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A STUDY OF THE EFQM MODEL: FINANCIAL RESULTS, SUSTAINABILITY & THE RELATION WITH ISO 9001

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ABSTRACT

Knowledge about what to expect when implementing the EFQM Model is a challenge for organizations. This paper has three objectives: to analyse whether organizations will gain financial benefits from implementing the EFQM Model; whether organizations will be sustainable within the social pillar when being recognised by EFQM and finally, whether there is a positive relation between ISO 9001 and the EFQM Model. A sample of 50 companies recognised by EFQM have been analysed by, inter alia, a linear regression. Research results that organizations in the sample do not gain a financial benefit by implementing the EFQM Model, but they implement sustainability. Lastly, research showed that there is a positive relation between ISO 9001 and the EFQM Model. The paper provides new insights concerning sustainability, the new EFQM Model and the associated financial results of organizations as well as the importance of the ISO 9001 standard in the EFQM Model implementation.

Keywords: EFQM Model; financial results; sustainability; employees; ISO 9001

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1. INTRODUCTION

With sustainability becoming more important in our society, many organizations are wanting to jump on the sustainability-train (Scheppe & Steinharter, 2019). One way of improving not only sustainability but the overall organization is with a total quality management model (TQM).

One of the most used TQM tool in Europe is the European Foundation for Quality Management (EFQM) Model (Kim, et al., 2010), which supports an organization to find out which main characteristics an organization has and how it can positively influence the organization by matching methods. EFQM additionally attaches great importance to self-evaluation of companies (Medne, et al., 2020, Dahlgaard, et al., 2013, Mohammad, et al., 2011). Reasons to be part of the EFQM recognition are to foster motivation among the organization towards improvement and therefore improve the effectiveness and performance of an organization (Dahlgaard, et al., 2013, Mohammad, et al., 2011).

A great amount of literature has yet been researching about the intentions of the EFQM Model. One result was that organizations are implementing the EFQM Model solely, because of internal drivers. Furthermore, research states that the EFQM Model is not made to help with external drivers, as an organization would face more difficulties than values when using it wrong (Escrig-Tena, et al., 2019, Asif & Bruijn, 2009). The opposite opinion is supported by EFQM, which claims that the EFQM Model helps positively with the public image and therefore the popularity of the organization as it gets named on the recognition database (EFQM, 2017). Calvo-Mora et al. (2014) and Henricks & Singhal (1996) agrees with the statement of EFQM that being recognized by EFQM can positively affect the financial results of a company, as the stock price for an organization changes positively.

When looking at literature that got conducted in order to find out about sustainability, it can be stated that organizations, which are more dedicated to the EFQM Model, will also be more sustainable involved (Escrig & De Menezes, 2016, EFQM Fundamental Concepts, 2017). Other studies argue that the EFQM Model is not supporting sustainability in a great manner, as only 50% of its actions are not sustainable and therefore rather market oriented. Hence, sustainability is often forgotten by organizations (Aryanasl, et al., 2016) (Palentová & Šlaichová, 2017).

The relation between being certified by ISO 9001 and the EFQM recognition has been previously researched with the outcome that ISO 9001 and the EFQM Model are aiming for different results (Heras-Saizarbitoria, et al., 2011, Neri, et al., 2019, Escrig-Tena, et al., 2019, Asif & Bruijn, 2009). Moreover, Fonseca, (2015) as well as Hongyi, et al., (2004), concluded that there is a positive relation between the EFQM Model and the ISO 9001 standard.

Although there has been done considerable research, the connection of sustainability in the EFQM Model and financial results of an organization as well as whether ISO 9001 can support an organization on the way to being successful with the EFQM Model have not yet been

completely researched simultaneously and therefore, there is a knowledge-gap that needs to be filled. Furthermore, in 2019 a new EFQM Model got presented, to which there has not been identified any research yet.

Thus, this research aims to analyse firstly whether there is a positive relationship between the implementation of the EFQM Model (hence the subsequent sustainability) and the organization's financial results. Secondly, the study aims to find out whether sustainability, specifically the social pillar, is present after an organization has been recognized by EFQM and lastly, whether there is a positive relation between ISO 9001 and the EFQM Model.

The following research questions will be examined:

- 1) Sustainable practices are positively related to the financial benefit of organizations implementing the EFQM Model.
- 2) Sustainability within the social pillar, hence employees can be found in any organization that has implemented the EFQM Model.
- 3) There is a positive relation between certified with ISO 9001 and recognized by EFQM.

This paper will first carry out a literature review. Afterwards, there is critically researched in which extent the EFQM Model and therefore sustainability is supporting an organization's financial results by examining 50 European organizations from eight different business sectors. Moreover, how many of the 50 companies have a sustainability report or similar and in which way the organizations comply with sustainability in the social pillar is analysed as well. Afterwards, it is briefly analysed how many of the organizations have an ISO 9001 certificate. Lastly, the paper presents its results for its stated research questions and comes to conclusions.

2. LITERATURE REVIEW

This chapter acquires a selected range of topics, which are helping to reach the objectives of this research paper. In detail, the literature review analyses the EFQM Model – the Model of 2013 as well as the Model of 2019 and furthermore compares both models. It also analyses the ISO 9001 management system standard, as it can have a positive effect on the EFQM Model. Hence, the EFQM Model 2013 and the ISO 9001 Model are compared according to the existing literature. Lastly, there is a section dedicated to the Recognition of Excellence of EFQM, the degree of sustainability in the EFQM Model and its outcome in financial results.

2.1 The EFQM Model

The European Foundation of Quality Management is a not-for-profit organization, which got founded in 1989 and is since then operating in 30,000 organizations from all business areas (EFQM, 2020a). The EFQM model implicates worldwide used practices, which supports organizations to gain knowledge about the status quo of their organizations and how to develop and improve the organization. EFQM helps to identify the organization's gaps as well as options to increase the performance in order to reach the desired target (EFQM, 2020a). This is getting supported by Dahlgaard et al. (2013) and Mohammad et al. (2011), who indicate that business excellence models (BEM) like the EFQM model are evaluating as well as showing organizations a way to business excellence. Suárez et al. (2014) state further that this way of doing helps organizations finding out which options are most suitable in order to improve (Mohammad et al., 2011). Because of the special proceeding of BEMs, many organizations have implemented them as they help to continuously benchmark to find out what needs to be improved (Escrig & De Menezes, 2015). In order to keep the continuous improvement, the senior management has to be constantly committed to it. Targets according to the EFQM values have to be determined as well as there should be an appointed way to achieve the goals. Moreover, the ambition and ways of achieving the goal have to be communicated throughout the organization (Suárez, et al., 2014).

The EFQM model got remodelled in 2019 (EFQM, 2019b), which indicates that the research articles used in this academic paper are referring to the previous model, which is the EFQM Model of 2013 (EFQM, 2020b). This is why there will be the old and the new model presented in this literature review and furthermore compared.

2.2 The EFQM Model of 2013

The last version before the new EFQM Model in 2019 was released in 2013 (EFQM, 2020b). In total, the EFQM Model got revised four times since its launch in 1991 (EFQM, 2013). The Model of 2013 stressed to attain complete implementation of the “Fundamental Concepts of Excellence” (Figure 1 and Table 1) and “the framework of the Model” (Figure 2 and Table 2).

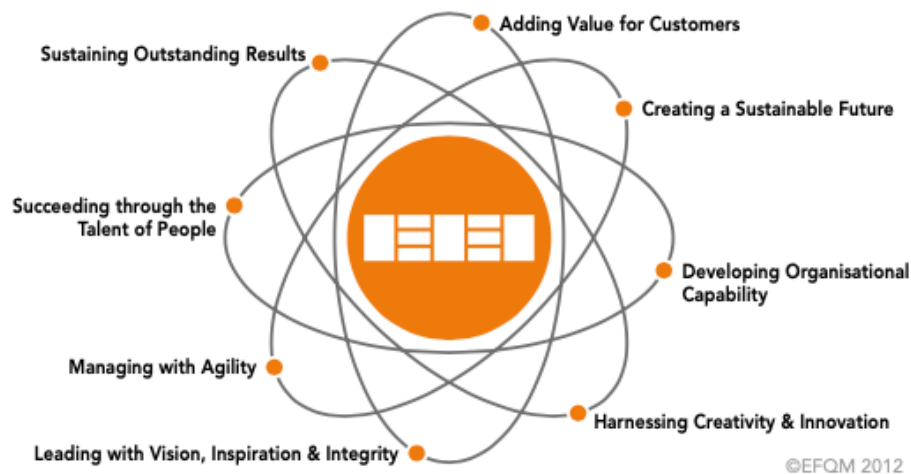


Figure 1 Fundamental Concepts of Excellence
Source: EFQM, (2013)

Table 1 Definition of fundamental concepts of excellence

FUNDAMENTAL CONCEPTS	DEFINITION
Adding value for costumers	Organizations understand, foresee and satisfy demands and possibilities in order to add value for customers. Organizations understand which target groups they serve and they aim for consistent innovation and value creation.
Creating a sustainable future	Organizations grow in their performance while being sustainable aware and have therefore a positive ecological footprint.
Developing organizational capability	Organizations raise capabilities by successfully managing change and by inter alia developing a high-performance value chain.
Harnessing creativity & innovation	Organizations create value by continuously implementing creative improvement and innovation.
Leading with vision, inspiration & integrity	Organizations take a position as role models for its values and ethics.
Managing with agility	Organizations are having a positive public image in place, which shows that the organizations can manage opportunities and threats efficiently.
Succeeding through the talent of people	Organizations support the talent in people on the way to organizational and personal goals.
Sustaining outstanding results	Organizations aim for results that meet short- and long-term needs of stakeholders.

Source: elaborated from EFQM, (2013)

The EFQM Model consists of two parts: enablers (five parts) and results (four parts), which both account to 50%. The Model itself consists of nine criteria (which can be seen in Figure 2) with 32 sub-criteria which can be found in Annex 1. The points given to each criterion is 100, equally divided between the sub-criteria. Furthermore, customer results and business results are the only two criteria that can achieve 150 points, with a total of 1000 points. While the enablers include the organizations tasks, the results, caused by enablers, include the performance. Only when the enablers are instilled in an organization, the organization will then accomplish the set results (EFQM, 2013).

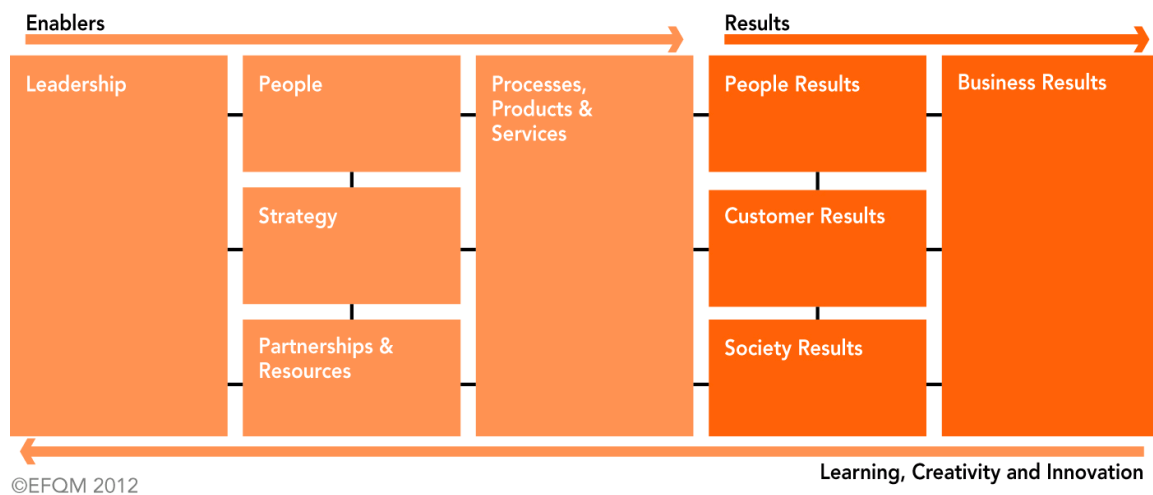


Figure 2 The Framework EFQM Model 2013
Source: elaborated from EFQM, (2013)

In order to be recognized by the EFQM Model, organizations must comply with the model and its criteria above. There are different levels of the model that an organization can apply for: (1) Committed to Excellence, (2) Committed to Excellence 2 stars, (3) Recognized for Excellence 3-5 stars, (4) Recognized for Sustainability and (5) the EFQM Global Excellence Award (EFQM, 2020c). The definitions of each Recognition can be seen in Table 7 in the section “EFQM Model Recognition”. Level (4) Recognized for Sustainability was only available in the EFQM Model 2013 and will therefore not be available from the year 2019 anymore (EFQM, 2020d).

