an increase of employees. The same happened with the number of companies, which fell to 6.600, but an increase in the next years was expected. [10]

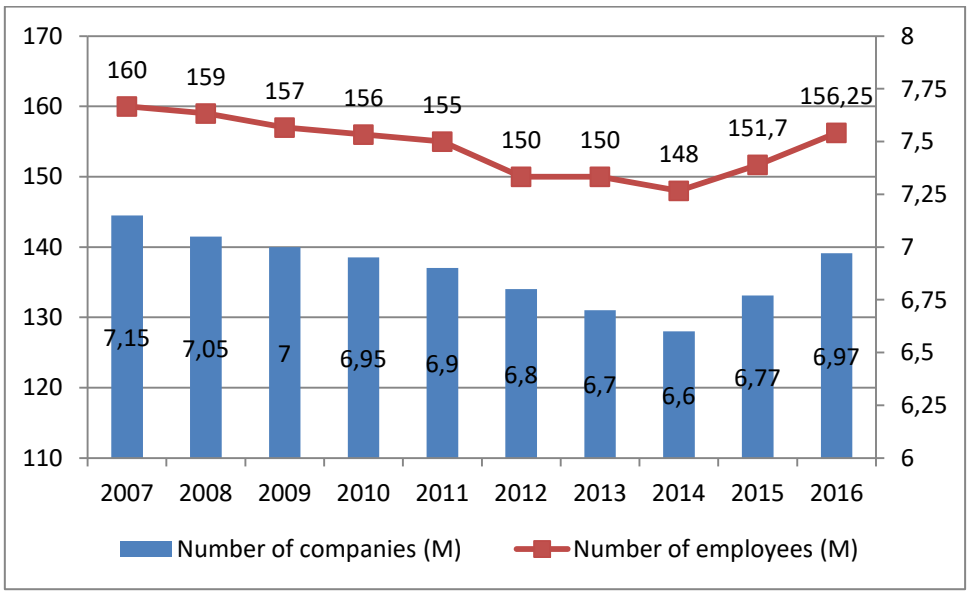

Fig. 4.10: Evolution of the number of companies and number of employees in the Maintenance sector [10]

In conclusion, the forecast related to the improvement of economic activity for the coming years is around 2.5% in 2015 or 3% by 2016. [10]

4.7 Energy

As can be seen in Figure 4.11, the turnover generated by the provision of services aimed at improving energy efficiency in buildings and other facilities continued to grow in 2015, standing at 945 million Euros. This result represented 6.2% better compared to 2014, a year in which an increase of 5.3% was recorded.

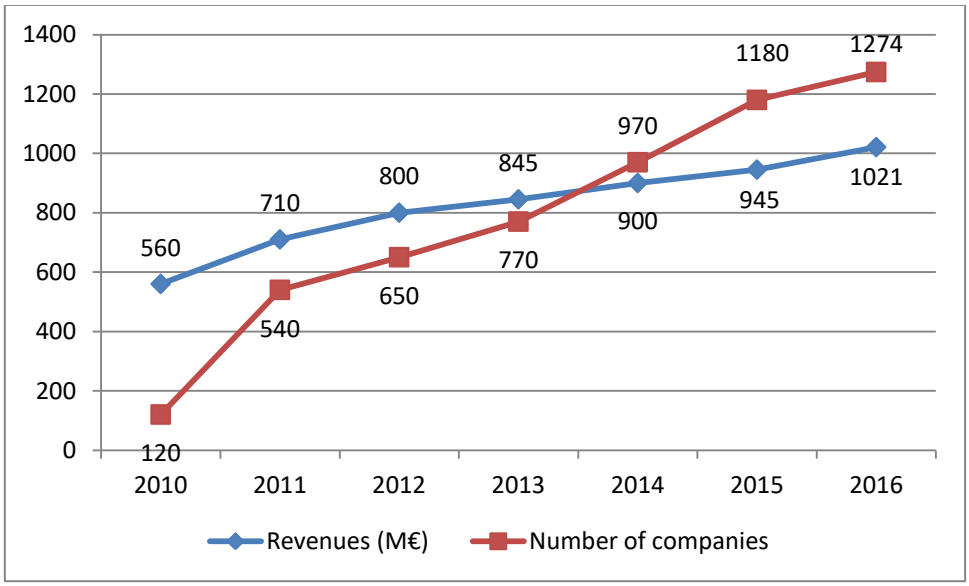

Fig. 4.11: Evolution of the revenues and the number of companies in the Energy sector [10]

In this way, demand from public administrations and private companies continued to increase. This rise came from the need to optimize resources, adjust costs and reduce the environmental impact of its activities, despite the slowdown of some projects as a result of funding difficulties

In relation to the types of use, office buildings and public bodies together account for more than 45% of the total market value, as shown in Figure 4.12. Public lighting, which in 2015 accounted for around 14% and industrial plant segments (13%) were as follows. [10]

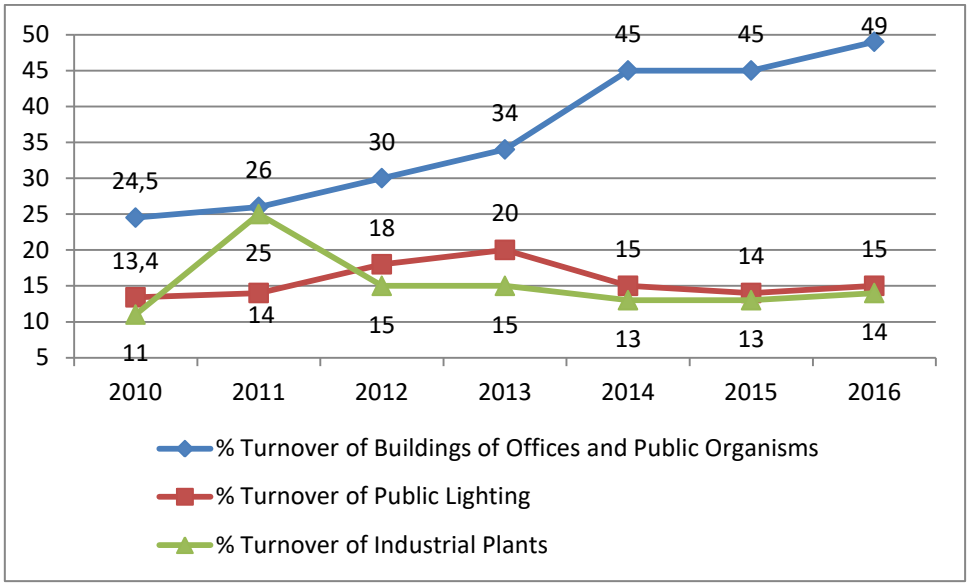

Fig. 4.12: Evolution in % of turnover for different areas in the Energy sector [10]

The sector has a high concentration in the main operators, mostly subsidiaries of construction companies, electric companies, engineering or installation and assembly companies. However, as Figure 4.11 shows, the number of companies registered as energy service companies continues to grow, surpassing 1,180 in March 2016, about 70 more than in May 2015.

Moreover, Spain has undertaken to reduce energy consumption by 20% compared to trend consumption by the year 2020, which has led to the establishment of obligations for an efficient energy system that will contribute to achieve this goal saving.

To sum up, forecasts for the future are very optimistic, reaching 8% based on the upward trend shown in the demand for services aimed at improving energy efficiency, both in buildings and other facilities and continuing the trend of the last years. [10]

4.8 Email and messaging

As shown in Figure 4.13, the total income of the Messaging and Pairing sector registered a growth of 4.2% in 2015, reaching a total of 6,150 million Euros. This evolution resulted in an extension of the recovery that had begun the previous year and which had ending a phase of five consecutive years of falls.

The favourable situation, the employment growth, the consumption increase and the industrial activity, all together with the dynamism of electronic commerce, explain the notable rise in that sector.

The business packaging segment, which mainly affects FM Management, recorded a growth of 5.7% in 2015, from 3.512 million Euros in 2014 to 3.725 billion Euros in 2015, as it can be seen in the Figure 4.13.

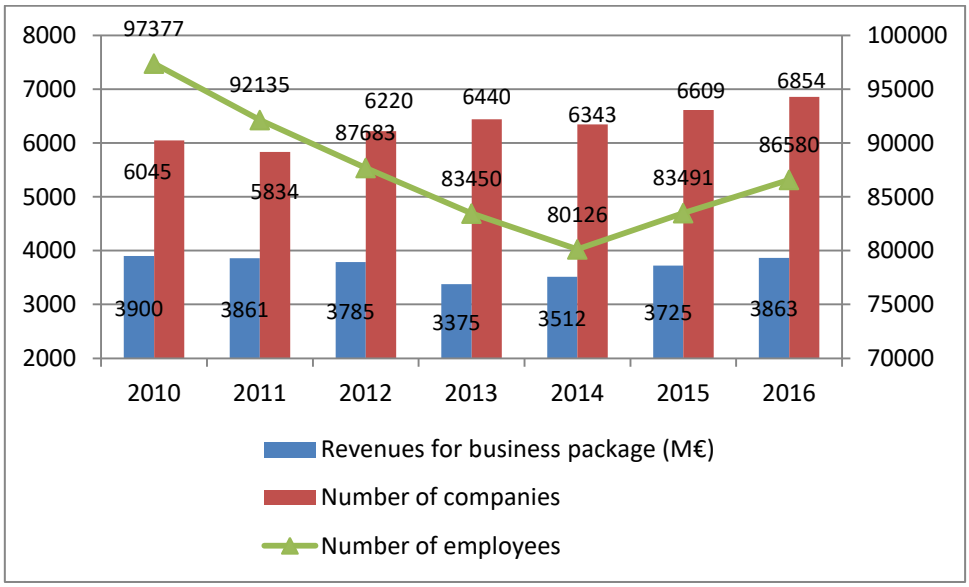

Fig. 4.13: Evolution of revenues, number of companies and number of employees in the messaging sector [10]

In addition, the industrial parcel segment reached 2,425 million, an increase of 2.1% compared to the previous year.

Furthermore, the turnover linked to the international transport services was boosted by the growth of the goods' trade with the outside world, together with the progressive internationalization of the Spanish business sector, which generated revenues of 1.45 billion € in 2015, 7.4% more than the one of 2014. [10]

Moreover, the activity in the national area contributed a turnover of 4.7 billion, an accrual of 3.3%. The number of authorized companies registered in the CNAE 5320 of postal and postal activities was more than 6,609 in 2015, which was an increase over the previous year.

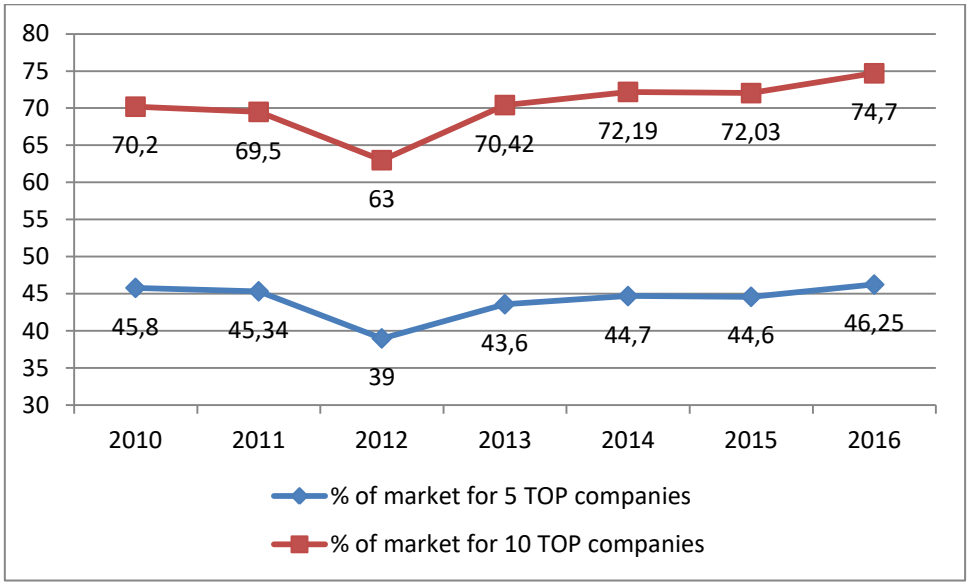

Fig. 4.14: Evolution of the % of market share for the 5 and 10 top companies in the messaging sector [10]

Additionally, and as can be seen in Figure 4.13, the number of employed workers had increased over the published figures for 2014, reaching over 83,000 employees.

