

PM Role on Sustainability Objectives¹

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Short Abstract

Very often, sustainability is rooted in the genes of companies, establishing in-house programmes and projects that aim to achieve a level of sustainability over time that is integrated into corporate strategies.

The concept of sustainability initially originated in relation to the environment but recently it has been also implemented in other areas such as social impact and good governance. These three macro aspects are recognised by the acronym E.S.G - Environmental, Social, Governance - and are also indicators that allow to analyse the activity of a company, not only on financial aspects, but also from an environmental, social, and good governance perspective.

Companies will have to move from a model in which they simply consume materials, energy, time, and human resources skills to one in which they instead manage a responsible relationship with materials, energy, and people values. It will be necessary to go through a very important transition to prepare their organisation, their production infrastructure, their people, and their governance to support this new model.

The role of the PM in these transitions is of fundamental and absolute importance. The research will focus on the following topics:

- Identification.
- PM & Sustainability.
- Environmental.
- Social.
- Governance.

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The purpose of the entire research is to analyse the current situation and to assess the maturity of project managers and organisations with regards to the topic of sustainability, measuring in particular ESG (Environmental, Social and Governance) aspects and establishing whether these criteria are used within the project management context.

With this data and information, it will be possible to identify which components have the greatest potential for improvement, and it will be possible to make project managers and organisations aware of project sustainability aspects.

The Department of Innovative Technologies (DTI) of the University of Applied Sciences and Arts of Southern Switzerland (SUPSI), as a training and research institute, will therefore be able, on one hand, to define courses or study programmes to fill these gaps; on the other hand, to continue to disseminate useful information and content on the subject and to raise awareness in organisations of the importance of sustainability in project management.

Keywords: sustainability, project manager, role, ESG, sustainability project

Paper type: Academic Research Paper

1 Introduction

Very often, sustainability is rooted in the genes of companies, establishing in-house programmes and projects that aim to achieve a level of sustainability over time that is integrated into corporate strategies.

The concept of sustainability initially originated in relation to the environment but recently it has been also implemented in other areas such as social impact and good governance. These three macro aspects are recognised by the acronym E.S.G - Environmental, Social, Governance - and are also indicators that allow to analyse the activity of a company, not only on financial aspects, but also from an environmental, social, and good governance perspective.

Companies that choose to adhere to the E.S.G. protocol with international standards (e.g., the UN Sustainable Development Goals) are going to focus on these three macro aspects, guaranteeing the compliance with certain measures and setting goals to be pursued in the medium and long term.

Companies will have to move from a model in which they simply consume materials, energy, time, and human resources skills to one in which they instead manage a responsible relationship with materials, energy, and people values. It will be necessary to go through a very important transition to prepare their organisation, their production infrastructure, their people, and their governance to support this new model.

The role of the PM in these transitions is of fundamental and absolute importance, and for this reason, the Department of Innovative Technologies (DTI) of University of Applied Sciences and Arts of Southern Switzerland (SUPSI), launched this study in September 2022, focusing on how the role of the PM can be a key player in corporate sustainability goals.

2 Methodology

2.1 Design/methodology/approach

We developed our study through a survey, which targeted a selected group of companies located in Switzerland and Italy, which operate in different sectors, are of different sizes, ranging from small, medium, large, and operate both locally and globally.

The survey was conducted through an online form of 25 questions. The answers were then analysed by the research participants; the data were first analysed in their complexity and then analysed in detail to focus on certain themes.

More specifically, we decided to focus our research on Ticino (Italian part of Switzerland) and Lombardy (northern Italy). This is because these two regions have a lot in common in terms of the economic situation and the types of companies that are present. In addition, these two regions constitute the catchment area of SUPSI, the promoter of this research.

Previous SUPSI Project Management graduates were also invited to participate in the survey.

The survey covered the following topics:

- **Identification:** Information about the context in which the participant operates, information about the company and its structure and how it integrates sustainability policies into the company, often linking them to their brand.
- **PM & Sustainability:** Information on how the PM is integrated in the activity of achieving Sustainability goals, information on how the PM can intervene within the company to raise awareness and promote E.S.G. issues.
- **Environmental:** How PM can impact sustainability on an ecological level related to the environment
- **Social:** How PM can implement aspects of social sustainability on Diversity, Equity, and Inclusion issues

- Governance: How PM's contribution can generate value and positively impact the various levels both from an organisational and strategic point of view and good governance by creating innovation, research, and incubation.