Table 2 Definition of criterions EFQM Model 2013

CRITERIA	DEFINITIONS
Leadership	Organizations employ leaders who have charisma to act as a role model for its values and ethics.
People	Organizations support the talent in people in order to deploy skills and knowledge in the organization. There is a fair recognition system in place.
Strategy	By generating a stakeholder focused strategy, organizations instil their mission and vision.
Partnership & Resources	In order to have a supported strategy in place, organizations administer external partnership, suppliers and internal resources.
Processes, Products & Services	Organizations design, administer and increase performance on processes, products and services in order to instil higher value for customers.
People Results	Organizations implement and obtain excellent results that satisfies the needs and desires of their employees.
Customer Results	Organizations implement and obtain excellent results that satisfies the needs and desires of their customers.
Society Results	Organizations implement and obtain excellent results that satisfies the needs and desires of stakeholders within society.
Business Results	Organizations implement and obtain excellent results that satisfies the needs and desires of business stakeholders.

Source: elaborated from EFQM, (2013)

The EFQM model is specialized in finding out the peculiarities of an organization and afterwards, it recommends matching methods and approaches, instead of solely commending general methods and approaches, which the organization itself then has to specialize (Medne, et al., 2020). Furthermore, the EFQM model supports the organizations own understanding on what to change by self-evaluation of the weaknesses as well as moreover to see, if the elected approaches and methods will be profitable for the organization (Medne, et al., 2020, Mohammad, et al., 2011, Dahlgaard, et al., 2013).

Escrig-Tena et al. (2019) as well as Asif & Bruijn, (2009) are concluding that organizations are implementing the EFQM model because of internal drivers, as there is the essential wish that there will be a “participative style among employees” in the organizations. Asif & Bruijn, (2009) add that the intent of an organization is of high value, as the wrong intent (e.g., external pressures) or the inability to fit the model with the organizational strategy will lead to more difficulties than real values. Therefore, an organization has to support the model with the right techniques in order to help a new organizational culture flourish (Dahlgaard, et al., 2013).

The EFQM Model is supposed to be used with a causal relationship when it comes to enablers and results, as the results can only be outstanding, when there have been worked with

outstanding enablers (EFQM, 2020a). Evidence of that is presented in Escrig et al. (2015) after analysing enablers and results; while Sampaio, et al., (2012) disagrees with it, as they claim that work commitment of each individual as well as the organizational culture and structure are what makes a competitive advantage, which can be partly gained by the EFQM model. Furthermore, Nazemi, (2010) states that there are knowledge gaps when it comes to the model interrelationship, which is why a causal relationship cannot be supported by research.

In the EFQM Model are existing soft and hard factors next to each other. Both factors are equally important in order for the EFQM Model to work properly (Calvo-Mora, et al., 2014). Soft factors internalized in the EFQM Model are leadership, human resources and continuous improvement. Calvo-Mora et al. (2014) stress as well the commitment of the human resources influencing the organization, which Escrig-Tena et al. (2019) has considered important as well. The soft factors are crucial to be successful with the implemented initiatives of the EFQM Model (Calvo-Mora, et al., 2014). Hard factors are writing down strategies and policies how to reach the goal of continuous improvement, which fits to the culture of the organization and therefore represents the technical structure (Calvo-Mora, et al., 2014). Suárez et al. (2014) take a step further and state that next to the soft and hard factors, there also has to be a policy and strategy able to reach the goals and moreover, there has to be a team in each organization, which coordinates the things to be done to reach the goal.

All facilitating agents (enablers) that are included in the EFQM model, have to be used together in order to gain the desired results (Esklidsen & Dahlgaard, 2000, Calvo-Mora, et al., 2014, Suárez, et al., 2014). When an organizational culture is aligned and institutionalized with the facilitating agents of the EFQM model, it can turn to a competitive advantage (Asif & Bruijn, 2009). This institutionalization can only be reached when the social factors, hence the people influencing the organization, are considered as well. As employee participation is an important part when implementing the EFQM Model (they are part of the model fundamental concepts and criteria), organizations will achieve this milestone easier when working with a participative style as it results into commitment and leads to a feeling of personal responsibility among people (Escrig-Tena, et al., 2019). While many articles confirm that the EFQM model fosters a competitive advantage as well as helps support an organization on its way to business excellence (Calvo-Mora et al., 2014, Mohammad, et al., 2011, Suárez, et al., 2014, Escrig & De Menezes, 2015, Medne, et al., 2020), there are also opposite opinions about it. Doelemann et al. (2014) for example, state that improvements in performance are not only depending on the EFQM Model, but on many more individual factors in an organization, while Dahlgaard, et al., (2013) show gaps in values and culture of an organization. Moreover, the EFQM Model has 32 sub-criteria, which is a great number for a company to be able to manage in order to be successful (Doeleman, et al., 2014).

When being recognized by EFQM it can also positively affect the financial results of a company, as the stock price for an organization changes positively when winning a quality award, which was furthermore announced in public (Henricks & Singhal, 1996, Calvo-Mora, et al., 2014).

It can be summarized that EFQM can bring together various initiatives within an organization and therefore can be seen as a comprehensive framework (Mohammad, et al., 2011).

2.3 ISO 9001

The International Organization for Standardization (ISO) is a non-governmental international organization, which promulgates international standards, which are adapted to the current market needs and which drive innovation and support when challenges arise, or change is wished. Its creation was demanded by engineers in 1946 in London and it started to operate in 1947 (ISO, 2020).

In 1987, ISO published the ISO 9000 family, which is a set of quality management system (QMS) standards. The most common standard of the ISO 9000 family is ISO 9001, which is the only standard of this family that can be certified (ISO, 2020). The newest version of ISO 9001 has been released in 2015. ISO 9001 establishes the requirements to implement, document, maintain and improve a QMS and it is based on the quality management principles, which are implied in ISO 9000 and therefore also in ISO 9001: “Customer focus”, “Leadership”, “Engagement of people”, “Process approach”, “Improvement”, “Evidence based decision making” and “Relationship management” (ISO, 2015). Table 3 comprises the definition to the principles. As of 2018, there are more than one million organizations certified (ISO, 2019).

Furthermore, ISO 9001 is involved in the continuous improvement of the performance of a company as well as it is involved in the sustainable improvement (ISO, 2015). Many organizations find the need in implementing ISO 9001 because its customers are looking for a certain kind of quality and the ISO 9001 standard helps the customers to be ensured that the organization will be able to comply with the desired quality. Key objectives of ISO 9001 are to develop a company further in order to be more successful and to be more cost effective (ISO, 2015). Moreover, ISO 9001 watches the sustainability of a company carefully, which implicates to choose the right suppliers and to discuss sustainability with the interested parties in a company (ISO, 2015).

Table 3 Definition of ISO 9001 Principles

ISO 9001 PRINCIPLES	DEFINITION
Customer focus	Fulfil customer requirements and aspire to go beyond customer expectancies.
Leadership	Objectives are reached by committed employees.
Engagement of people	In order to strengthen the capability of an organization to deliver value, committed people at all levels are vital.
Process approach	An organization has to operate as a uniform system in order to manage results more efficiently.
Improvement	There is consistent improvement.
Evidence based decision making	In order to attain a desired outcome, decisions should be made based on analysis of data.
Relationship management	In order to have sustained success, relationships with inter alia suppliers have to be fostered.

Source: elaborated from ISO, (2015)

In order to be able to use ISO 9001 properly, one must be familiar with not only ISO 9001 but the whole ISO 9000 family, as it provides essential knowledge for the understanding and implementation of ISO 9001 (ISO, 2016). Heras-Saizarbitoria, et al., (2011) state that the ISO 9000 standards are not founded to fulfil a goal or a specific outcome (as for example the EFQM Model) but for standardizing and formalizing a number of operations. According to Veronese, et al., (2020), the certification process for ISO 9001 supports an organization by detecting its strenghts and weaknesses and supports to standardize processes. Moreover, ISO 9001 contributes with continuous optimization as well as the prompt identification of errors. The study furthermore states that during the audit of ISO 9001, there will be detected anomalies which can then be adjusted. By eliminating anomalies and increasing the strenghts of an organization, the satisfaction of customers and employees will hence increase. Figure 3 vivids the process approach of ISO 9001 (ISO, 2015).

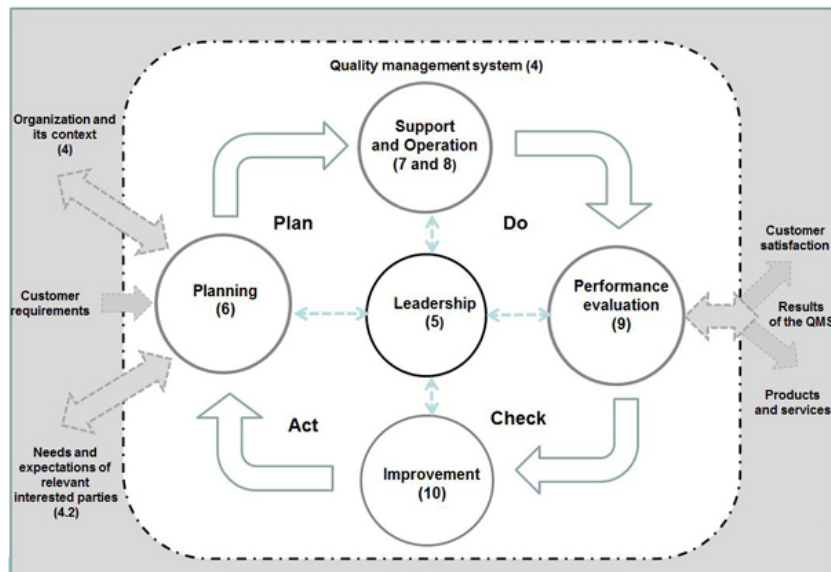


Figure 3 Process approach ISO
Source: ISO, (2015)

Companies implement ISO 9001 and can decide to certify it. Certification is a process in which a third-party, namely a certification body, audits if the QMS implemented in the organization meets the requirements of the ISO 9001. The audit process is done in accordance to the company who supports the auditors during the on-site audit. If the evaluation is positive, the company receives the certificate which is valid for three years (Casadesús, et al., 2005). The ISO 9001 certification supports “knowledge management, customer satisfaction and organizational image”. In specific, it increases competitive advantage and customer satisfaction within tangible and intangible sectors. Also, the organizational image is increasing as customers are aware that an organization is certified by ISO 9001 and therefore also trust this particular organization more. Knowledge management is improved as well, but with a lower intensity (Brito, et al., 2020).