As shown in figure 4.14, the top five operators accounted a market share of 44.6% of the business in 2015 while 72% of that share was for the top 10 companies in the Messaging and Pairing Sector.

To conclude, the forecasts for the year 2016 were increased around 3.7% of the turnover.

4.9 Fleet Management

Analyzed the 150 largest Spanish companies with a turnover of more than 100 million Euros and a fleet of at least 50 vehicles, it can be said that Renting gains weight in the fleet of vehicles of large companies. All these companies had a total fleet of 53,787 passenger cars and commercial vehicles and 92.8% of them were under Renting.

As shown in Figure 4.15, Renting, after several years of falling is growing again due to the improvement of the economic situation since 2014. The market value increased by 0.4% in 2014 and 8.7% in 2015, to reach 3,980 million Euros in 2015. According to D. Agustín García, President of the Spanish Association of Renting Vehicles, the performance of the activity of the renting sector was very positive during the year 2015. During that year, both the fleet and the turnover experienced rises close to 10%, specifically 9.69% in the case of the fleet reaching 447,623 units, and 9.76% in terms of billing, equivalent to 3,979.56 million Euros.

Market shares reflect a high degree of concentration, having the top five operators more than 60% of the market in 2015, while the top ten accounted for 85%. [10]

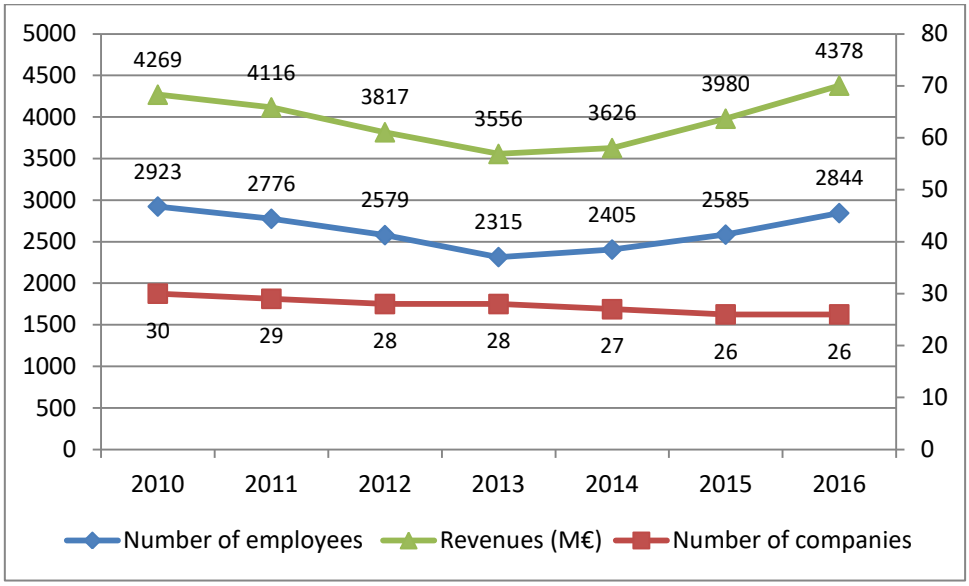

Fig. 4.15: Evolution of the revenues, number of companies and number of employees in the fleet management sector [10]

5 Results and analysis

Once analyzed each possible activity to be outsourced by the companies and observed its evolution over the last years, it is the time to study the questionnaires carried out to companies in the Spanish market.

First of all, it will be compared to similar studies carried out in 2014 and 2016 for different companies but under the same premises. After that, those studies will be compared with other studies related to other European countries.

5.1 Evolution of FM discipline in Spain

5.1.1 Basic data of the company

As mentioned before in this thesis, the questionnaires have been made for Top 500 Spanish companies ordered according to their revenues. All of them randomly selected.

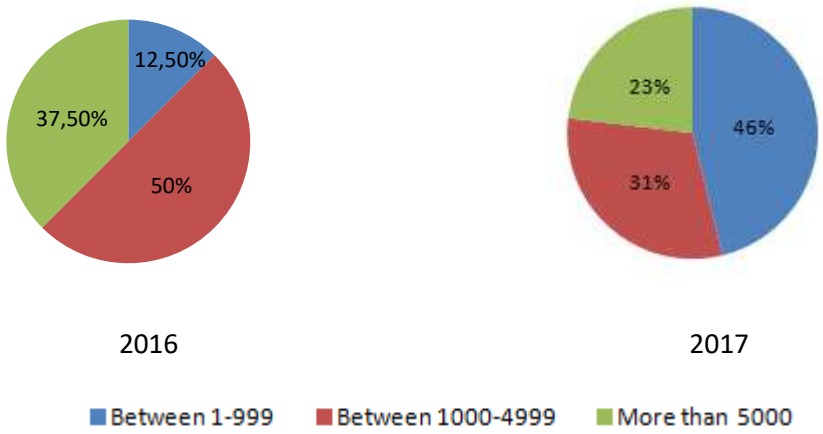

Fig. 5.1: Number of employees of the selected companies in 2016 and 2017

Being all Top 500 companies, their revenues are over than 300 million Euros. Therefore, as expected, its size is generally large and its number of employees high. As it can be seen in Figure 5.1, more than 50% of the companies have more than 1000 employees in 2016. In 2017, this number is lower than the previous year due to the randomness of the sample.

5.1.2 Organization

Earlier it has been mentioned that over the years, the FM departments have increasingly been implemented and the percentage of the companies with FM department has been intensified.

However, as previously stated, smaller companies have, in percentage, less developed facility management departments. Therefore, as seen in Figure 5.1, the companies studied in 2017 are smaller in terms of their employees. That is why, in the present study, as it is showed in Figure 5.2, the percentage of companies with a separate FM department is lower.

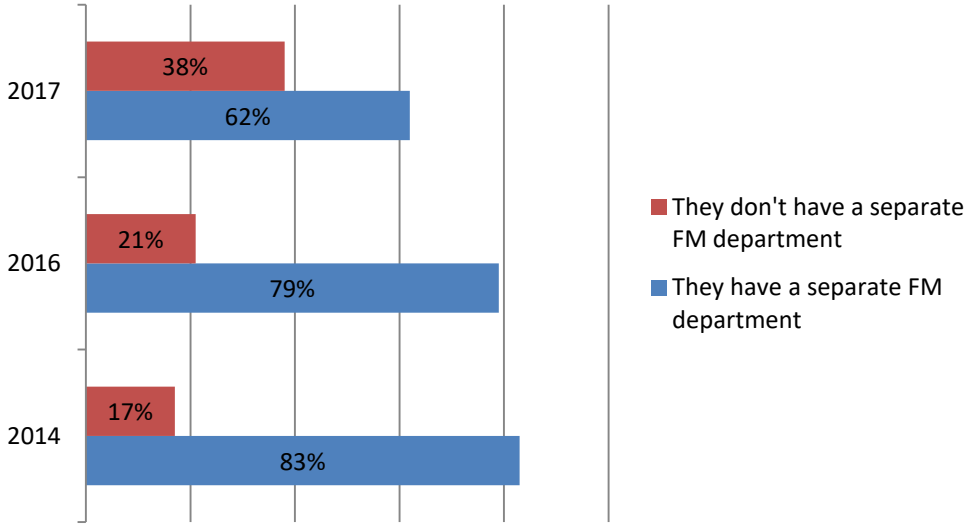

Fig. 5.2: Portion of companies with a separate FM department in 2014, 2016 and 2017

Moreover, as it can be seen in Figure 5.3, the number of companies that have implemented the FM department are constantly increasing. In 2017, it is higher than in 2016 and in 2016 it was higher than in 2014. So, there's a positive trend in the market.

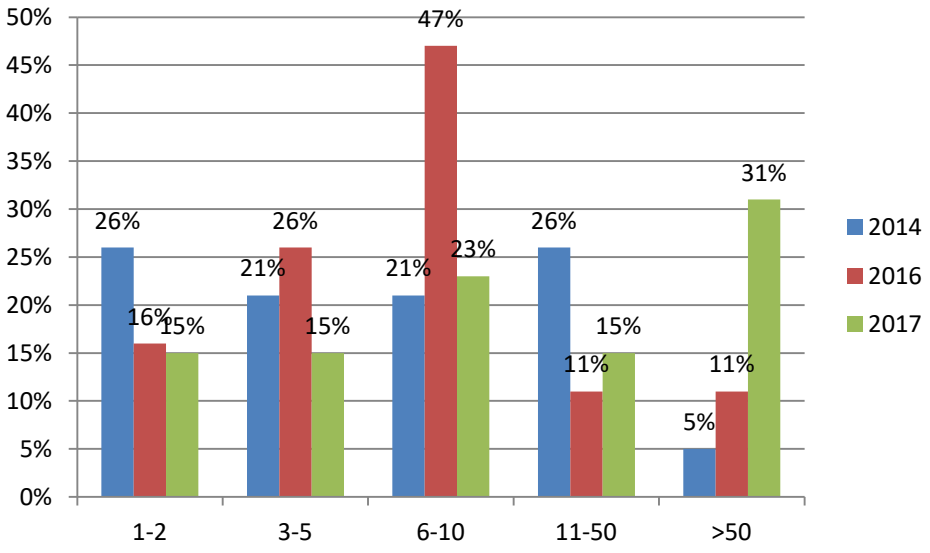

Fig. 5.3: Staff members in FM departments in 2014, 2016 and 2017

Another fact that shows the evolution of the department in the companies is its place in the hierarchy of the company. As shown in Figure 5.4, the companies studied in 2017 have the FM department in a higher position in the company hierarchy than in 2016 and 2014. That difference is probably related to the different type of companies included in the studied sample or maybe because this department becomes more important for the companies.

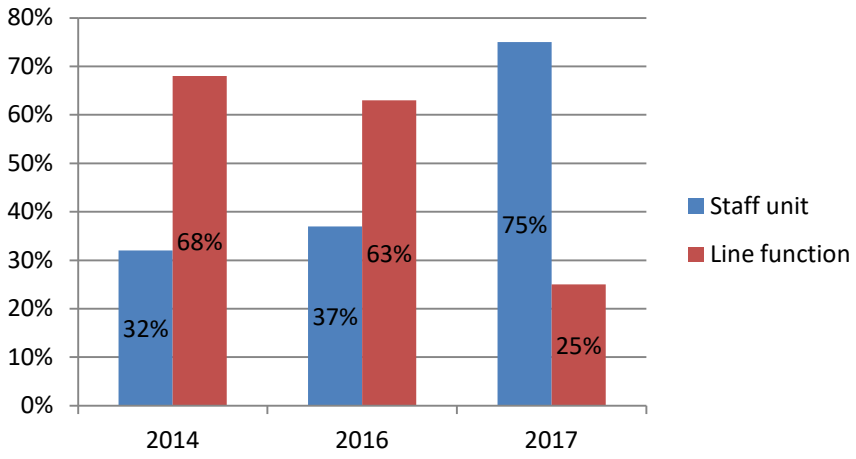

Fig. 5.4: Comparison of the hierarchic level of FM department between 2016 and 2017

Additionally, in relation to the frequency that the FM department is contacted from leaders, 69% indicate that it is done weekly, while 15% do it monthly. Only 7.7% does it every six months and another 7.7% does it irregularly or by agreement.

Another very positive fact that should be taken into consideration is the development of FM in companies. 92% of companies have a description of the tasks of the department in contrast to only 8% that do not have it. This value is similar and even a little bit higher to the one obtained in 2016, which was 90%.

The objectives of a company indicate the path they want to follow and their intentions. Figure 5.5 shows the different goals or strategies the FM department of the different companies should achieve and the importance they give to these goals. Note that the most important objectives are to ensure quality and reduce costs while the least important is the preservation of the environment.

Furthermore, the formulation of this question has varied in this study. While in 2017, it has been asked to rate the strategies from 1 to 5 being 1 very important and 5 very little important, in 2016, it was only asked if they considered it a strategy or not.

All companies have scored all strategies. That is why this study has made a difference between whether the strategy is important or not. It has been decided that the company considers the strategy important if they have rated it 1 or 2. Therefore the results do not have to be similar. Figure 5.5 shows the strategies considered important by the FM departments of the studied companies.