2.2 Goal of the research

The purpose of the entire research is to analyse the current situation and to assess the maturity of project managers and organisations with regards to the topic of sustainability, measuring in particular ESG (Environmental, Social and Governance) aspects and establishing whether these criteria are used within the project management context.

What emerged from our research is that only large companies have resources dedicated solely to the topic of sustainability; small and medium-sized companies, on the other hand, must somehow make do with the resources they already have in house. Very often, therefore, it is the project manager who finds himself in this role. Even in the case of large companies, however, a control and monitoring role is still assigned to the project manager.

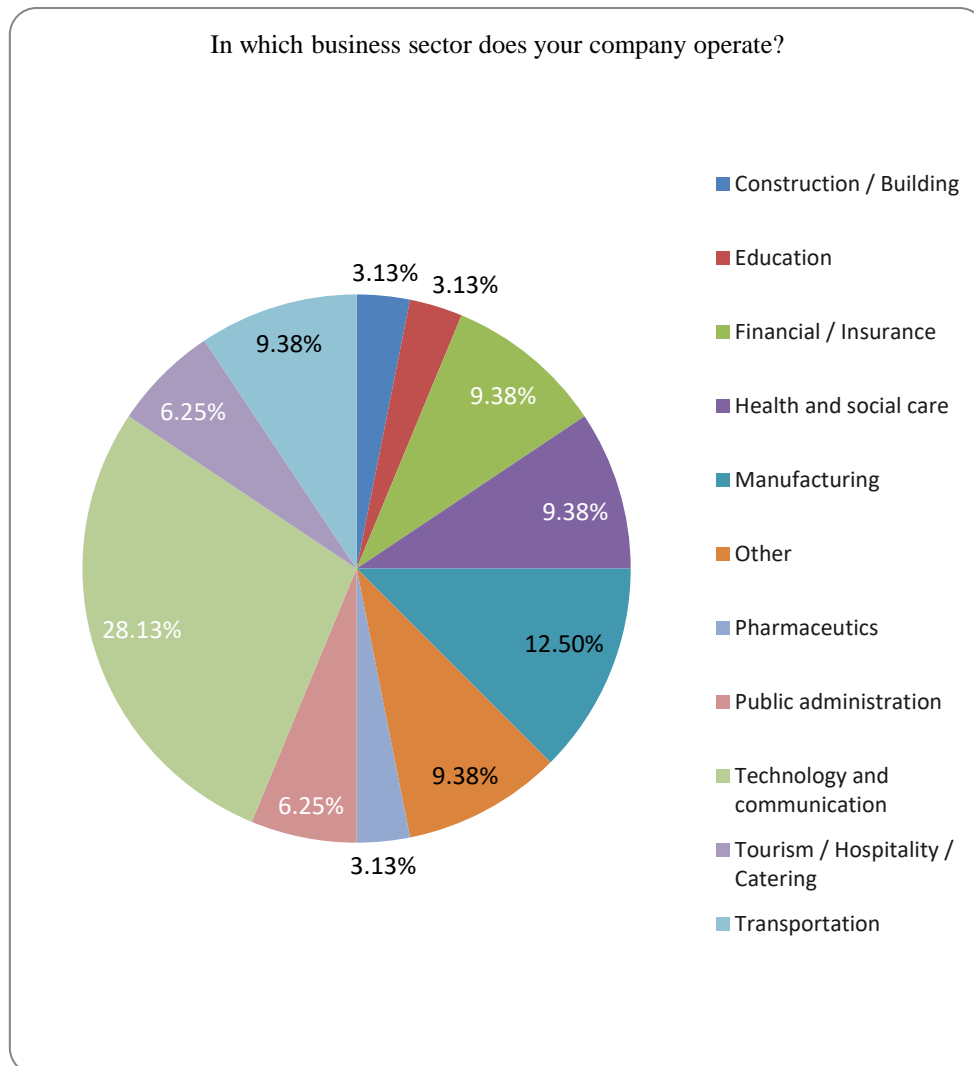
For this reason, it was important for our research to interview project managers.