2.4 The EFQM Model related to ISO 9001

Heras-Saizarbitoria et al. (2011) compared the ISO 9001 and the EFQM model directly with each other and found out that there are both internal and external motivations for organizations to implement ISO 9001, which are internally the upgrading in systemization and internal control, while external motivations are client demand and the upgrading of the public image. On the other hand, it seems to be a generally internal motivation to become involved in TQM by using the EFQM model, especially because of upgrading planning and management capabilities as well as the control within the organization (Escrig-Tena, et al., 2019, Asif & Bruijn, 2009). Rodríguez-Mantilla, et al., (2020) analysed the impact of the EFQM Model as well as the ISO 9001 in schools and found that schools show a higher improvement in communication, external relationships as well as in realisation of resources. ISO 9001 on the other hand shows a higher result in “activities carried out with other schools”. Heras-

Saizarbitoria et al. (2011) furthermore state that the implementation of both the EFQM model as well as the ISO 9001 have different positive effects for the organizations. Organizations implementing the EFQM model upgraded the image of the firm, internal efficiency and decision-making processes as well as it had a positive effect on leadership, motivation and internal transmission. Organizations implementing the ISO 9001 upgraded its evaluation of performance. Brito, et al., (2020) add that also by the implementation of ISO 9001, the image of the firm is improving.

Obstacles of the ISO 9001 were the bureaucratic workload when implementing it as well as the missing motivation to implement it from the side of the managers, while obstacles for the EFQM model were the shortcoming of resources to manage the EFQM model as well as the complexity of the model (Heras-Saizarbitoria, et al., 2011).

EFQM is considering soft and hard factors, while ISO 9001 is more concerned for the hard factors (Palentová & Šlaichová, 2017). Furthermore, while ISO 9001 is supporting the quality management, EFQM is leading an organization towards adopting corporate social responsibility (CSR) (Neri, et al., 2019).

There is a positive relationship between the EFQM model and the ISO 9001 certification, as an organization seems to reach a higher score in the EFQM Model if it is already ISO 9001 certified, as ISO 9001 has instilled yet many criterions of the EFQM model (Fonseca, 2015). Hence, the longer an organization has been complying with ISO 9001, the greater the result in the EFQM evaluation is. ISO 9001 is based on the process map model plus the “Plan-Do-Check-Act” (PDCA) or continuous improvement model (shown in Figure 3), which means that organizations with a greater result have passed more PDCA cycles and therefore increased their degree of maturity (Fonseca, 2015); while the EFQM model bases its self-evaluation on the RADAR logic (shown in Figure 5) (EFQM, 2020), which is similar to the PDCA cycle. Hongyi, et al., (2004) compliment to this statement that there is a positive correlation between TQM and ISO 9001, which will bring an organization great benefits when first implementing ISO 9001 and then a TQM.

There are also similarities between the EFQM Model and the ISO 9001 quality management system, which are shown in Table 4 together with an assessment proposal of how great the similarities of the two models are.

Table 4 EFQM in relation to ISO 9001

EFQM	ISO 9001	OWN ELABORATION
Customer Results - Adding value	Customer Focus - Adding value - Flexibility regarding customer needs	Covered
Leadership - The management acts as role models and evolves the mission, vision and ethics	Leadership - Top management commitment to quality	Partly covered
People - By considering the expectation of internal and external stakeholders as well as knowing the internal performance, a strategy is established	Engagement of people - What can be improved to fulfil customer requirements?	Slightly covered
People results / Society Results - Evaluation of the customer's / society's impression of the organization	Customer communication - Organization should offer a competent customer service - Ask for customer feedback / evaluation of products and services	Slightly covered
Managing agility - Capability of recognizing opportunities and risks effectively and to react accordingly to them	Process approach - Organization has to consider internal and external impacts in order to be in line with the strategic direction Risk based thinking - How does an organization examine risk and opportunities?	Covered
Business Results - Key strategic results: key financial and non-financial results, which confirm the success of the organization's strategy - Sustained results	Improvement - Improvement of internal productivity to not lose competitiveness - Flexibility regarding customer needs - To do improvements where it is meaningful and adds value	Slightly covered
Processes, Products & Services / Strategy - Skills improvement through changes within and outside of the organization's boundary zone	Evidence based decision making - Internal evaluation processes - Which skills are needed to work effectively? Design & Development Process	Partly covered

<ul style="list-style-type: none"> - The organization's strategy is backed up by people plans - Processes are managed to improve stakeholder value - Products and Services are manufactured, provided and administered 	<ul style="list-style-type: none"> - Is the product living up to the intended use and the requirements for it? Processes <ul style="list-style-type: none"> - Processes should be studied, evaluated and improved frequently Resources <ul style="list-style-type: none"> - Have to be managed reasonably 	
Partnership & Resources <ul style="list-style-type: none"> - Suppliers are navigated for sustainable gain and a sustainable future - Finances are navigated to ensure sustained results - Equipment and resources are used and handled in a sustainable manner 	Relationship making External providers <ul style="list-style-type: none"> - Providers activities are evaluated in order to enable the specific requirements of the organization - Organization has to ensure that the external provider can offer the desired quality of the products 	Slightly covered

Source: own elaboration based on Auditing Practices Group, (2020) and EFQM, (2013).

2.5 The EFQM Model of 2019

The EFQM Model got remodelled in 2019, as in the society today, values have shifted. Some values that have shifted are for example that an organization not only has an obligation towards its stakeholders, but also to the ecological community, which it uses. Another example is that organizations prefer a flat hierarchy and hence a contracting leadership style, which is more collective and social. Also, sustainability has gained more importance (EFQM, 2020b).

The new model is more complex than the old model, because the model wants to remind every organization using it that organizations are also complex (EFQM, 2020b). Furthermore, the model acknowledged that excellent organizational culture is supporting sustainable value as well as motivating people. Hence, the new EFQM Model supports teamwork as well as “leaders at every level”, as this results an organization to stay within its vision (EFQM, 2020b). Last but not least, the EFQM Model acknowledges that every organization is unique and therefore the EFQM Model has been adapted to add value in any organization without limits because of the size or the sector (EFQM, 2020b).

The EFQM of 2019 model has seven criteria (see Figure 4) and 23 sub-criteria, which can be found in Annex 2. The new Model has a distribution of 60% enablers and 40% results, as EFQM sees results as something that is already in the past and therefore does not have to be focused as much as the enablers, which are in the present/future. EFQM wants to show with the distribution that an organization should rather focus on its culture in order to be successful and therefore then achieve outstanding results. Points are given equally within the different criteria up to 100 points, which means that every sub-criterion counts 20 points. The exception is

“creating sustainable value”, which counts 50 points for each sub-criterion. For results, there are no sub-criteria and therefore no point allocation except for the two criteria within results. In total, a company can reach 1000 points (EFQM, 2020b).



Figure 4 EFQM Model

Source: EFQM, (2019b)

When an organization is using the model, its first priority is to be able to see the organization as a part of a larger system, in which are existing competitors, customers, helpers, etc. The first part of the EFQM Model is the “Direction”, which covers the question which purpose an organization has. The second part is the “Execution”, which looks at the way a company wants to provide its purpose to customers, and lastly the “Results” covers the long-term views of an organization. When having a closer look at the model, there can be found the criterion “Creating Sustainable Value”, which is (as described above) a new criterion in the EFQM Model and it is targeting the long-term view of being sustainable of a company as only then there can be financial strength (EFQM, 2019b).

In order to understand the thought behind the EFQM Model, EFQM uses RADAR (self-assessment tool), which stands for **R**esults, **A**pproaches, **D**eployment, **A**ssessment and **R**efinement and can be seen in Figure 5. It supports not only the EFQM Model itself, but also organizations in the current working style as well as it can help to find out current strengths, opportunities and weaknesses of the current way of working. More specifically, the RADAR defines the results of a certain strategy (**r**esults), determines what operations have to be worked on to get to the result (**a**pproaches), supplies the operations with the needed material (**d**eployment), benchmarks (**a**ssessment) and readjusts the operations in order to get to the desired result (**r**efinement) (EFQM, 2019b).

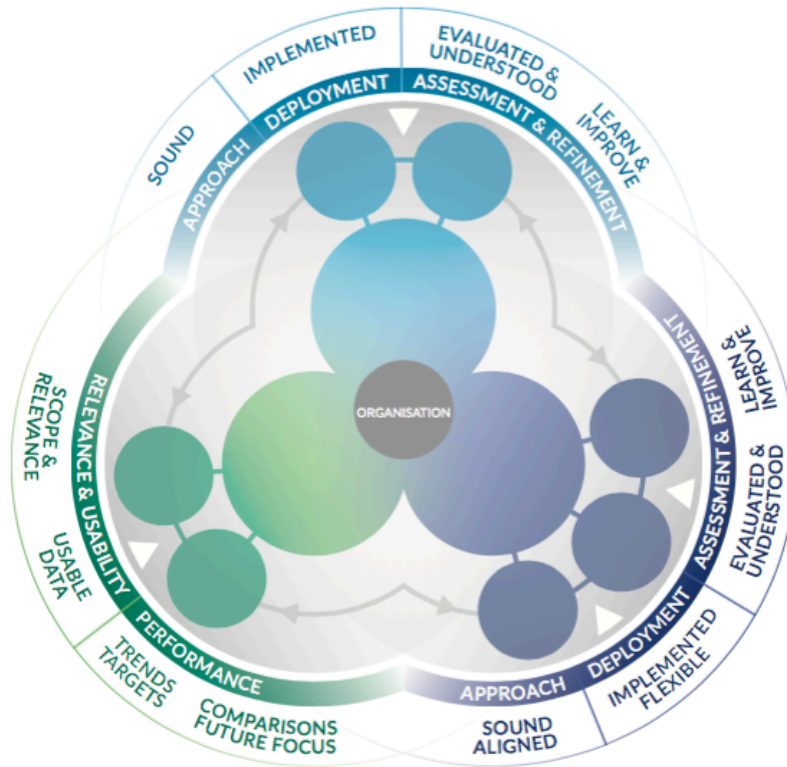


Figure 5 EFQM Diagnostic Tool RADAR
Source: EFQM, (2019b)

According to EFQM, Figure 6 shows the amount of points in each area, which is recommended for a perfect running organization. When applying RADAR logic, it has to be ensured that the operations in “direction” and “execution” are not greater than “sound” as the sound is the most important one and the other criterions need to be judged towards it. Moreover, the same applies for the results, just that the most important criterion is “Scope and Relevance” (EFQM, 2019b). The definition of sound in “direction” and “execution” is that there is a clear ground and target which is managed to suit also in the future, in order to satisfy the needs of key stakeholders. The definition of scope and relevance in “results” is that there has to be a mission, vision and strategy which is connected to results at the organizations disposal, which is constantly improved (EFQM, 2019b).



Figure 6 Importance Scoring using RADAR

Source: EFQM, (2019b)

As seen in the EFQM Model 2013, to be recognized by the EFQM Model, organizations must comply to the criteria the model has in place. Compared to the EFQM Model 2013, the recognitions that companies can choose from have changed by a small degree. Companies can apply in the EFQM Model 2019 for: (1) Validated by EFQM, (2) Qualified by EFQM, (3) Recognized by EFQM 3-7 stars and (4) the EFQM Global Award (EFQM, 2019a). The Recognition that companies can choose from can be compared to the former recognitions in place, which is shown in Table 5.