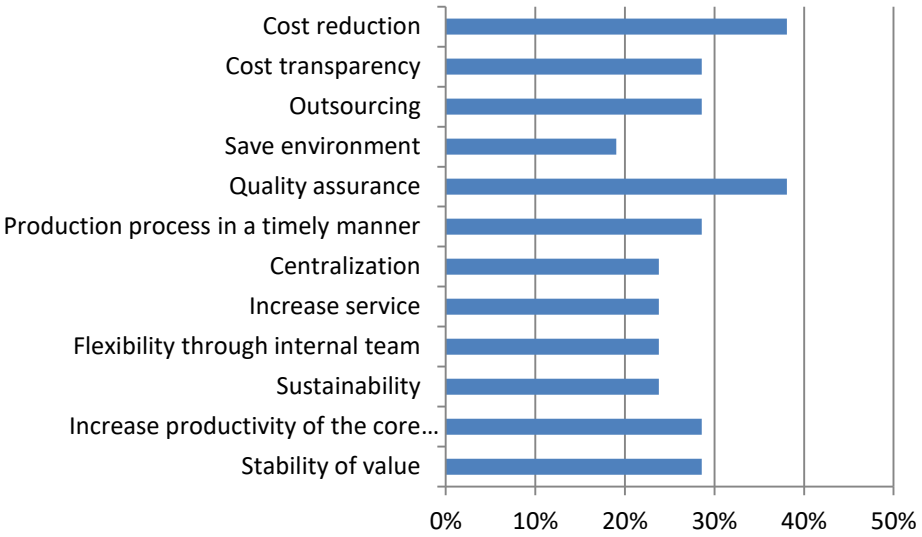

Fig. 5.5: Main important goals by percentage that FM departments have

Another question that has been added to the current study that was not completed in 2016 is the number of locations that are supervised by the FM department. Figure 5.6 shows the results. Note that 85% of FM departments only monitor up to 10 places.

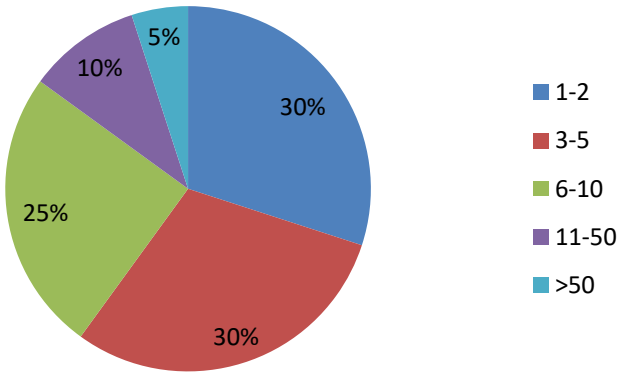

Fig. 5.6: Number of locations supervised by the FM department

As it has been told before, the reduction of costs is one of the most important objectives of the FM department (Figure 5.5). Then, it is necessary to evaluate what the cost drivers that most influence in the real estate are and therefore in the FM. Figure 5.7 shows the most influential cost drivers for the companies. Highlighting the 4 most important ones are Cleaning, Maintenance, Personal and Energy.

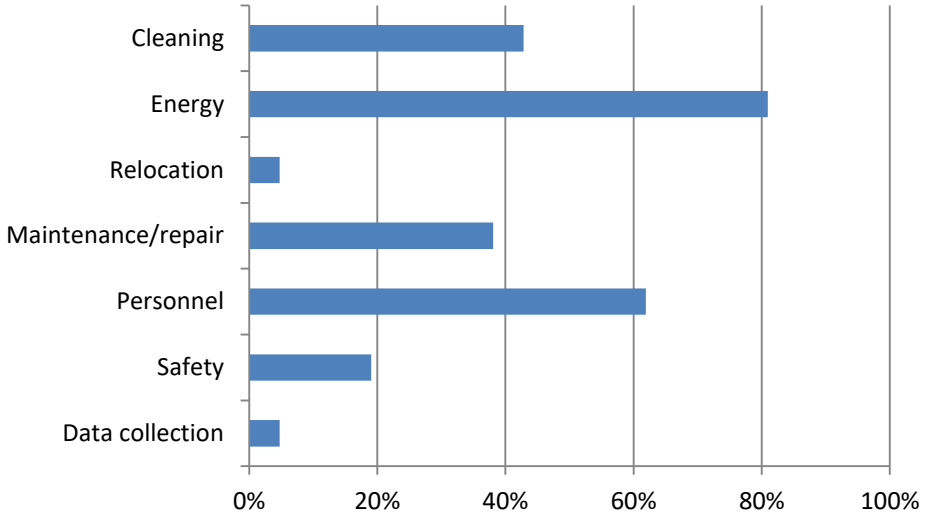

Fig. 5.7: Main cost drivers that FM departments have

Since another important goal is also cost transparency (Figure 5.5), it has also been necessary to analyse data once the FM department is implemented in order to examine where the benefits are obtained and where the productivity is improved.

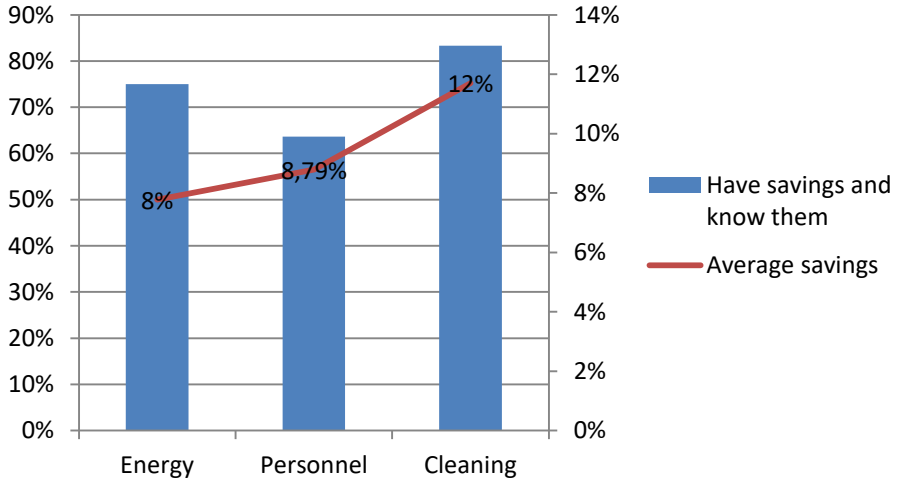

Fig. 5.8: % of companies that have savings and know them and average of savings in those companies

As can be seen in Figure 5.8, cleaning is the area where more savings are known both in the number of companies and in the average savings. It is followed by Energy in the number of companies with known savings. However, Personnel comes behind Cleaning and before Energy in terms of average savings. This data remains in line with the one obtained in 2016 since both data have a similar trend.

Another aspect studied is the reason for these savings. In this case, the answers, in 2017, have been obtained differently than in 2016 because it has been rated from 1 to 5 each of the reasons, being 1 very important and 5 very little. It has been decided the following criteria: reasons rated 1 or 2 are the most relevant ones. Therefore, the results obtained in 2017 may differ from those from 2016.

In this case the most important reasons for savings in Energy are the synergy between services and new contracts, while in the Personnel area, it has been the reorganization and also the new contracts. On the other hand, the main factors in Cleaning are the outsourcing followed by the reorganization. Note that nobody or almost nobody has believed purchase or technical improvements as a major reason.

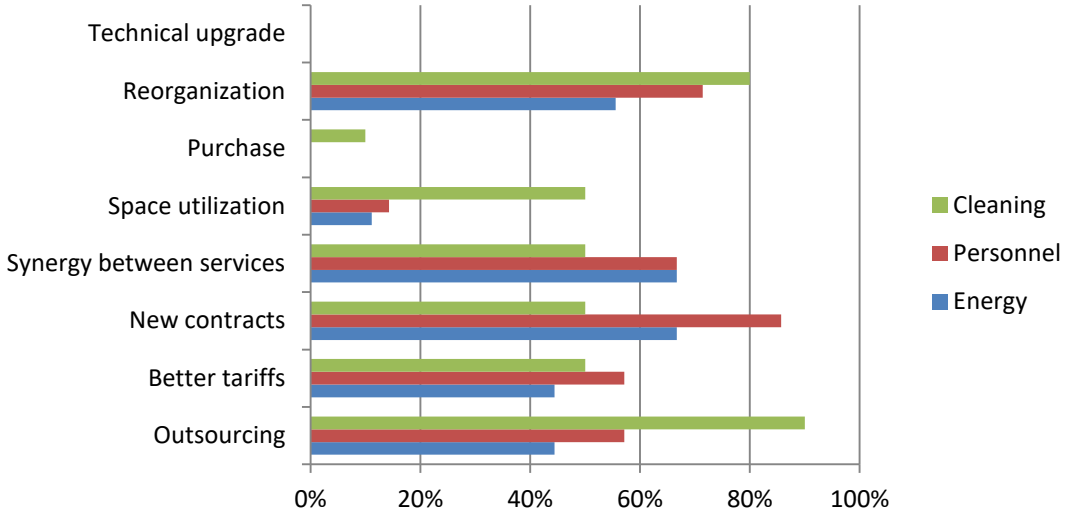

Fig. 5.9: Reasons why savings are achieved

In the case of productivity, there is a low percentage of companies that have observed or measured an increase in productivity due to the implementation of FM. Both in the number of companies and in the % of improvement, maintenance is the area with the highest productivity increases.

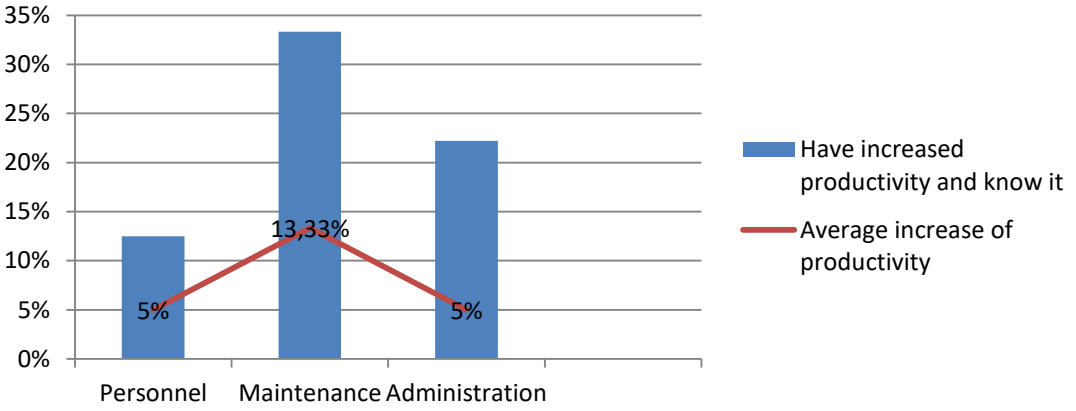

Fig. 5.10: % of companies that have improved their productivity and know it and the average of improvement in those companies

Figure 5.11 shows the different reasons why the companies believe that productivity has increased. Once again, the formulation of the question is different from the one in 2016 that's why the results obtained in 2017 may vary from the previous year. In the case of energy, the synergy between services and the reorganization stand out. In the case of maintenance, the work utilization followed by the optimization of the process and the synergy between services are the main reasons for companies to implement a FM department. Finally, related to administration, work utilization and reorganization become major reasons. Purchase is again the least important reason.

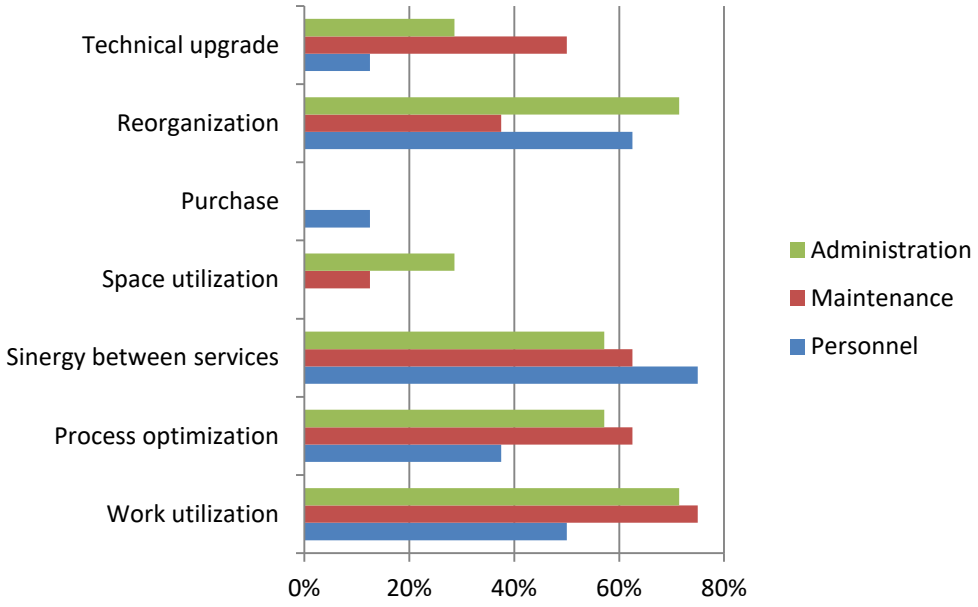

Fig. 5.11: Reasons why productivity have increased

To sum up, it was necessary to know the state of the offices, if they are rented or in property. As can be seen in Figure 5.12, 68% are in property while 32% are rented.

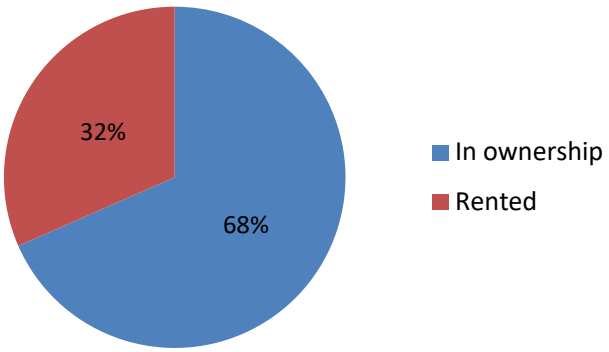

Fig. 5.12: State of offices (predominant part)

5.1.3 Outsourcing

As mentioned above in Figure 5.5, outsourcing is a relevant goal for a Facility Manager. Therefore, a part of the study is based on analyzing the variety of companies and tasks that are outsourced, the average duration of contracts either in infrastructure or in technical services and the main reasons for choosing a supplier or another.

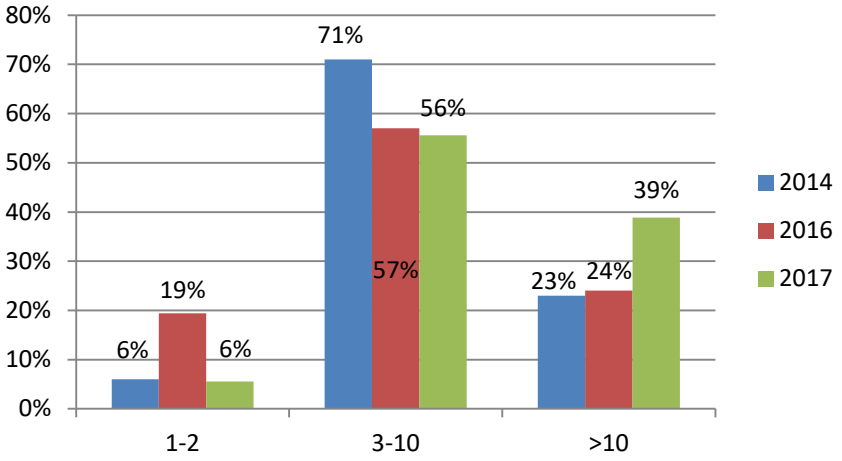

Fig. 5.13: Evolution of the number of external service providers

As it can be seen in Figure 5.13, the percentage obtained in 2017 is similar to the one in 2014 and in 2016. Actually, there's a rise in the number of companies outsourcing more than 10 suppliers and a drop in the number of companies outsourcing 1 or 2 suppliers. This can probably be explained because the market offer is increasing year by year. However, Figure 5.14 shows that the percentage of outsourced activities is slightly lower in 2017 for the companies that outsource a high percentage of services even if the most of the companies outsource more than 50% of the services.

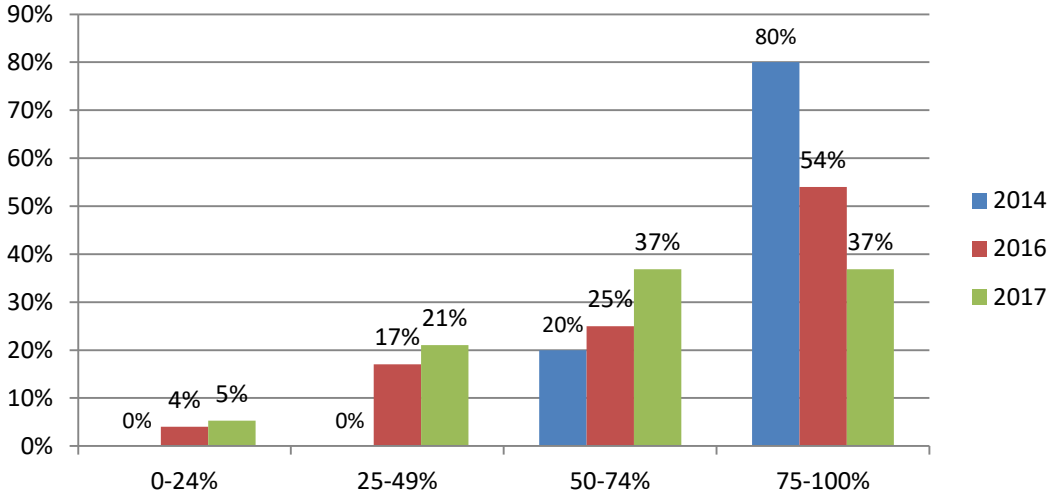

Fig. 5.14: Distribution of tasks executed by themselves (0%) or by external service providers (100%)

Regarding the activities that are outsourced, Figure 5.15 shows which the most outsourced activities are. Highlighting that cleaning is the most outsourced activity with a 100%. Other services with a high percentage are maintenance (90%) and security (95%). In the other hand, the less contracted activities are winter services (5%), commercial services (20%) and planning (20%). This is due because companies prefer to keep taking care of core activities or even some activities that don't involve much risk or money for them whereas they prefer to outsource non-core but frequent activities.

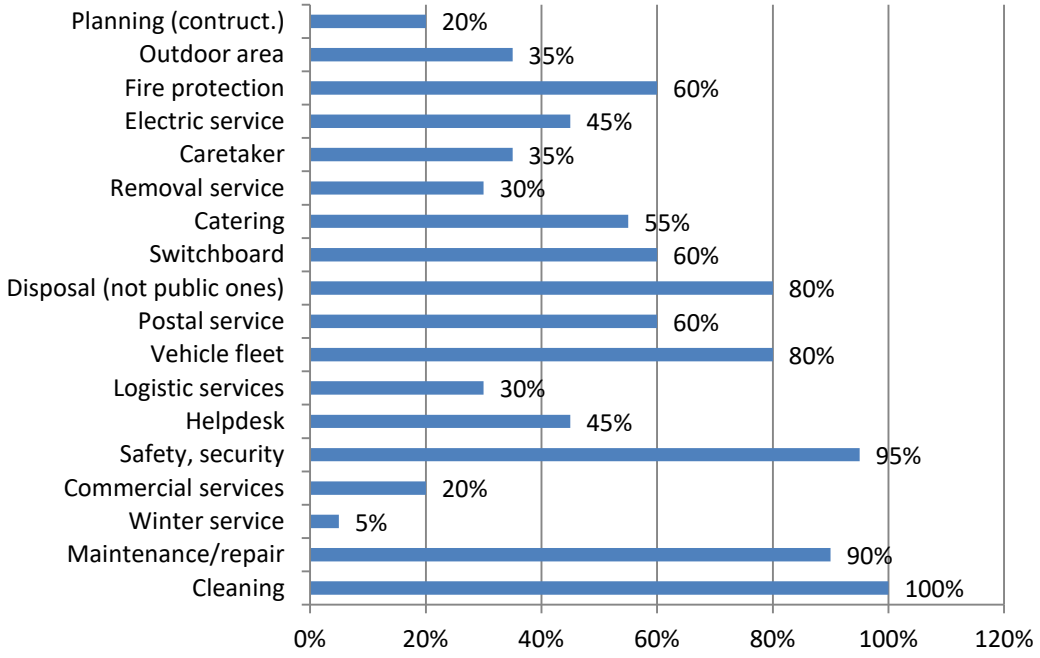

Fig. 5.15: Most outsourced facility services in Spain in 2016 and 2017

In terms of types and duration of contracts in infrastructures, Figures 5.16 and 5.17 show that the service contract prevails with 77% over the others and that any company contracts for more than 4 years.

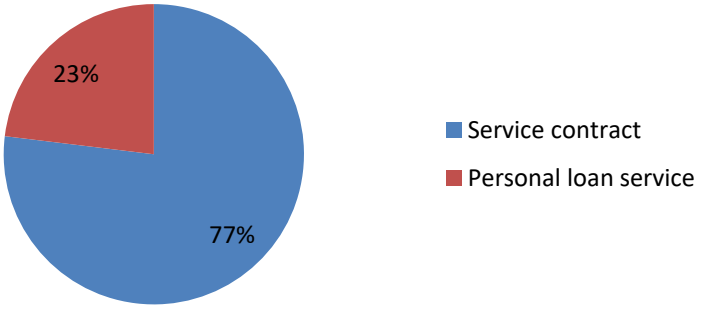

Fig. 5.16: Contract type in infrastructural services

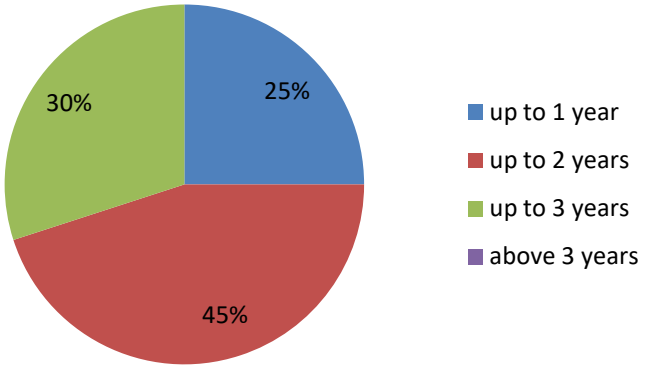

Fig. 5.17: Average duration on contracts in infrastructural services

On the other hand, Figures 5.18 and 5.19 show that technical services contracts are similar to the infrastructure ones, slightly expanding service contracts and their duration.

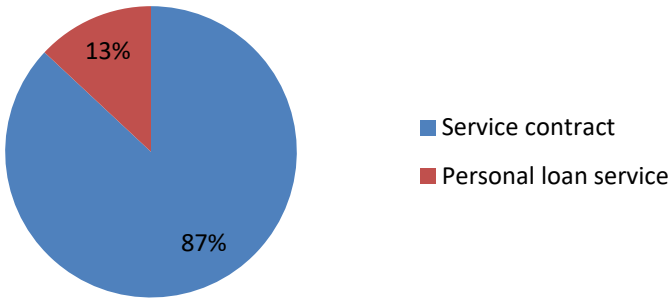

Fig. 5.18: Contract type in technical services

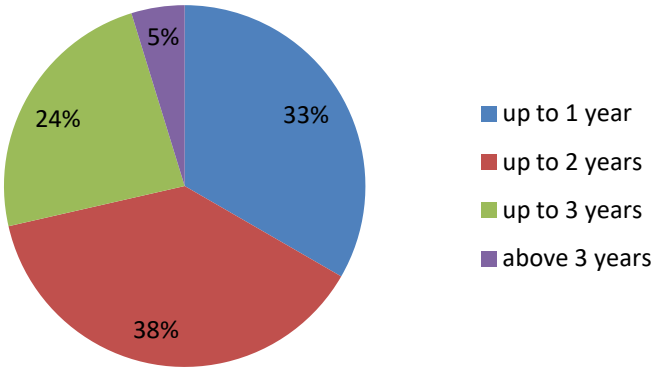

Fig. 5.19: Average duration of contracts in technical services

Finally, Figure 5.20 shows the main reasons why a company choose one supplier or another. The most important ones are the price-quality ratio (81%), competition or know-how (67%) and quality alone (67%). This reasons are similar than the ones in 2016.