Table 5 Comparison of the Recognition

EFQM 2013	EFQM 2019
Committed to Excellence	Validated by EFQM
Committed to Sustainability	-
-	Qualified by EFQM
Recognized for Excellence 3-5 stars	Recognized by EFQM 3-7 stars
Excellence Award	EFQM Global Award

Source: (EFQM, 2017, 2019a)

As can be seen in Table 5, Committed to Sustainability is not available for recognition anymore, but there has been a new recognition, which is Qualified by EFQM. Qualified by EFQM is intended for organizations that wish to know whether the strategy and management practices the organization is pursuing is leading them to the desired outcome (EFQM, 2019a).

2.6 Comparison EFQM Model 2013 with EFQM Model 2019

The comparison of the EFQM Model 2013 and the EFQM Model 2019 is shown in Table 6. The EFQM Model 2019 covers most of the EFQM Model 2013, with some additions, which are shown in the table in italic. Major findings are that two new words can be found in the EFQM Model 2019, which cannot be found in EFQM 2013: “driving performance” and “transformation”. This is also a new criterion of the EFQM 2019. Furthermore, sustainability can be found to a greater amount in the EFQM 2019, hence it is a new criterion in the EFQM 2019 as well. Additionally, “people results”, “customer results” and “society results” receives a greater amount of attention from the EFQM 2019, as it is named in more criterions and sub-criterions as in the old model (EFQM, 2013, 2019b).

Table 6 Comparison of EFQM 2013 and EFQM 2019

EFQM 2013	EFQM 2019	COMPARISON
1. <u>Leadership</u> 1a) The management acts as role models and evolves the mission, vision and ethics 1b) The management specifies, monitors and encourages the progress of the organization’s management system and performance 1c) The management is involved with external stakeholders 1d) The management encourages to a culture of excellence 1e) The management ensures to lead through change effectively as well as to have an in general flexible organization	1. <u>Purpose, vision & strategy</u> 1.1 Develop the mission and vision 1.2 Recognize stakeholders needs 1.3 Outline and instil a governance and performance management system 2. <u>Organizational culture & leadership</u> 2.1 Manage the organization’s culture and cherish values 2.2 Design the background for change 3. <u>Engaging Stakeholders</u> 3.3 Business and governing stakeholders: assure and sustain consecutive support	Covered
2. <u>People</u> 2a) By considering the expectation of internal and external stakeholders, a strategy is established 2b) Strategy is established on knowing capabilities and internal performance	1. <u>Purpose, vision & strategy</u> 1.3 Know the ecosystem, the capabilities and the greatest objections 1.4 Establish Strategy	EFQM 2013: Addition of 2c + 2d

<p>2c) <i>Supporting policies for the strategy are refined and implemented</i></p> <p>2d) <i>Supporting policies are announced and observed</i></p>		
<p>3. <u>Strategy</u></p> <p>3a) The organization's strategy is backed up by people plans</p> <p>3b) People are developed according to their potential and skills</p> <p>3c) People are loyal, involved and authorized</p> <p>3d) <i>Communication is effective throughout the organization</i></p> <p>3e) <i>In the organization is a system of rewards and recognition in place</i></p>	<p>2. <u>Organizational culture & leadership</u></p> <p>2.3 Empower creativity and innovation</p> <p>2.4 Align and involve in purpose, vision and strategy</p> <p>5. <u>Driving performance & transformation</u></p> <p>5.1 <i>Steer performance and control risk</i></p> <p>5.4. Utilize data, information and skills</p>	<p>EFQM 2013: Addition of 3d + 3e</p> <p>EFQM 2019: Addition of 5.1</p> <p>Addition of EFQM 2019 can be found in "Fundamental concepts of Excellence" in 2013</p>
<p>4. <u>Partnership & Resources</u></p> <p>4a) Suppliers are navigated for sustainable gain</p> <p>4b) Finances are navigated to ensure sustained results</p> <p>4c) Equipment and resources are used and handled in a sustainable manner</p> <p>4d) Technology is used to help the strategy</p> <p>4e) In order to develop the organization's capability, information and knowledge are navigated to help the decision making</p>	<p>3. <u>Engaging stakeholders</u></p> <p>3.5 Partners and suppliers: establish relationships and guarantee support for creating sustainable value</p> <p>5. <u>Driving performance & transformation</u></p> <p>5.5 Navigate assets and resources</p>	<p>Covered</p>
<p>5. <u>Processes, Products & Services</u></p> <p>5a) Processes are managed to improve stakeholder value</p> <p>5b) Products and Services are improved to be able to give highest value for customers</p> <p>5c) Products and Services are adequately advertised</p> <p>5d) Products and Services are manufactured, provided and administered</p>	<p>3. <u>Engaging stakeholders</u></p> <p>3.1 Customers: establish sustainable relationships</p> <p>4. <u>Creating sustainable value</u></p> <p>4.1 Create the value (sustainability)</p> <p>4.2 Announce the value and market the value (sustainability)</p> <p>4.3. Provide the value</p> <p>5. <u>Driving performance & transformation</u></p> <p>5.3 <i>Steer innovations and apply technology</i></p>	<p>EFQM 2019: Addition of 5.3</p> <p>Addition of EFQM 2019 can be found in "Fundamental concepts of Excellence" in 2013</p>

5e) Customer relationships are administered and improved		
<u>6. People results</u> 6a) Evaluation of the customer's impression of the organization 6b) Evaluation of performance tracers: internal measurement to observe and increase performance of the organization's external customers	<u>3. Engaging stakeholders</u> 3.2 People: attract, involve, evolve, maintain <u>4. Creating sustainable value</u> <i>4.4 Determine and instil the overall experience</i> <u>6. Stakeholder perception</u> 6.2 People Perception Results	EFQM 2019: Addition of 4.4
<u>7. Customer results</u> 7a) Evaluation of people's impression of the organization 7b) Evaluation of the performance tracers: internal measurement to observe and increase performance of the organization's people	<u>3. Engaging stakeholders</u> 3.1 Customers: establish sustainable relationships <u>4. Creating sustainable value</u> <i>4.4 Determine and instil the overall experience</i> <u>6. Stakeholder perception</u> 6.1 Customer Perception Results	EFQM 2019: Addition of 4.4
<u>8. Society Results</u> 8a) Evaluation of society's impression of the organization 8b) Evaluation of the performance tracers: internal measurement to observe and increase performance of the organization's relevant society stakeholders	<u>3. Engaging stakeholders</u> 3.4 Society: Take part in evolvement, wellbeing and prosperity <u>4. Creating sustainable value</u> <i>4.4 Determine and instil the overall experience</i> <u>6. Stakeholder perception</u> 6.3 Business & Governing Stakeholders Perception Results 6.4 Society Perception Results 6.5 Partners & Suppliers Perception Results	EFQM 2019: Addition of 4.4, 6.3 + 6.5
<u>9. Business results</u> 9a) Key strategic results: key financial and non-financial results, which confirm the success of the organization's strategy 9b) Key performance tracers: key financial and non-financial tracers, which have been used to survey the organization's operational performance	<u>7. Strategic + operational performance</u> 7.1 Achievements in delivering its purpose and creating sustainable value 7.2 Financial performance 7.3 Fulfilment of Key Stakeholders expectations 7.4 Achievement of Strategic Objectives 7.5 Achievement in Driving Performance	EFQM 2019: Addition of 7.5, 7.6 + 7.7

	<p><i>7.6 Achievement in Driving Transformation</i></p> <p><i>7.7 Predictive Measures for the Future</i></p>	
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Source: EFQM, (2013, 2019b)

2.7 EFQM Model Recognition

The EFQM Recognition is a supportive program for organizations, which want to continuously improve its way of operating. In this section, only the EFQM 2013 will be looked at, as the new EFQM Model of 2019 is not in place yet and currently all organizations recognized for excellence of EFQM are measured with the EFQM Model of 2013 (EFQM, 2020d).

As alluded before, the recognition program distinguishes between different levels of recognition depending on the readiness of an organization. Details to every level are shown in Table 7 (EFQM, 2017). By being recognized the organization will be listed on the recognition database, which will hence support the organization with popularity in its business area as well as positively affect its internal as well as public image. Moreover, the organization will be part of an international business network, from which it can gain knowledge and share own experiences (EFQM, 2017, Gómez-López, et al., 2019).

Table 7 Recognition Levels of EFQM

Recognition	Meaning
Committed to Excellence	Introduction of EFQM in the organization. Points achieved: less than 200 points
Committed to Sustainability	Introduction of sustainability in the organization (1 star)
1-3 stars	Several sustainability practices are instilled (2 stars)
	Organization is managing sustainability effectively (3 stars)
Committed to excellence 2 stars	Introduction of EFQM in the organization. Points achieved: more than 200 points
Recognized for excellence 3 stars	Several management practices are instilled and positively affect the results of the organization. Points achieved: more than 300 points
Recognized for excellence 4 stars	Well-performance of the organization and has invested in operations which will help it to success. Points achieved: more than 400 points
Recognized for excellence 5 stars	Organization is managing change effectively and shows high performance. Points achieved: more than 500 points
EFQM Global Excellence Award	Organizations have instilled finest performing and have an outstanding track record
	Organizations must have been Recognized for Excellence 5 stars

Source: elaborated from EFQM, (2014, 2017)

Depending on how much commitment, finances and the “readiness” of an organization, it can choose between the listed options in the table. An organization, which for example wants to apply for Recognized for Excellence 3 stars has first been self-evaluating itself in order to know if the organization is ready for its pursued goal. Afterwards it has to hand in a management document which includes the key operations. In order to achieve 3 stars, the organization should have been on a positive way already, with improving results in the last 3 years. The organization knows which improvement it wants to do and also has a first strategy defined for it. Afterwards the management document is reviewed, the organization applies for an external evaluation, where 3-7 EFQM experts will assess the application and spend 3-5 days on the premises of the organization to gather interviews and an impression of the applicant. The organization has to reach at least 300 points given by the EFQM experts in order to achieve the status recognized for excellence 3 stars, who evaluate all criteria to determine the score. If an organization wants to be Committed to Excellence 4 stars, it needs to reach a minimum of 400 points and so on. The highest possible score is 1000 points. The certificate is valid for 2 years (EFQM, 2017).

According to Escrig & De Menezes, (2015) results, the EFQM Recognition helps organizations to improve, as the majority of (Spanish) organizations analysed in the research paper showed an improvement to higher levels of excellence. The downside of the findings of Escrig & De Menezes, (2015) is that the majority of organizations implement the EFQM model while thinking of the external auditing, in order to be able to maximize its results on the day of the assessment by the EFQM assessors.

When looking at the performance of organizations participating in the recognition model, it can be stated that the organizations with committed to excellence 5 star has a higher performance than the organizations with committed to excellence 3 and 4 stars. Furthermore, according to Escrig & De Menezes, (2016) and the EFQM Fundamental Concepts, (2017), it can be concluded that the majority of organizations awarded with committed to excellence 5 stars are multinational enterprises (MNEs), while the majority awarded for committed to excellence 3 and 4 stars are small and medium enterprises (SMEs) which leads to the result that larger organizations are more likely able to reach a higher performance than small organizations. Although MNEs had generally higher results, in Leadership and Strategy SMEs and MNEs scored similar results while in People Results SMEs scored higher than MNEs. MNEs on the other hand scored higher in General Results, in Managing Assets and Resources and in Building Relationships (Escrig & De Menezes, 2016). Moreover, the findings showed that in large organizations leaders are the driving force of change and hence, large organizations are developing its strategy related to internal performance, as large organizations have a more structured measurement system. Another difference between SMEs and MNEs are the handling of training and rewarding people (Escrig & De Menezes, 2016).