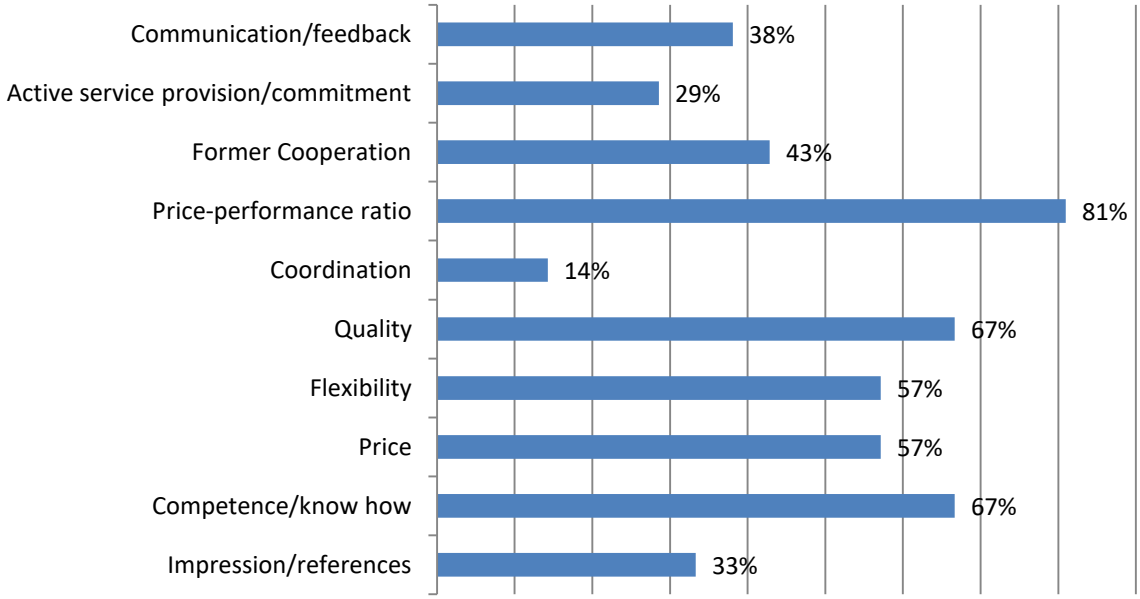

Fig. 5.20: Main reasons when choosing an external service provider

5.1.4 IT Support

To conclude the study, the two IT systems which are used to support FM and Real Estate processes are CAFM-systems and ERP-systems. CAFM (Computer Aided Facility Management) is a high-tech tool used by facility professionals to track and manage virtually any facility-related asset. ERP (Enterprise Resource Planning) is a business software system that enables companies to share common data and activities throughout the entire enterprise, automate and integrate the critical parts of its business processes and generate and access information in real-time environment. [11]

After analyzing the questionnaires, it has been perceived that companies think that CAFM systems are unaware of its application since most of them have answered that they do not know if they are available or what they do. A small part of the firms has added that they use another system, in this case, they refer to SAP. These leads to think that they are unaware what a CAFM program is and what advantages it gives to the company when using it.

On the other hand, related to ERP systems, there have been more affirmative answers. Figure 5.21 present the different programs used, which are summarized in several SAP variables and DATISA and Oracle in a smaller proportion.

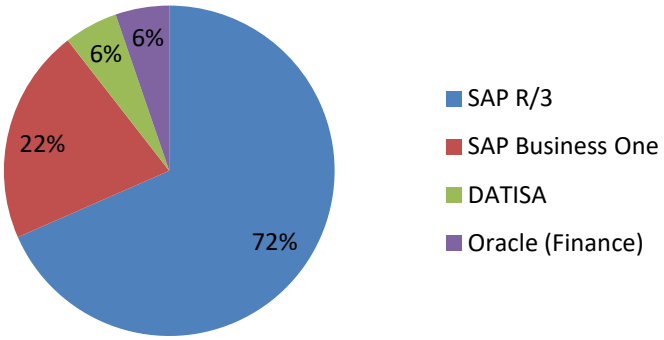

Fig. 5.21: Type of ERP system used by companies

Finally, we have analysed the processes that are controlled by an ERP. Figure 5.22 shows the different processes and the percentage of companies that control these processes with an ERP.

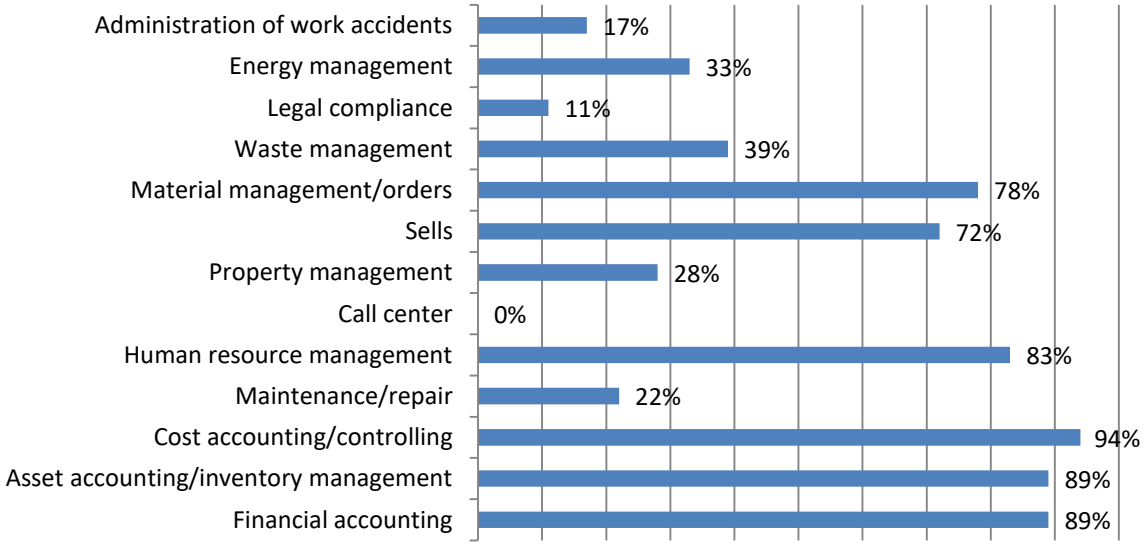

Fig. 5.22: Business processes covered with an ERP system

5.2 FM Spanish market compared to other European countries

Once analysed both the state and the evolution of the FM departments of Spanish companies, the group of Spanish companies was compared to other European countries. This requires that similar studies should have been carried out in these countries. Among the different studies and countries, the chosen ones have been the most recent ones from Switzerland (2016), Austria (2016), Germany (2016) and Romania (2014). Additionally, the analysis of the previous years of the studied country, Spain, has been added.

The study will be divided into the four parts mentioned in 5.1 that are as follows: compare the basic data to locate companies, their organization, their outsourcing policy and their information of technology related to FM.

5.2.1 Organization

When comparing the organization of companies from different countries, the percentage of companies with a FM department has been compared. In this case, Figure 5.23 shows how Spain is, with Romania, the country with the lowest percentage. In 2017, the percentage represents 62%; lower than in 2014 and in 2016. Germany stands out as the country with the highest percentage of companies with a FM department with 96%.

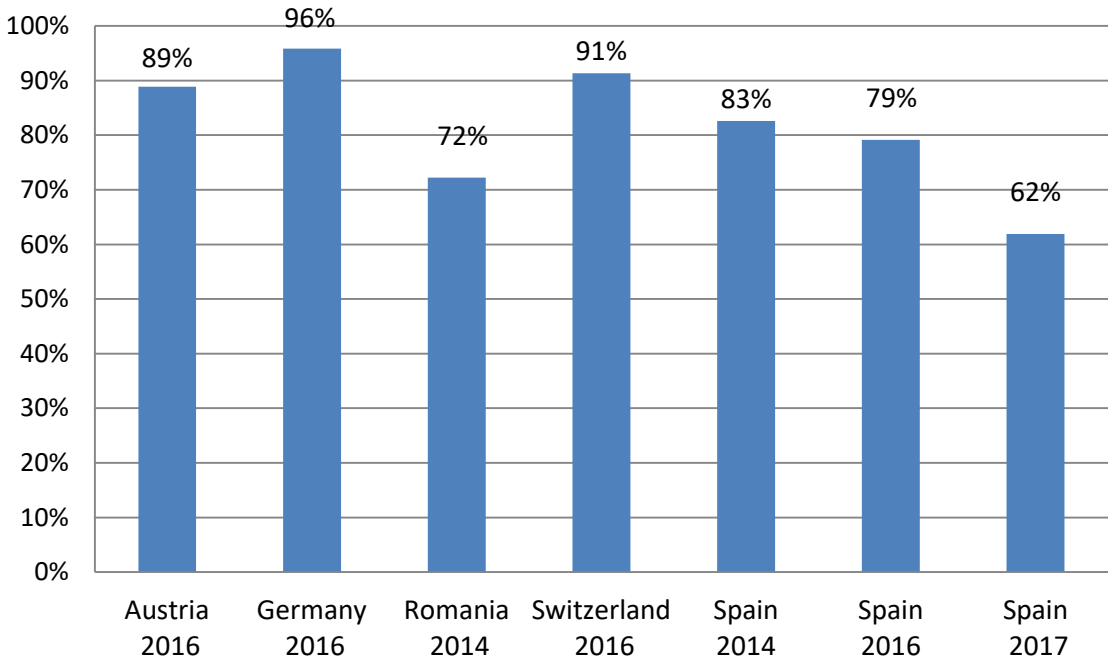

Fig. 5.23: Portion of companies with a separate FM department [12]

Furthermore, the number of employees that have all the FM departments has been analyzed. Figure 5.24 shows by ranks the number of companies related to the number of workers in the FM department for each country studied. Highlight that, in Spain, 23% of the companies have more than 100 workers in their FM departments. This is something that hasn't been taken into consideration in previous studies and that is why this information doesn't appear in some of the other countries and previous years studied. On the other hand, Romania has 49% of the FM departments with 1 or 2 workers, which makes the importance of their FM departments lower than in other companies.

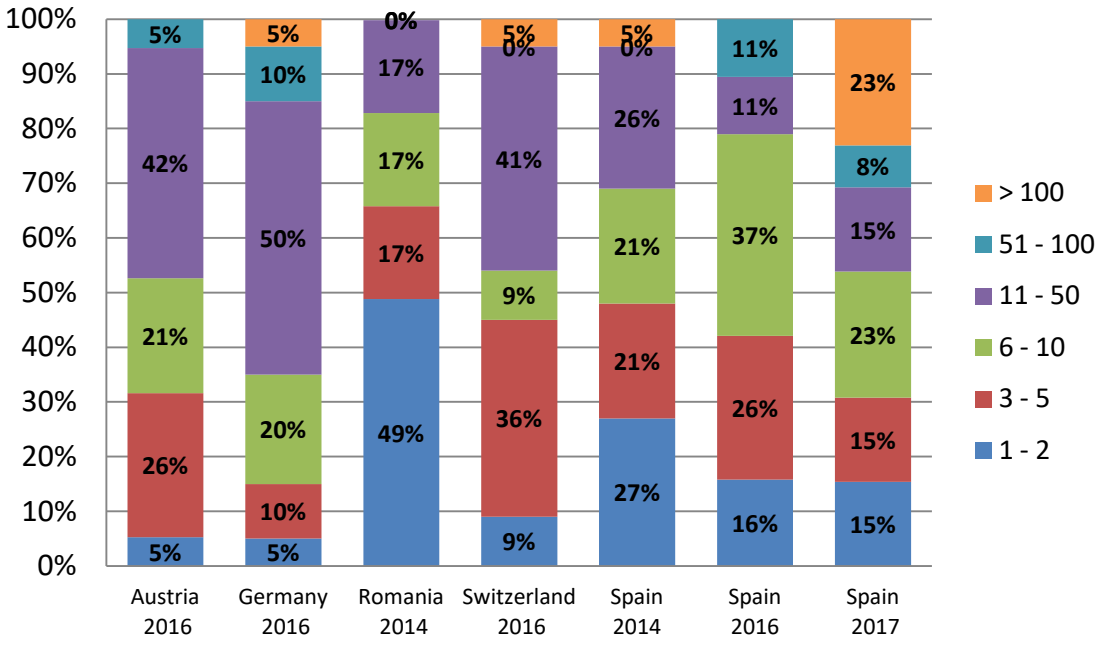

Fig. 5.24: Comparison of staff members in FM departments [12]

Another issue to bear in mind is the difference of Spain from the rest of the countries related to the hierarchical place occupied by FM departments in the companies. As can be seen in Figure 5.25, Spain places the FM department in the staff unit in 75% of the companies and the rest in the line function. However, the rest of the countries mainly place the departments in the line function or below. This is similar than in the previous years.