2.8 Sustainability in the EFQM Model

Sustainability in general can be described as “the assurance that human needs are satisfied today without harming the ability to fulfil the needs of a future generation.” Hence, there are limitations on using the environment (WCED, 1987). Sustainability furthermore implicates that more wealthy regions, which have better access to technology (e.g., technology in energy), have to be more aware on how to use its environment in order not to harm the environment for the future (WCED, 1987). Elkington, (1997) states that sustainability exists of three pillars: the social, the economic and the environmental pillar, which represent the profits of an organization, and it is also known as the Triple Bottom Line (TBL). The social pillar represents social capital in the means of public health, knowledge and education. The economic pillar represents the profits of capital, which includes physical, financial and human capital. The environmental pillar represents the crucial natural capital as well as the renewable, exchangeable natural. Sustainability can bring a company a great amount of benefits as for example cost reduction, increasing the market share and increasing profit. Therefore, sustainability can be seen as a competitive advantage (Savitz & Weber, 2006). Medne, et al., (2020) state that the EFQM supports an organization on its way to a sustainable development by implementing helpful activities. (Al-Tabbaa, et al., (2013), found that not-for-profit (NOP) organizations could raise sustainability by using the EFQM Model. When it comes to sustainability, there has been analysed that organizations which are more dedicated to the EFQM model are also more sustainable involved. Hence, more dedication for EFQM results in higher performance and therefore in higher sustainability (Escrig & De Menezes, 2016, EFQM Fundamental Concepts, 2017). Moreover, the EFQM Model can lead an organization towards CSR when there is a correspondingly high commitment to the EFQM Model in general in the organization (Neri, et al., 2019, Martín-Gaitero & Escrig-Tena, 2018).

Aryanasl, et al., (2016) argue that the EFQM Model is dedicated to sustainability with 50% of its actions and that the other half would need to be modified in order for an organization to be sustainable through the EFQM model. Palentová & Šlaichová, (2017) analysed that the general concepts chosen in an organization is leadership, financial management and quality. Sustainability and CSR are therefore often forgotten. The authors argue further that most criteria in the EFQM model do not support sustainability nor CSR and is rather market oriented. The article gives furthermore a guidance on what needs to be changed in organizations to be more sustainable, which are for example leadership, resources & partners and processes & products. In addition, Adamek, (2018) found that if an organization is following up with sustainability, it is with the environmental pillar, as an organization can decrease costs with this practice. Social and economic pillars are mostly ignored. Hence, the research paper concluded that there is no direct connection between EFQM and corporate sustainability issues. The article results show further that sustainability is not yet a priority in organizations, but only at its starting point. In contrast, Loepp & Betz, (2015) concluded that organization mainly stress the point of employees to be sustainable. Dyllick & Hockerts, (2002) add that the implementation of sustainability is unclear, which is the reason for a poor execution of it. In contrast, Criado-

García, et al., (2019) concluded that the EFQM Model can support a competitive advantage in regard to sustainability.

As the newest papers to sustainability regarding the EFQM model have been published in 2019, it can be said that there has been a change in the EFQM model, as it got revised in 2019. By now, “creating sustainable value” is a criterion in the execution and not a sub-criterion, furthermore EFQM stresses the point that an organization should not only look out for itself, but also for its ecosystem and surrounding (EFQM, 2019b, 2020b).

2.9 Financial results regarding the EFQM Model

The EFQM model impacts financial results like the company profitability, the market share growth, the sales growth and the profit-margin improvement (Heras-Saizarbitoria, et al., 2011, Hongyi, et al., 2004). This gets also concluded from Hendricks & Singhal, (2001) which state that organizations both small and large ones, are upgrading their financial performance by undertaking a TQM system. When compared to each other, small organizations profit even more than large organizations from implementing a TQM system. This is a surprising finding, as managers often believe that TQM is cost-intensive for small organizations. Hendricks & Singhal, (2001) argue that many elements that are needed for TQM are already available in small organizations. Moreover, small organizations have a higher cost reduction when implementing a TQM, which shows that small organizations are more efficient. Lastly the article found out that organizations, who put the TQM system in the centre of their operations are achieving greater means with it.

Easton & Jarrell, (1998) found that the performance of an organization is upgraded in “accounting variables”, example given net income or operating income, and “stock returns” when implementing TQM. The better the TQM system, the better the improvement. The authors furthermore state that there is no change in performance of organizations when they have won a quality award versus organizations who solely implemented the TQM system (Easton & Jarrell, 1998). York & Miree (2004) came to the opposite conclusion, as they analysed that quality award winning organizations had a greater business performance 5 years after the achieved award. They furthermore agree to a certain degree with Easton & Jarrell, (1998) by resulting that organizations who implemented TQM had also a higher business performance in financial terms before winning the award (York & Miree, 2004).

Another analysis towards financial results of organization states that TQM correlates significantly with the ISO 9001 standard when organizations had improved its financial results, as many organizations firstly implemented the ISO 9001 standard and afterwards complemented it with a TQM system (Hongyi, et al., 2004). Gómez-López, et al., (2019) come to a different conclusion and state that the greatest results of the EFQM Model are internal results, rather than human resource results (human resources were not considered as internal results in this paper) and financial results.

3. METHODOLOGY

The research concerning sustainability in the EFQM model, especially looking as well on the financial results is scarce. The found research articles have either focused solely on sustainability in the EFQM model, solely on financial results that can be achieved with the implementation of the EFQM model or solely on the comparison of the EFQM Model and the ISO 9001 standard (Hongyi, et al., 2004, Hendricks & Singhal, 2001, Easton & Jarrell, 1998, Escrig & De Menezes, 2016, Heras-Saizarbitoria, et al., 2011, Escrig-Tena, et al., 2019).

In order to find out whether or not the stated research questions are confirmed, there will be done an empirical, qualitative and quantitative research with 50 organizations, which were gathered on the data recognition base of the EFQM website (EFQM, 2020c). The companies got selected from the categories “recognized for excellence” 3 to 5 stars, as these organizations should be easily to compare due to the fact that every organization strives to be excellent in their business area. To have even clearer results, only the organizations which got recognized for excellence more than once were chosen. The majority of the 50 organizations chosen were from the sectors of Education, Manufacturing, Healthcare, Energy, Not for Profit (NOP), Automotive, Consulting/ Construction, Transportation & Logistics and others.

Regarding the first research question – whether sustainable practices are positively related to the financial benefit of organizations who are implementing the EFQM Model – there was done an analysis of linear regression. It was looked at two years before the recognition by EFQM of an organization, as well as two years after the recognition had been achieved. The radius of two years before and two years afterwards was chosen because of the assumption that it is taking approximately two years to implement the EFQM Model as well as the assumption that the first year after implementing the EFQM, the sales might not immediately increase (EFQM, 2020d). Moreover, it has to be noted that it was looked at the first year of the award in order to do the linear regression. The chosen tools to do a financial analysis of these firms was the database AMADEUS (Bureau van Dijk, 2020), where data regarding the sales of a company could be attained.

The linear regression analysis was used due to its capacity to be able to show the correlation between two numbers. For this analysis, the sales of the year of implementation was used as the independent variable X, while the sales up to two years after or two years before the implementation were used as the dependent variable Y. Therefore, X could show the growth rate of the sales. The goal of this analysis was to find out if the implementation of the EFQM Model increases or decreases the sales, hence the financial performance. Afterwards, the Pearson Correlation was used to confirm the results.

As organizations introduced the EFQM Model in different years, there has to be also taken into consideration that there have been better and worse financial years for organizations. The majority (12) of organizations introduced the EFQM Model in 2011. Therefore, a further regression analysis had been done in order to find out, if the results of the general analysis with

all implementation years was matching the specific analysis with only the implementation year of 2011. Most organizations got analysed from the year 2009/2010 until 2018. There were some exceptions, where the companies got analysed in a shorter term/ longer term, but this only was accepted if the term was informative enough (Bureau van Dijk, 2020).

For the second and third research questions, which were stating, that sustainability within employees can be found in any organization that has implemented the EFQM Model as well as that there is a positive relation between the ISO 9001 and EFQM Model, the sustainability reports or similar of the same 50 organizations as for research question one were analysed in order to see the excellence level of sustainability in each organization. Furthermore, there was analysed, whether the organizations were implementing the ISO 9001 in addition. The method has been adapted from Loepp & Betz, (2015). From 50 organizations only 15 had a sustainability report or similar, which was either in English or in German. The organizations with a sustainability report have been analysed by the level of recognition, the type of report, the usage of the ISO 9001 within the organization and the preciseness of the phrases from the sustainability reports, which could be compared to the phrases in the EFQM Model. Table 8 shows the 50 organizations alphabetically and points out in grey which of the organizations had a sustainability report or similar.

The particular social pillar, hence employees was chosen, as much literature has been researching about the importance of employees in organizations, but there has not been identified yet any proof that there is sustainability within employees when organizations have implemented the EFQM Model (Escrig-Tena, et al., 2019, Asif & Bruijn, 2009, Calvo-Mora, et al., 2014, Heras-Saizarbitoria, et al., 2011, Palentová & Šlaichová, 2017, Adamek, 2018, Gómez-López, et al., 2019).

Regarding the results, the EFQM Model of 2013 has written down the following statements that can make an organization instil more sustainability in employees (EFQM, 2013):

- The organization's strategy is backed up by people plans
- People are developed according to their potential skills
- People are loyal, involved and authorized
- In the organization is a system of rewards and recognition in place
- Evaluation of the performance tracers: internal measurement to observe and increase performance of the organization's people
- Evaluation of people's impression of the organization
- Good internal communication

Table 8 Organizations alphabetically ordered

aarReha Schinznach	AEROPORTS de LYON	AFNOR Compétences	ALSA GRUPO	ASSA ABLOY Sicherheitstechnik GmbH
Botnia Mill Service Oy Ab	Bosch Rexroth S.p.A.	CASER RESIDENCIA L S.A.U.	City Building (Glasgow) LLP	COLEGIO RAMÓN Y CAJAL
Comer Industries S.p.A.	Complex Cultural Esportiu Montessori – Palau	CAPSA	ENAGÁS S.A.	EULEN SERVICIOS SOCIOSANITARI OS
Europlakat D.O.O., Ljubljana	FH JOANNEUM Gesellschaft mbH	Forel Klinik	FUNDACIÓN ONCE	FunderMax GmbH
GRUPO ILUNION	Hospital Moncloa	Hyundai Motor Manufacturing Czech s.r.o.	INSTALACIONE S INABENSA S.A.	KEOLIS LYON
Kostwein Maschinenbau GmbH	LähiTapiola Kiinteistövarainhoi to Oy	Loretto Care	MASTER DISTANCIA S.A	Münchner Volkshochschule
Parc d'Atraccions Tibidabo, S.A.	Pierburg s.r.o.	Psychiatrische Dienste Aargau AG	Recupel	RED ELÉCTRICA DE ESPAÑA
SANITAS HOSPITALES	SCLE SFE	Scottish Autism	Sense Scotland	TELEFÓNICA EDUCACIÓN DIGITAL
TELEFÓNICA LEARNING SERVICES S.L.U.	The Wise Group	ThyssenKrupp Norte, S.A.	Transport Sanitari De Catalunya	UNIMAT PREVENCIÓN
UNIVERSIDA D EUROPEA DE MADRID	UNI-PHARMA KLEON TSETIS PHARMA. LABORATORIES S.A.	University of Winchester	UNIMAT PREVENCIÓN	WIFI Kärnten GmbH

Source: Bureau van Dijk, (2020)

To measure the level of sustainability in these organizations, a self-classification has been created. There are seven statements regarding sustainability within employees instilled in the EFQM Model (Annex 1). Depending on how many of these statements an organization had implemented, it could achieve between 1 and 7 points. Moreover, an organization could gain a point for a valid report in place. There could be no point gained for the usage of the ISO 9001.

Depending on the end result of an organization, there would be determined the level of sustainability of the model. The following point system for the end result has been put in place:

- 6-8 points – Excellent sustainability in place
- 4-5 points – Moderate sustainability in place
- 1-3 points – Weak sustainability in place

Figure 7 makes the process of the three research questions more vivid.

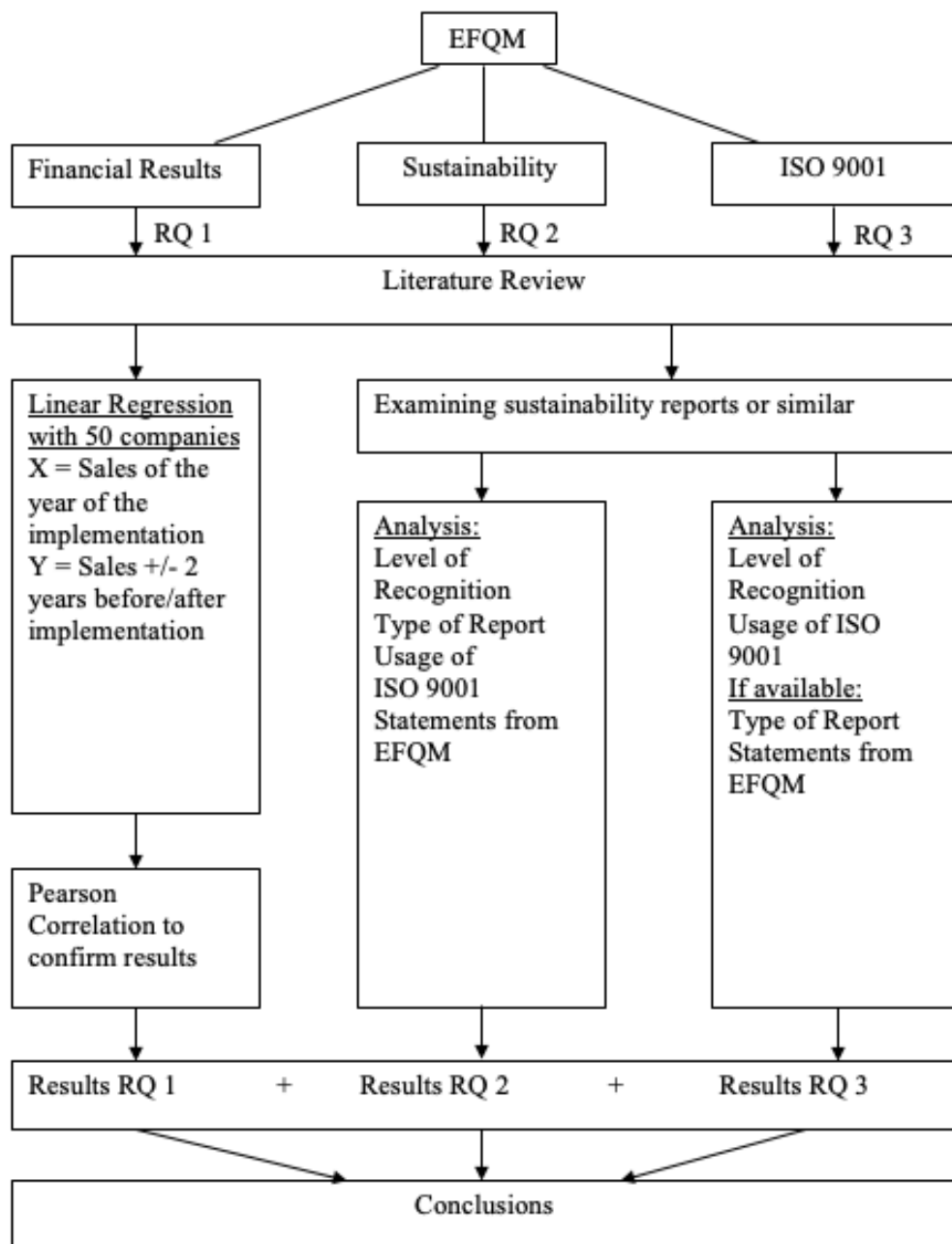


Figure 7 Process for Research Questions
Source: Author's own elaboration

4. RESULTS AND DISCUSSION

To answer the first question, whether sustainable practices are positively related to the financial benefit of organizations implementing the EFQM Model, there will be done a linear regression as well as the Pearson Correlation calculation.

When looking at the linear regression of the sales one year after the implementation of the EFQM Model and therefore one year after sustainable practices have been increased, shown in Figure 8, it can be stated that there can be found a linear relation as most of the sales numbers are allocated around the line. Furthermore, the X-variable has to be analysed, as it is the forecast of the upcoming years. A number lower than 1 is negative, while a number higher than 1 is positive. $X = 1$ can be considered neutral. The value of X is 0.8667 in the first year, which means that sales will decrease by 13%. The same can be seen at sales after two years of the implementation, where X is 0.8978, which is still a negative value, with a slight increase of 0.03% compared to the year before (Figure 9).

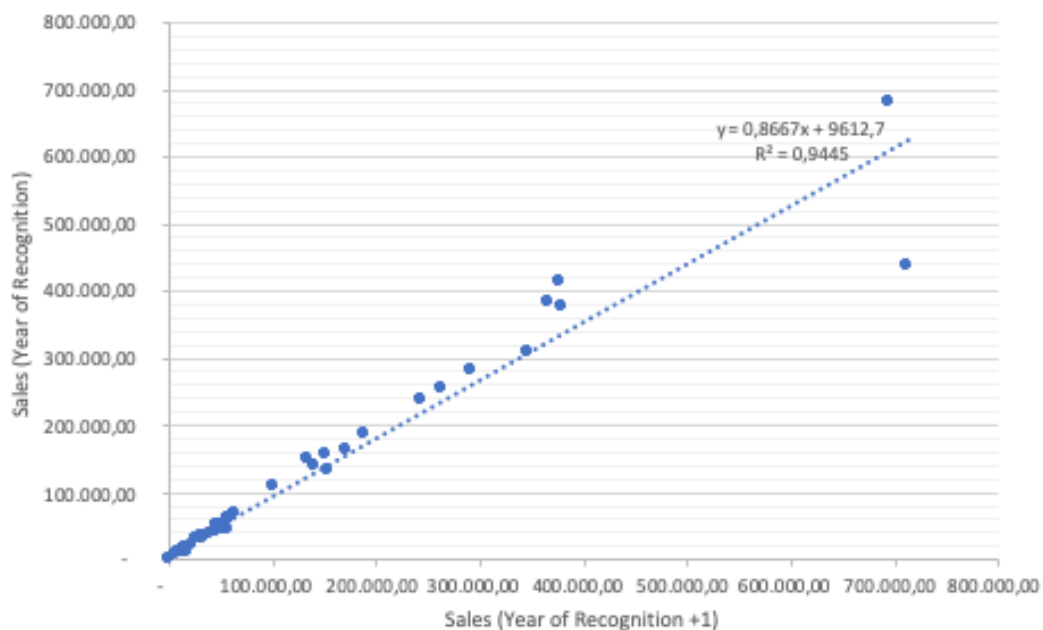


Figure 8 Linear Regression (Year of Recognition + 1)

Source: Own elaboration

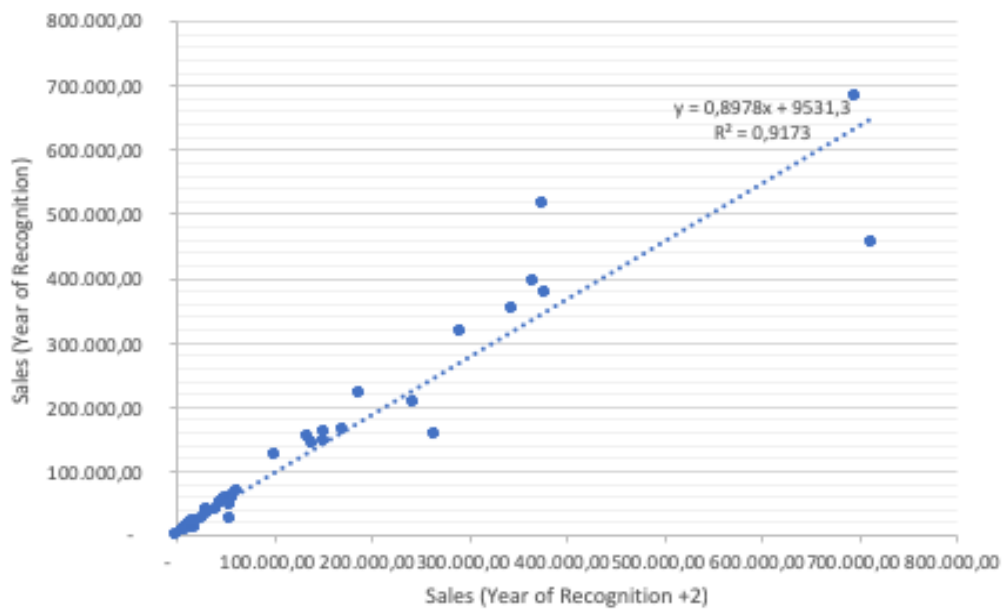


Figure 9 Linear Regression (Year of Recognition + 2)
Source: Own elaboration

When analysing the years before the award of the EFQM Model it can be said that the expected growth rate two years before the EFQM is approximately 56% and one year before the implementation of the EFQM Model the expected growth rate went down to -4%, which can be seen in Figure 10 and 11. This shows a trend of the financial results going down the closer the year of implementation of the EFQM Model comes.