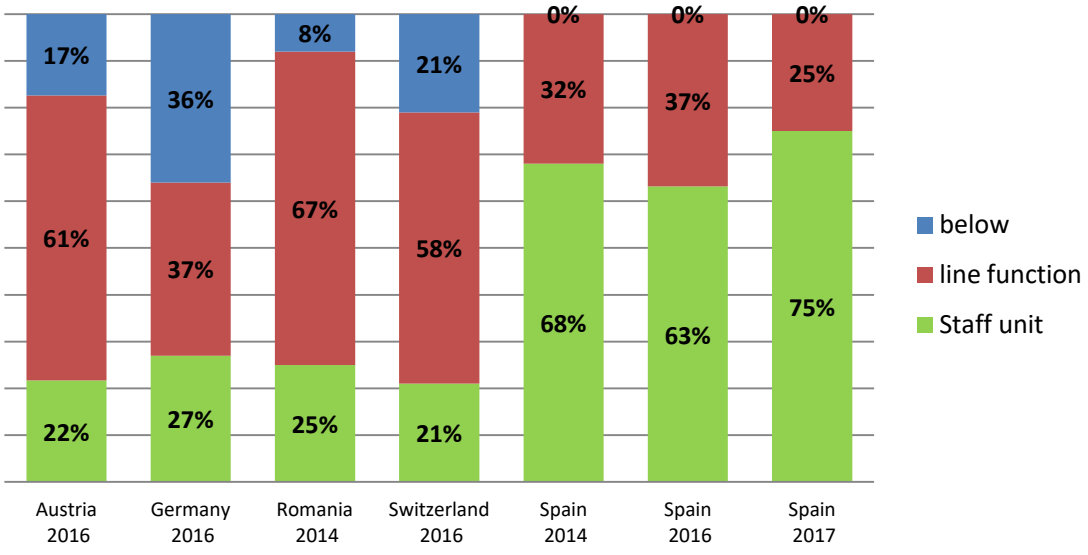

Fig. 5.25: Comparison of the hierarchic level of FM department [12]

One of the most important aspects of this thesis has been to analyze the different objectives / strategies of FM departments. Figure 5.26 shows the number of companies that give importance to the proposed set of objectives.

In the Figure 5.26, it seems that Spain has given more importance to outsourcing, centralization and productivity increase than in other countries. However, as already mentioned in section 5.1.2, the study of the objectives of the FM departments has been carried out differently from other countries. The questionnaire wanted to underline the importance of each objective from 1 to 5. Then, companies have punctuated almost all the objectives, making it appear as a more important point than in other countries where the most relevant objectives where just marked with an X. In Figure 5.5, where the objectives have been analyzed in Spain, it is shown that the most significant objectives are Quality assurance and Cost reduction, as in the rest of the countries.

Another detail is that, due to the lack of some data, in some countries, there are sections that have been analyzed in previous years.

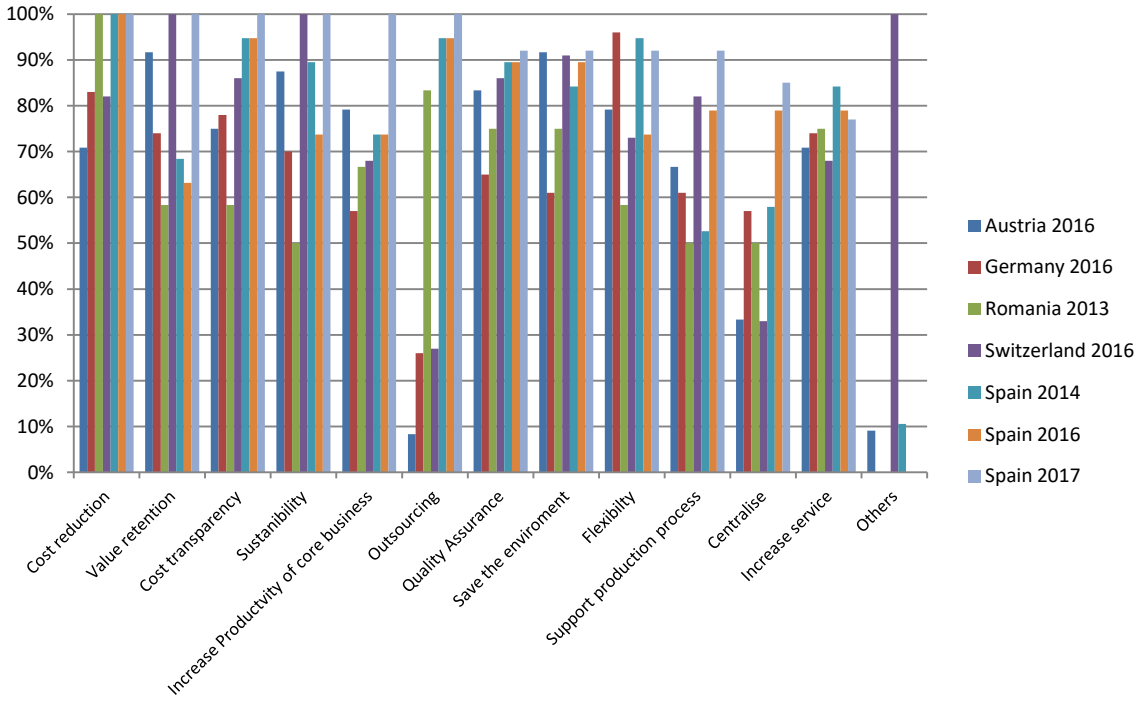

Fig. 5.26: Main goals of FM departments [12]

With respect to the cost factors of the FM departments, Figure 5.27 shows surprisingly how much more Spanish companies spend on personnel, cleaning and energy than other countries. On the other hand, they spend less on technology or digital planning. This is similar in 2017 than in the previous years the study was made.

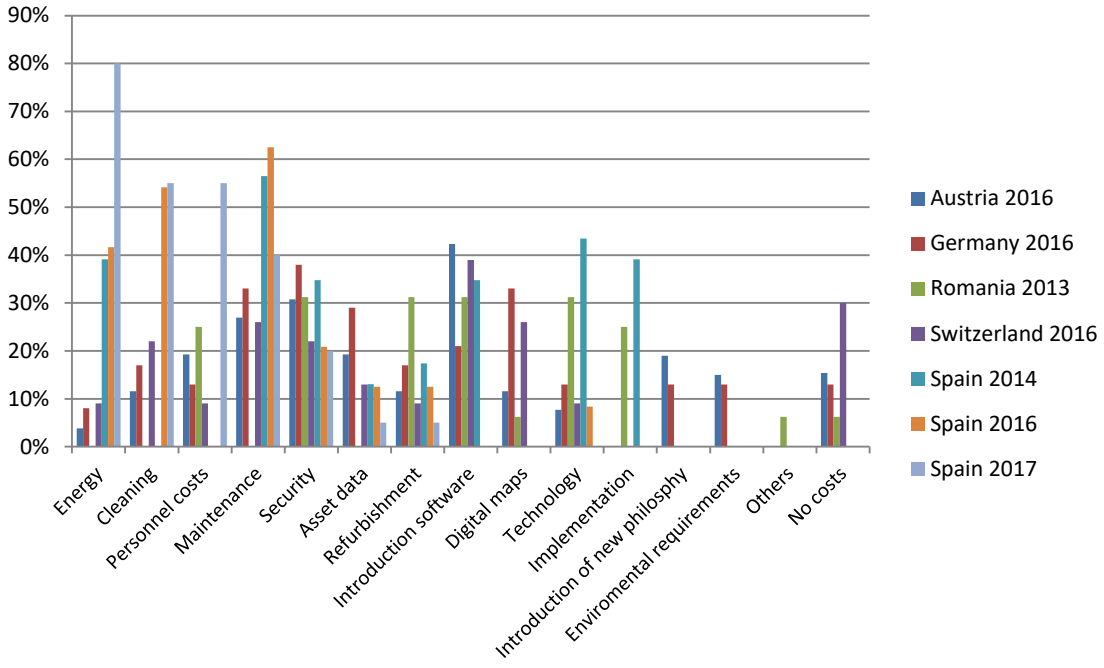

Fig. 5.27: Main cost drivers that FM departments have [12]

As for the consequences of the appearance of FM, it will be compared both savings and the increase of productivity, as in the previous sections.

In the case of benefits, Figure 5.28 shows similar values in Spain than in the other countries examined, but note as an outstanding fact the high cleaning savings in Austria and energy savings in Switzerland. Spain keeps the same percentages in the different years.

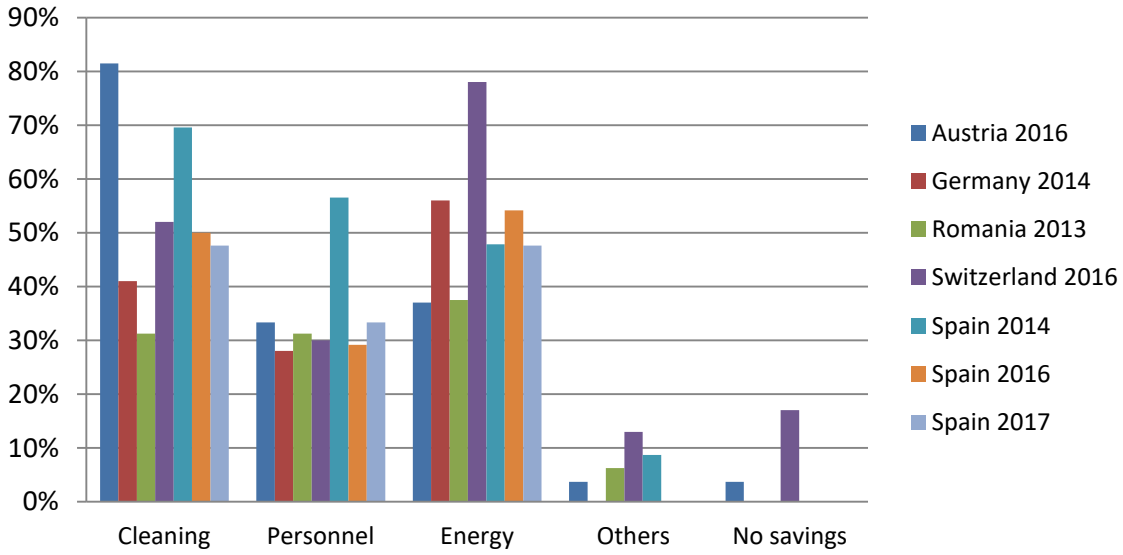

Fig. 5.28: Fields with biggest savings through the use of FM [12]

In the case of increased productivity, it has dropped in Spain during the last years. While nowadays it is around 15%, it was around 60% in 2014. Figure 5.29 shows all that information.