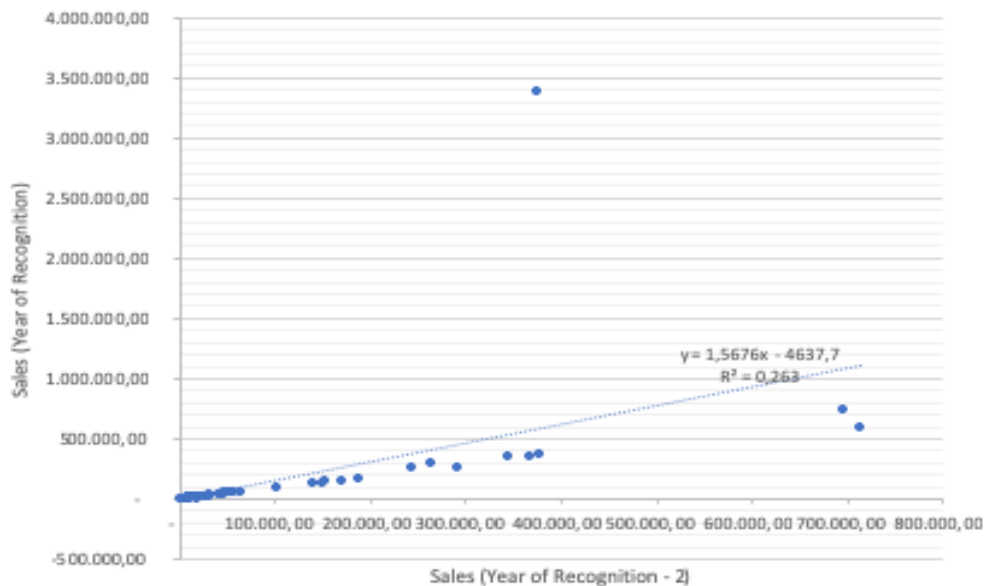


Figure 10 Linear Regression (Year of Recognition - 2)
Source: Own elaboration

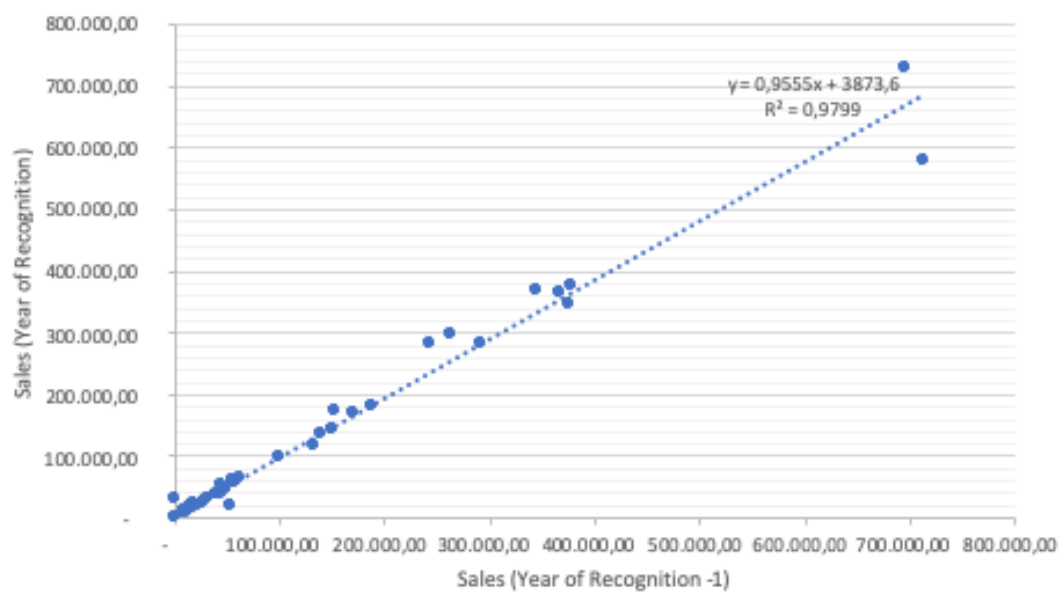


Figure 11 Linear Regression (Year of Recognition -1)

Source: Own elaboration

As the organizations have been implementing the EFQM Model in different years, also the effect of global economy changes has to be taken into account. The majority of organizations have first implemented the EFQM Model in 2011, hence the year 2011 was analysed separately in order to find out, whether global economy changes have a great impact on the financial results of an organization (Annex 3-6). It can be stated that for two years after the EFQM recognition as well as two years before the EFQM implementation, there has been a negative growth rate (Year of Recognition +1 = -38%; Year of Recognition +2 = -36%; Year of Recognition -2 = -16%; Year of Recognition -1 = -19%). This matches the negative trend of the analysis of all organizations and therefore global economic changes do not have to be considered.

Furthermore, the Pearson Correlation got calculated for all four years as well as the year of 2011 in order to verify the relation of the variables. A result close to 1 means that there is a very strong positive relation between the two variables. On the other hand, a result close to -1 shows a negative relation between the variables. The average result of the Pearson Correlation was 0.87, which shows that there is a positive correlation between the variables.

The above findings state that the answer to the first research question is negative, thus, the implementation of the EFQM model is not improving the financial performance of companies. This also matches the findings of Gómez-López, et al., (2019) who state that the EFQM Model supports an organization rather with internal than with external results. Moreover, organizations are implementing the EFQM Model because of internal drivers with the wish of a “participative style among employees”. Also, the wrong intent of wanting to be recognized by EFQM, which could be for example external pressures, will lead to more obstacles than values (Escrig-Tena, et al., 2019, Asif & Bruijn, 2009). Doeleman, et al., (2014) state that improvements in

performance are not only depending on the EFQM Model, but on many more individual factors in an organization. On the other hand, Heras-Saizarbitoria, et al., (2011), Hongyi, et al., (2004), Hendricks & Singhal, (2001), Easton & Jarrell, (1998) and York & Miree, (2004) disagree with these findings, as they state that the EFQM Model impacts financial results, like the sales growth, positively.

In order to answer the second question, namely, sustainability within the social pillar, hence employees can be found in any organization that has implemented the EFQM Model, there was created a table in order to measure sustainability in employees in the individual organizations. In Table 9 can be seen the 17 out of 50 organizations, which had a sustainability report sorted by the level of the first-time recognition.

It can be seen in the table that every organization – from 3 to 5 stars – has implemented sustainability to a certain degree within employees. It can be furthermore stated, that there is a difference of implementation of sustainability in employees between organizations with 5 stars compared to organizations with 3 and 4 stars. The level “excellent sustainability in place” can solely be found within organizations recognized for 5 stars. Organizations with 3 and 4 stars solely have “weak or moderate sustainability” in place. This shows, that a higher recognition also leads to a higher commitment to employees and sustainability, which matches the findings of Escrig & De Menezes, (2016). Moreover, it can be seen, that the majority of 5 stars organizations (nine organizations) were providing a sustainability report or similar while solely five organizations with recognized for 4 stars and three organizations with a recognition of 3 stars, have provided a sustainability report or similar, which Neri, et al., (2019) and Martín-Gaitero & Escrig-Tena, (2018) had analyzed as well. The research articles furthermore stated that the EFQM Model can lead towards CSR when there is a high commitment to the EFQM Model in general in the organization.

Hence it can be stated, that the second research question is positively answered, as sustainability can be found within the social pillar, hence the employees, in every organization of the sample. There is a limitation to the statement, as the degree of sustainability varies greatly between organizations. This result disagrees with Adamek, (2018), who stated that an organization is rather following up with the environmental pillar of sustainability than with the social (employees) or the economic pillar. The author furthermore concluded that there is no direct connection between the EFQM Model and corporate sustainability and moreover it is not yet a priority in organizations but only a starting point. In contrast Escrig-Tena, et al., (2019) analysed that institutionalization can only be reached when the social factors, hence the employees, influencing the organization are considered as well. Escrig-Tena et al. (2019) as well as Asif & Bruijn, (2009) are concluding that organizations are implementing the EFQM model because of internal drivers, as there is the essential wish that there will be a “participative style among employees” in the organizations, while Calvo-Mora et al. (2014) points out the commitment of the human resources influencing the organization (Escrig-Tena et al., 2019). Therefore, the EFQM Model can support a competitive advantage in regard to sustainability (Criado-García, et al., 2019). The results obtained in this paper agrees with the named

statements above, as the majority of the organizations measured had a moderate sustainability, followed by an excellent sustainability in place. Only four of the 17 organizations analysed had a weak sustainability in place.

Table 9 Level of Sustainability in Organizations

Organization	Level of Recognition	Sustainability Report or similar	Statements from EFQM	Usage of ISO 9001	Level of Sustainability
ILUNION, (2018)	5	Yes, Shared Value Report	5/7	Yes	Excellent
WIFI Kärnten, (2018)	5	Yes, Quality and Success Report	5/7	No	Excellent
Volkshochschule, (2018)	5	Yes, Annual Report	4/7	No	Moderate
ASSA ABLOY GmbH, (2019)	5	Yes, Sustainability Report	5/7	Yes	Excellent
FUNDERMAX GmbH, (2020a)	5	Yes, Website	5/7	Yes	Excellent
CAPSA, (2020)	5	Yes, Website	6/7	No	Excellent
RED ELÉCTRICA DE ESPAÑA, (2020)	5	Yes, Website	3/7	Yes	Moderate
Recupel, (2018)	5	Yes, Annual Report	3/7	No	Moderate
Hyundai Motor Manufacturing Czech s.r.o., (2020)	5	Yes, Website	3/7	No	Moderate
Kostwein Maschinenbau GmbH, (2020a)	4	Yes, Website	3/7	Yes	Moderate
Parc d'Atraccions Tibidabo, (2020)	4	Yes, Website	2/7	Yes	Weak
Loretto Care, (2020)	4	Yes, Website	2/7	No	Weak
ENÁGAS S.A., (2019)	4	Yes, Annual Report	3/7	Yes	Moderate
ALSA GRUPO, (2018)	4	Yes, Sustainability Report	2/7	No	Weak
Psychiatrische Dienste Aargau AG, (2019)	3	Yes, Quality Report	3/7	No	Moderate
Sense Scotland, (2018)	3	Yes, Annual Review	3/7	No	Moderate
Transport Sanitari de Catalunya, (2020)	3	Yes, Website	2/7	Yes	Weak

Source: Own elaboration based on companies' reports

Regarding the third question, whether there is a positive relation between having the certification of ISO 9001 and recognized by EFQM, there has been created a table of all organizations, which are using both practices regardless to whether they provided a sustainability report. In Table 10 are presented 15 organizations sorted by the level of first-time recognition.

Table 10 Organizations using ISO 9001 and EFQM

Organization	Level of Recognit.	Sustainability Report or similar	Statements from EFQM	Usage of ISO 9001	Level of Sustainability
ILUNION, (2012)	5	Yes	5/7	Yes	Excellent
ASSA ABLOY GmbH, (2013)	5	Yes	5/7	Yes	Excellent
FUNDERMAX GmbH, (2020b)	5	Yes	5/7	Yes	Excellent
RED ELÉCTRICA DE ESPAÑA, (1999)	5	Yes	3/7	Yes	Moderate
Universidad Europea, Madrid, (2020)	5	Not available	Not available	Yes	Not available
Complex Cultural Esportiu Montessori–Palau, (2015)	5	Not available	Not available	Yes	Not available
Comer Industries S.p.A., (2013)	5	Not available	Not available	Yes	Not available
AFNOR Compétences, (2020)	5	Not available	Not available	Yes	Not available
VASBE S.L., (2004)	5	Not available	Not available	Yes	Not available
SCLE SFE, (1994)	5	Not available	Not available	Yes	Not available
Kostwein Maschinenbau GmbH, (2020b)	4	Yes	3/7	Yes	Moderate
ENAGÁS S.A., (2008)	4	Yes	3/7	Yes	Moderate
Transport Sanitari De Catalunya, (2020)	3	Yes	2/7	Yes	Weak
Bosch Rexroth S.p.A., (2019)	3	Not available	Not available	Yes	Not available
UNIMAT PREVENCIÓN, (2020)	3	Not available	Not available	Yes	Not available

Source: Own elaboration based on companies' reports

In Table 10 it can be seen that more than half of the organizations, which are certified by ISO 9001 are not providing a sustainability report. The organizations solely state on their website that they are recognized by EFQM and are certified by ISO 9001, which is why they could not be listed in Table 9, where the sustainability of the organizations was analysed. It can be seen that organizations, which are recognized by 5 stars from EFQM are more likely certified by ISO 9001 as well. In Table 10, ten organizations are recognized by 5 stars, while two are recognized by 4 stars and three are recognized by 3 stars.

It is found that the third question is positively answered, as the majority of organizations certified by ISO 9001 are recognized by 5 stars from EFQM. Fonseca, (2015) agrees with these results as the research paper states that an organization will reach a higher score in the EFQM Model if it is at that time certified by ISO 9001, as ISO 9001 has instilled many criterions of the EFQM model. It further states that the positive effect results are greater, the longer an organization is certified by ISO 9001 already. Moreover, the positive correlation will bring an organization great benefits when ISO 9001 was implemented first (Hongyi, et al., 2004).

5. CONCLUSIONS

This paper has analysed the EFQM Model in regard to three goals. First, to find out whether the financial performance of an organization is increasing after being recognized by EFQM, hence because of the sustainability an organization has newly instilled. The second goal was to investigate whether sustainability actually can be found in any organization that has implemented the EFQM Model. The sustainability was more specifically analysed in the social pillar: within the employees. The third and last goal was to examine whether there is a positive relationship between the EFQM Model and the ISO 9001 certificate. After doing an analysis using a sample of 50 companies recognized with the EFQM Model, the following conclusions can be presented.

The findings showed that the EFQM Model does not support the financial performance of the organizations of the sample and therefore should be seen as a model which solely internally increases the standards of an organization (Gómez-López, et al., 2019, Escrig-Tena, et al., 2019, Asif & Bruijn, 2009). The second results showed that sustainability within the social pillar, hence the employees, can be found in any organization of the sample which implemented the EFQM Model. It seems that a higher result in the recognition leads to a higher commitment to sustainability (Neri, et al., 2019, Martín-Gaitero & Escrig-Tena, 2018). Lastly the results demonstrated that there is a positive relationship between the EFQM Model and the ISO 9001 standard, as the results showed that the majority of organizations certified with ISO 9001 in the sample are recognized by EFQM with 5 stars, which shows that organizations certified by ISO 9001 will be able to reach a higher score in the evaluation for the EFQM recognition (Fonseca, 2015).

The paper contributes to the existing theories but provides new insights concerning the sustainability and the associated financial results of companies in the sample as well as the importance of the ISO 9001, as it shows that an organization will benefit from the EFQM Model in terms of sustainability and internal results as well as an organization will be more successful with it when certified first by ISO 9001. The results also show, mainly from the second research question, that the new EFQM Model designed is considering the sustainable orientation of companies, which are already working in creating a sustainable value. Thus, the adaptation of these organizations to this new framework will probably be easier than in previous updates.

Moreover, this study is helpful for managers who are considering the implementation of the EFQM Model. The study shows that an organization should rather implement the EFQM Model because of internal reasons and that the EFQM Model is the wrong choice for a fast-growing financial result. Furthermore, it can be helpful for managers, whose organization has been working with the ISO 9001 for a considerable amount of time and who are considering implementing the EFQM Model.

6. LIMITATIONS AND FUTURE RESEARCH

This paper has been analysing the effect that the implementation of sustainability through the EFQM Model has on the financial results of an organization. Hereby, there was no differentiation of the individual stars (3 to 5) that EFQM recognizes. Furthermore, the sample taken in order to create a linear regression was only considering the first year of implementation. Therefore, there has to be done future research in order to find out whether all organizations are solely profiting of the EFQM Model in internal results. A larger sample should also need to be analysed.

Moreover, the paper concluded that in every organization (of the sample) there can be found sustainability in a certain degree. This could be further researched by conducting interviews with managers in order to dive deeper in the commitment of sustainability within organizations. In addition, there is a limitation as there could only be German and English sustainability reports taken into account. Future research could therefore examine also sustainability reports, which are in different languages to add to this study. The EFQM Model 2019 will also help in diving deeper to this aspect.

Lastly, there has been done research towards the relationship between ISO 9001 and the EFQM Model. This paper assumed that the ISO 9001 was present in an organization before or latest at the same time as the EFQM Model first got implemented, as only then the ISO 9001 could have a positive effect on the EFQM Model. Further research should be conducted regarding the external performance of organizations which are both awarded with the EFQM Model and certified by the ISO 9001 in order to support Heras-Saizarbitoria, et al., (2011) research, who concluded that the ISO 9001 are implemented for internal and external reasons, while the EFQM Model solely is implemented in regards to internal motivations.

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ANNEXES

Annex 1. Sub-criteria EFQM Model 2013

Sub-criteria	Meaning
Sub 1a	The management acts as role models and evolves the mission, vision and ethics
Sub 1b	The management specifies, monitors and encourages the progress of the organization's management system and performance
Sub 1c	The management is involved with external stakeholders
Sub 1d	The management encourages to a culture of excellence
Sub 1e	The management ensures to lead through change effectively as well as to have an in general flexible organization
Sub 2a	By considering the expectation of internal and external stakeholders, a strategy is established
Sub 2b	Strategy is established on knowing capabilities and internal performance
Sub 2c	Supporting policies for the strategy are refined and implemented
Sub 2d	Supporting policies are announced and observed
Sub 3a	The organization's strategy is backed up by people plans
Sub 3b	People are developed according to their potential and skills
Sub 3c	People are loyal, involved and authorized
Sub 3d	Communication is effective throughout the organization
Sub 3e	In the organization is a system of rewards and recognition in place
Sub 4a	Suppliers are navigated for sustainable gain
Sub 4b	Finances are navigated to ensure sustained results
Sub 4c	Equipment and resources are used and handled in a sustainable manner
Sub 4d	Technology is used to help the strategy
Sub 4e	In order to develop the organization's capability, information and knowledge are navigated to help the decision making
Sub 5a	Processes are managed to improve stakeholder value
Sub 5b	Products and Services are improved to be able to give highest value for customers
Sub 5c	Products and Services are adequately advertised
Sub 5d	Products and Services are manufactured, provided and administered
Sub 5e	Customer relationships are administered and improved
Sub 6a	Evaluation of the customer's impression of the organization
Sub 6b	Evaluation of performance tracers: internal measurement to observe and increase performance of the organization's external customers
Sub 7a	Evaluation of people's impression of the organization
Sub 7b	Evaluation of the performance tracers: internal measurement to observe and increase performance of the organization's people
Sub 8a	Evaluation of society's impression of the organization
Sub 8b	Evaluation of the performance tracers: internal measurement to observe and increase performance of the organization's relevant society stakeholders
Sub 9a	Key strategic results: key financial and non-financial results, which confirm the success of the organization's strategy
Sub 9b	Key performance tracers: key financial and non-financial tracers, which have been used to survey the organization's operational performance

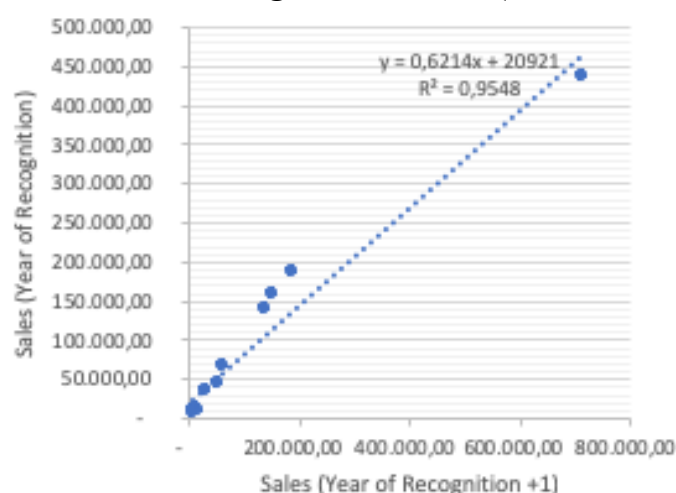
Source: elaborated by the author from EFQM, (2013)

Annex 2. Sub-criteria EFQM Model 2019

Sub-criteria	Meaning
Sub 1.1	Develop the mission and vision
Sub 1.2	Recognize stakeholders needs
Sub 1.3	Know the ecosystem, the capabilities and the greatest objections
Sub 1.4	Establish Strategy
Sub 1.5	Outline and instil a governance and performance management system
Sub 2.1	Manage the organization's culture and cherish values
Sub 2.2	Design the background for change
Sub 2.3	Empower creativity and innovation
Sub 2.4	Align and involve in purpose, vision and strategy
Sub 3.1	Customers: establish sustainable relationships
Sub 3.2	People: attract, involve, evolve, maintain
Sub 3.3	Business and governing stakeholders: assure and sustain consecutive support
Sub 3.4	Society: take part in evolvement, wellbeing and prosperity
Sub 3.5	Partners and suppliers: establish relationships and guarantee support for creating sustainable value
Sub 4.1	Create the value
Sub 4.2	Announce the value and market the value
Sub 4.3	Provide the value
Sub 4.4	Determine and instil the overall experience
Sub 5.1	Steer performance and control risk
Sub 5.2	Convert the organization for the future
Sub 5.3	Steer innovations and apply technology
Sub 5.4	Utilize data, information and skills
Sub 5.5	Navigate assets and resources

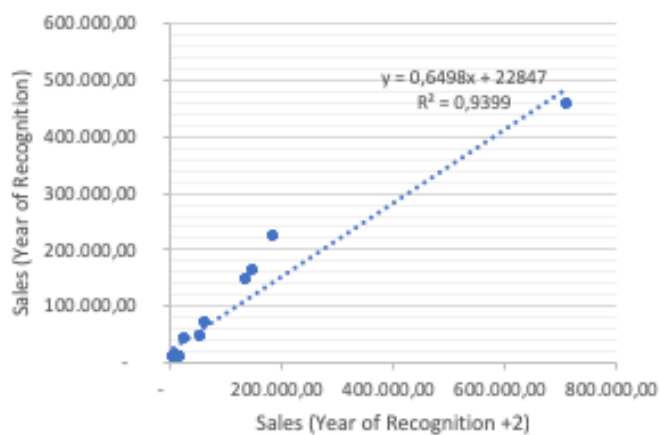
Source: elaborated by the author from EFQM, (2019b)

Annex 3. Linear Regression of 2011 (Year of Recognition +1)



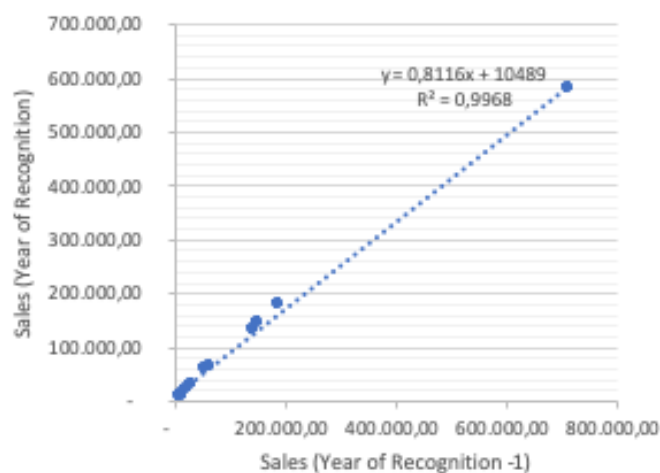
Source: Own elaboration

Annex 4. Linear Regression of 2011 (Year of Recognition +2)



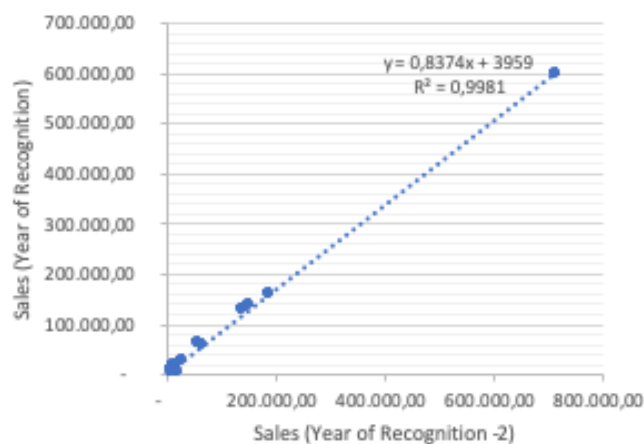
Source: Own elaboration

Annex 5. Linear Regression of 2011 (Year of Recognition -1)



Source: Own elaboration

Annex 6. Linear Regression of 2011 (Year of Recognition -2)



Source: Own elaboration