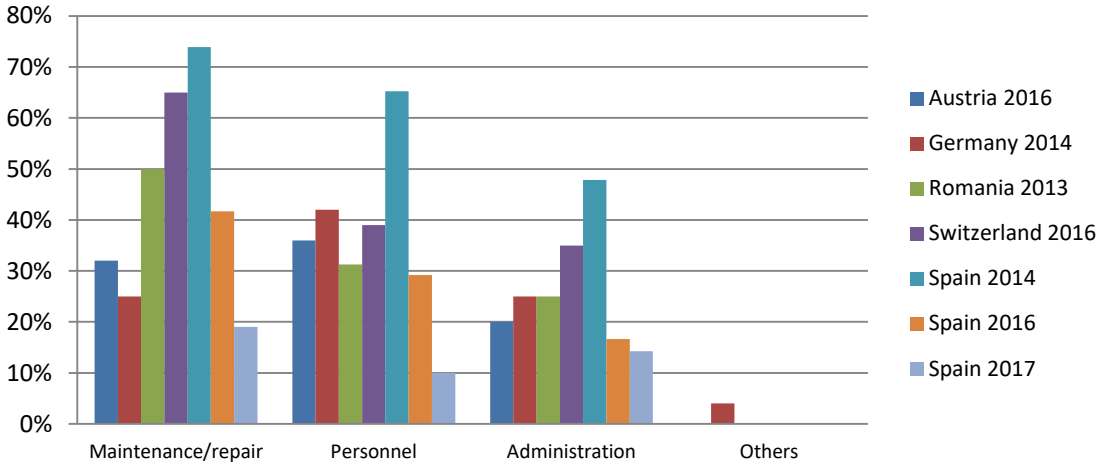

Fig. 5.29: Fields with biggest increases in productivity [12]

5.2.2 Outsourcing

As mentioned above, if you look at the objectives of FM departments, outsourcing is one of the most relevant ones. However, in the rest of Europe, as shown in Figure 5.26, it doesn't represent such a high priority objective, with the exception of Romania. In this section, the outsourcing strategy for the rest of the surveyed countries will be identified.

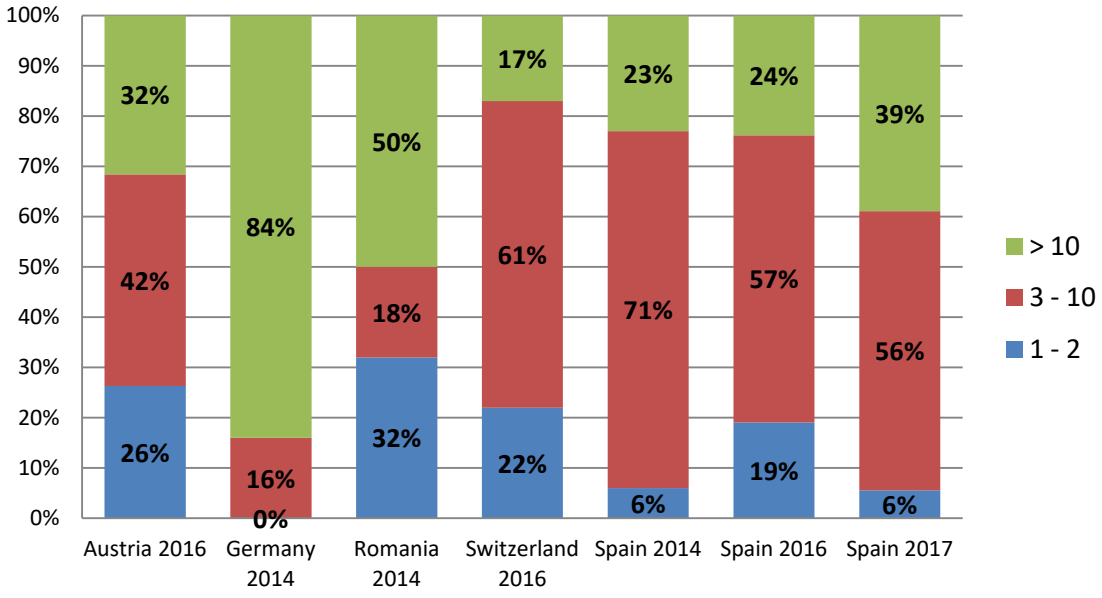

Fig. 5.30: Number of external service providers [12]

Nevertheless, Figure 5.30 shows that Germany is the one that hire the most of outsourced suppliers at the same time followed by Spain and Romania. Furthermore, Spanish has incremented the number of providers since 2014. This growth is related to the increase of the number of supplies in the market. In Figure 5.31, the most services outsourced by each of the countries can be identified. Moreover, it is possible to observe how Spain stands out by outsourcing car fleet, postal service and telephone exchange among the other countries, with the exception of Rumania with which they share a lot of the outsourcing policy. Highlight the

low outsourcing of winter services, which is not strange due to the difference in climate between Spain and the rest of the countries. Another point to take into consideration is that Romania does not outsource waste disposal. Note that in this case, there is no information available from Switzerland.

Furthermore, the most outsourced services in Spain in 2017 are similar so those from 2014. Among the few variations in recent years, the increase in security is highlighted in 2017.

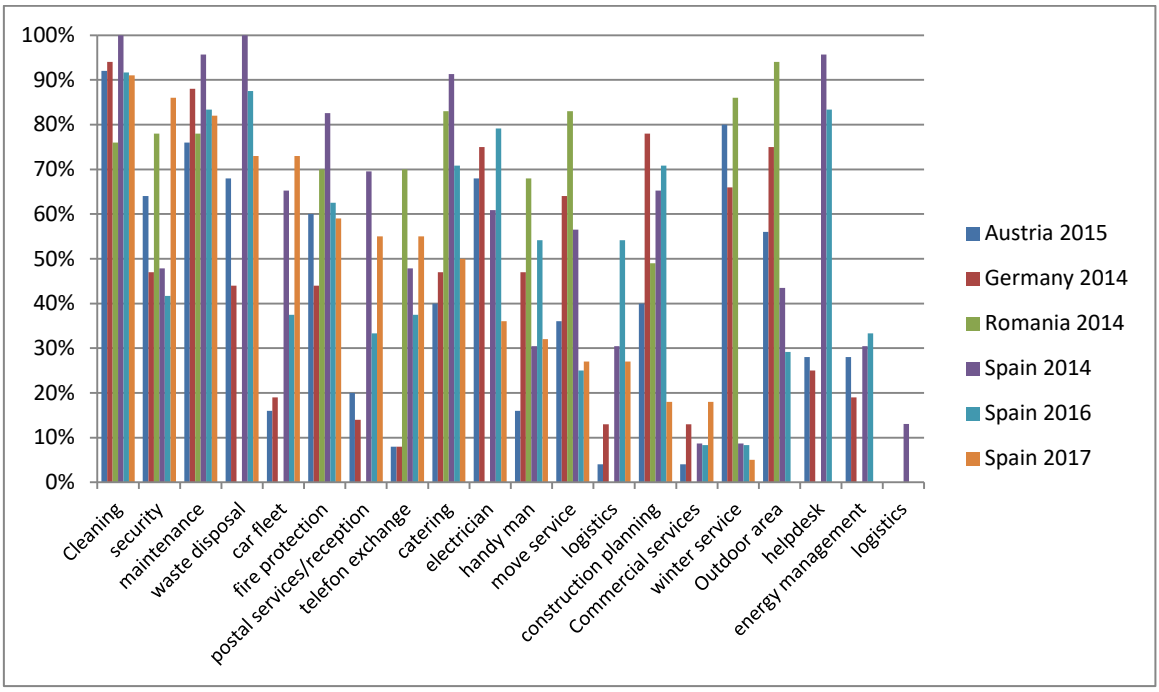

Fig. 5.31: Most outsourced facility services [12]

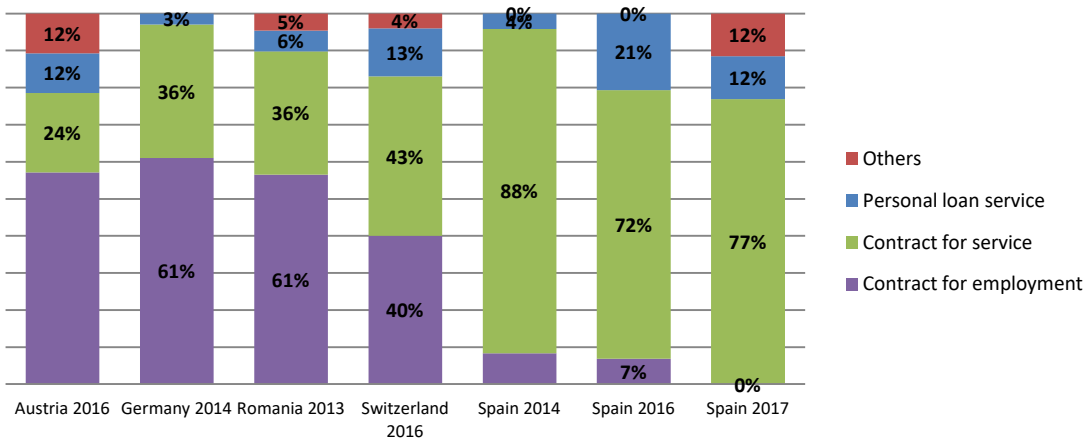

Fig. 5.32: Comparison of contract type for infrastructure between European countries [12]

Regarding the types of contracts that are established with the suppliers, Figures 5.32 and 5.33 show the types of contracts for both infrastructure and technical services. In both infrastructure and technical contracts in Spain, the percentage for employment has decreased while the one for service, which is the main type of contract so far, was maintained at a similar

level. In addition, note that in both cases, in 2017, Spain has no contract for employment and prioritizes the contracts for service.

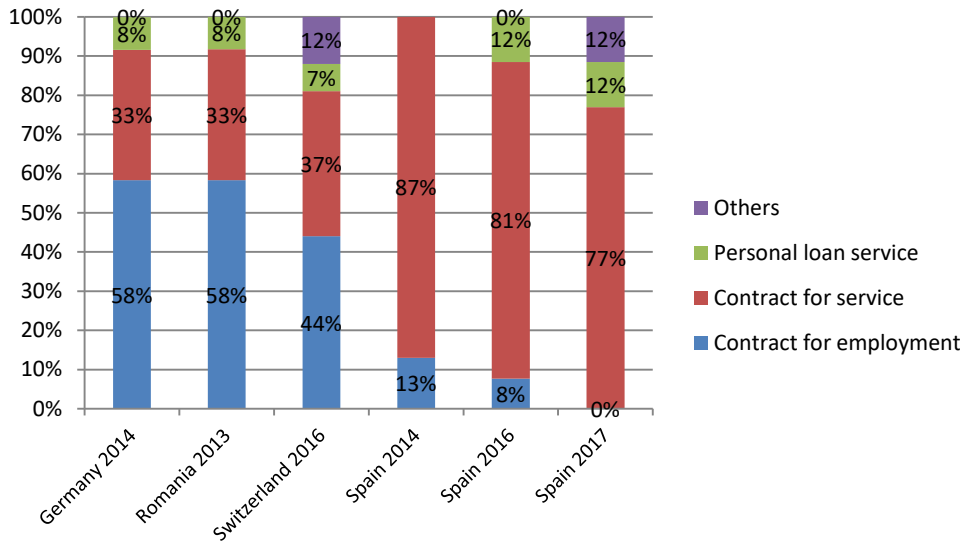

Fig. 5.33: Comparison of contract type for technical services between European countries [12]

5.2.3 IT Support

As in other points, information technologies associated to the FM of the countries of study are examined. In this case, CAFM and ERP systems will be compared. Regarding CAFM, Figure 5.34 shows the percentage of companies that use a CAFM system in the FM department. Spain, as in other situations, resembles Romania, with about 35% of companies that use it. However, it is necessary to point out, as stated in the section about the study of information technologies in Spanish companies, that there is no company that has marked any of the proposed programs. However, all those who say they use a CAFM system have marked others and said SAP. This indicates that there may be an ignorance of these systems and that none use any of the ones proposed.

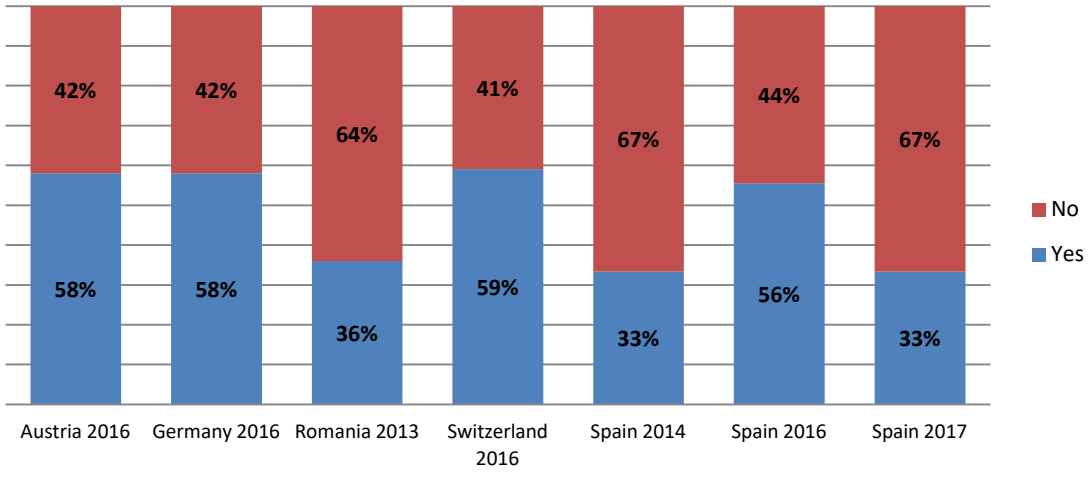

Fig. 5.34: Percentage of companies with CAFM system in different European countries [12]

Figure 5.35 shows which processes are controlled by the CAFM system in the different countries. It is relevant to highlight the wide variety of processes controlled by companies in each country. Spain has different processes each year, this is due to the wide variety mentioned above.

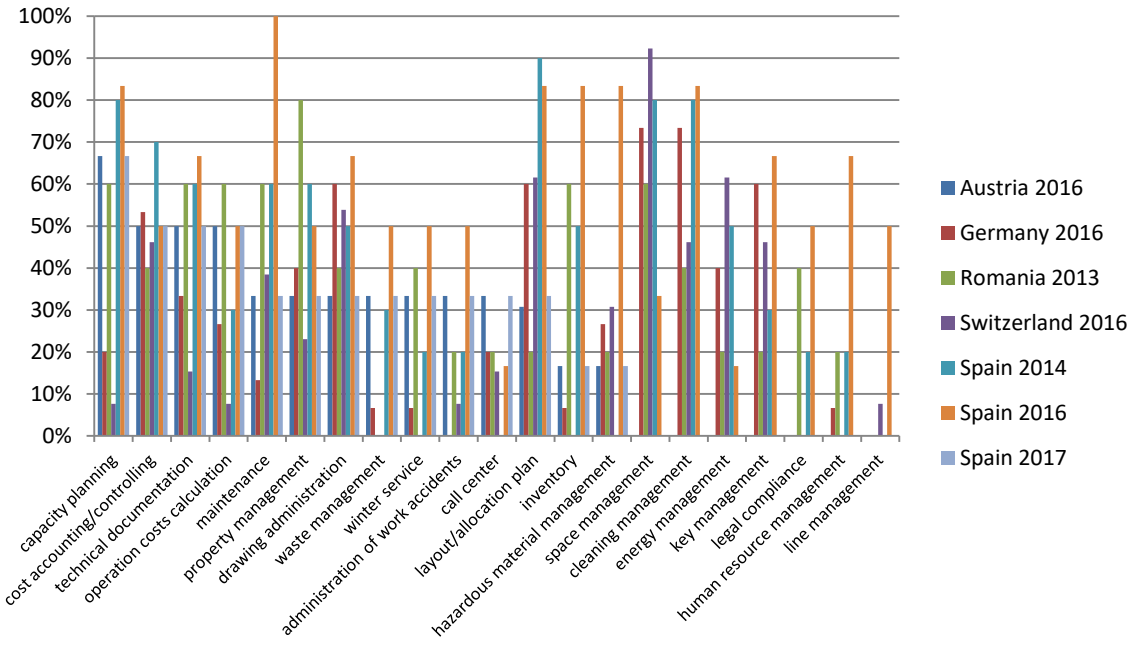

Fig. 5.35: Processes covered with CAFM system in the different countries [12]

As for ERP systems, it should be noted that the percentages are higher than for the CAFMs. Spain stands at 86%, only surpassed by Austria at 88%, all shown in Figure 5.36. This indicates that these systems are more established in the market than the CAFM systems even if the most widely used program in all countries is SAP. In addition, the Spanish percentages are quite similar in the different years analyzed.

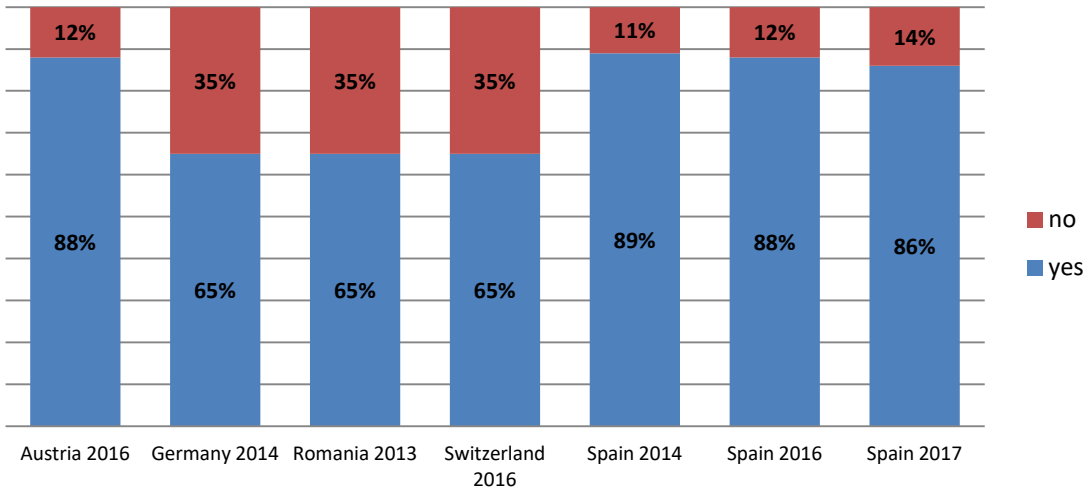

Fig. 5.36: Percentage of companies with ERP system in the different countries [12]

In the case of the processes controlled by the ERP systems in the FM departments, Figure 5.37 shows that there are much more similarities among the different countries, highlighting the call center of Romania that is well above the other countries. The processes covered in Spain are similar in the recent years.

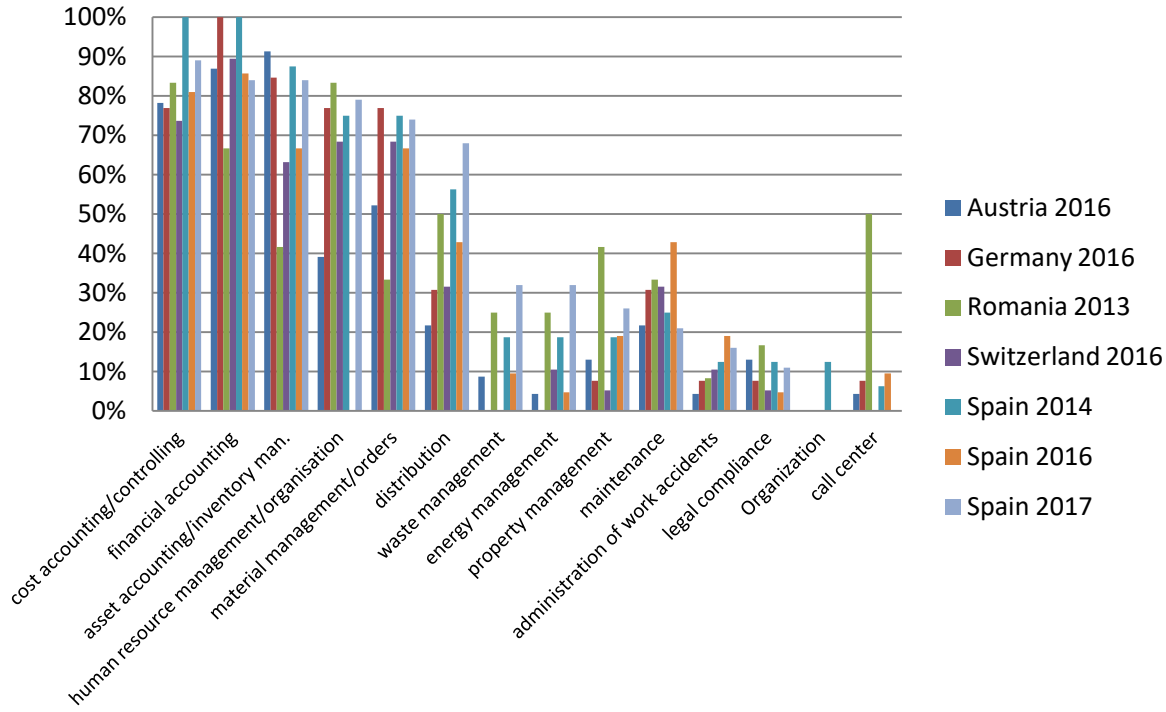

Fig. 5.37: Processes covered with ERP system in different European countries [12]

6 Conclusions and recommendations

Throughout the project it has been exposed, analyzed and compared the different areas that encompass the Facility Management of Spanish and European companies. In this last point, the results obtained will be presented and discussed to improve the FM sector in Spain. It will also be examined the fulfilment of the objectives proposed at the beginning of the project.

First of all, it is a key point to say that the Facility Management is a quite new sector, therefore booming. Both in Spain and in the rest of Europe, there are still things to improve in this area. Although the majority of large companies already use the FM, it is still necessary to introduce or make it more common in medium and especially small companies.

The first objective of this thesis was to determine how important the FM for Spanish companies was. Among the most important objectives for companies are to reduce costs and ensure quality. That's why during the project, the different areas in which the FM department has repercussions have been analysed. A significant point to bear in mind is that, savings of around 10% have been obtained in sectors such as cleaning, energy and personnel. In addition, the productivity of companies using the FM has risen by more than 5% in energy, maintenance and administration. This tells us how positive it is to create the department for those companies that still do not have it.

Assessing the reasons for these improvements, in the field of energy saving, the synergy between services and new contracts are the main reasons acquired. As for personnel, new contracts are considered a good way to improve followed by the reorganization. Finally, for cleaning, outsourcing and reorganization becomes the most relevant reason.

In order to increase productivity, we have also obtained reasons for each of the areas. The most important in terms of personnel are reorganization and synergy between services. For maintenance, they represent work utilization, followed by optimization of the process and synergy between services and for administration, reorganization and work utilization.

Another objective of the project was to know the position of the FM department in the hierarchy of a company and what role it took within it. It has been seen that Spain gives a more significant role to the FM department, staff unit, while the rest of countries mainly give a medium role in the line function to this area.

Furthermore, the objective of seeing what the most important cost factors for the FM department of Spanish companies are was a primary one. It has been found that, unlike the other countries, in Spain, cleaning, personnel and energy are the main cost factor. The rest of Europe is dominated by others such as security, introduction of new software or maintenance.

As the last objective, it was wondered how developed the Spanish FM sector was compared to the rest of Europe. It has been seen that in Spain it is not much implemented and only 62% of companies have FM department. In contrast, the percentage for the rest of countries is around 90%. However, it has been seen that those companies that have a FM department allocate more workers for it. More than 23% of companies have more than 100 workers in this department. As it has been explained previously, Spain gives more importance to the FM

department and places it above in the hierarchy of the company but it the FM department is not as much introduced as in other countries. Regarding the objectives established by the FM departments in the different countries, these are similar to the Spanish ones, emphasizing that outsourcing has more importance in Spain. Moreover, Spain has similar savings to other countries in implementing the FM in its companies but it still needs to improve in terms of productivity gains, since it is below the rest of the countries.

As for the outsourcing strategies, Spain is only surpassed by Germany, among the countries studied, when it comes to the number of contracted suppliers. Regarding what kind of services the companies decide to outsource, Spain is the country that most externalizes car fleeting. However, cleaning remains the most outsourced service in the majority countries.

Regarding the type of contracts they establish with the supplier, it is important to note that Spain is the only one that does not use the contract for employment and prioritises the contract for service.

To end the comparison with other countries, Spain needs to know better the system of CAFM since they only use SAP. In terms of ERP systems, Spain is at the same level as other European countries.

To end with the conclusions, it would be a key point to recommend to the Spanish government to help and promote the implementation of the FM in the companies and help small and medium ones to make the process possible. Furthermore, Spain needs to match the other European countries in several aspects, since if companies that do not use the FM properly, it will be difficult for them to compete in the near future.

Finally, it must be stressed that the ten most productive countries in the world are, curiously, the ten countries that invest more in Facility Management. [2]

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