3 Results of the survey

In this chapter we will describe the results obtained by considering the interaction between the survey questions according to the objectives set.

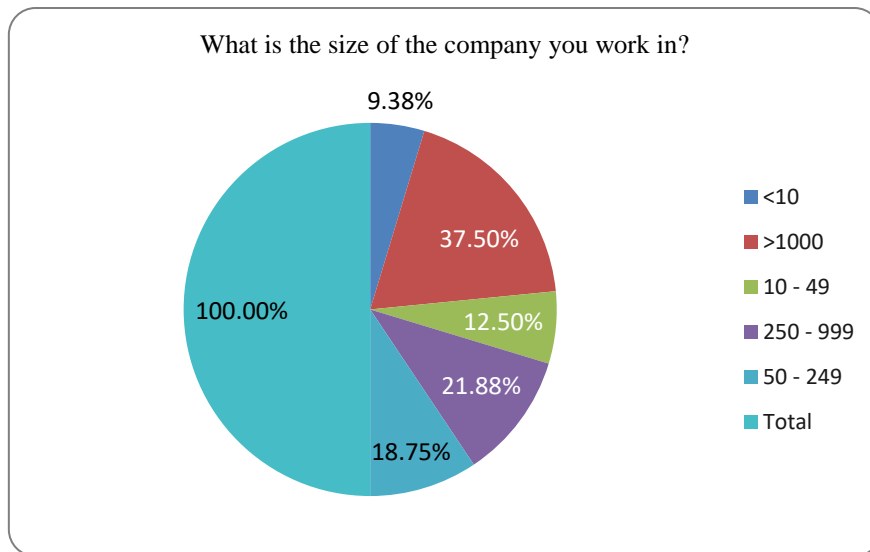
3.1 Identification

Referring to the identification area, the results show that a large proportion of the respondents, 28.3%, work in the technology and communications sector. The remaining sectors that see a good number of employees are Manufacturing with 12.5% followed by Finance / Insurance, Health and Social Care, Transport / Circulation all with 9.38%.



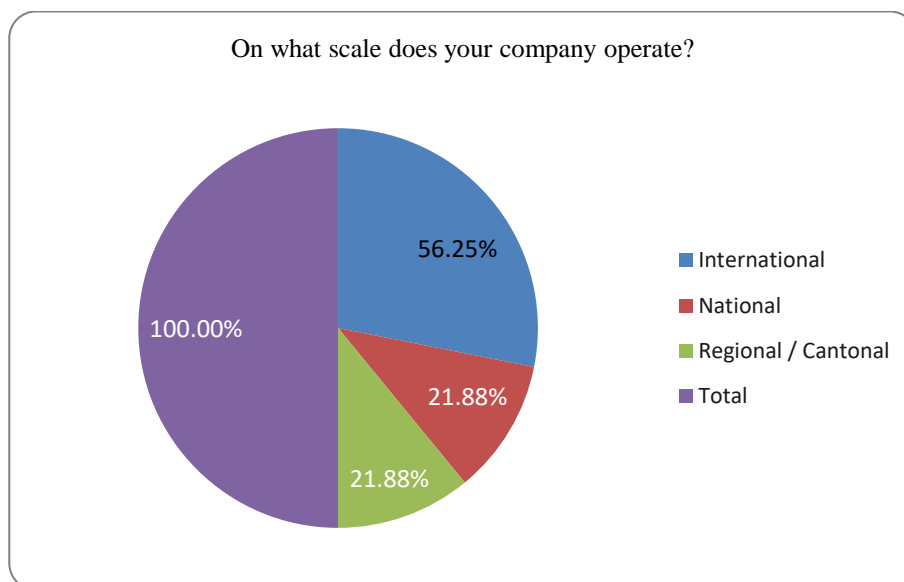
3.1.1 Identification – Company sector

Most of the organizations that took part in the survey have a size of 1000 employees or more (large organizations) with 37,50% of respondents. Other categories have similar values.



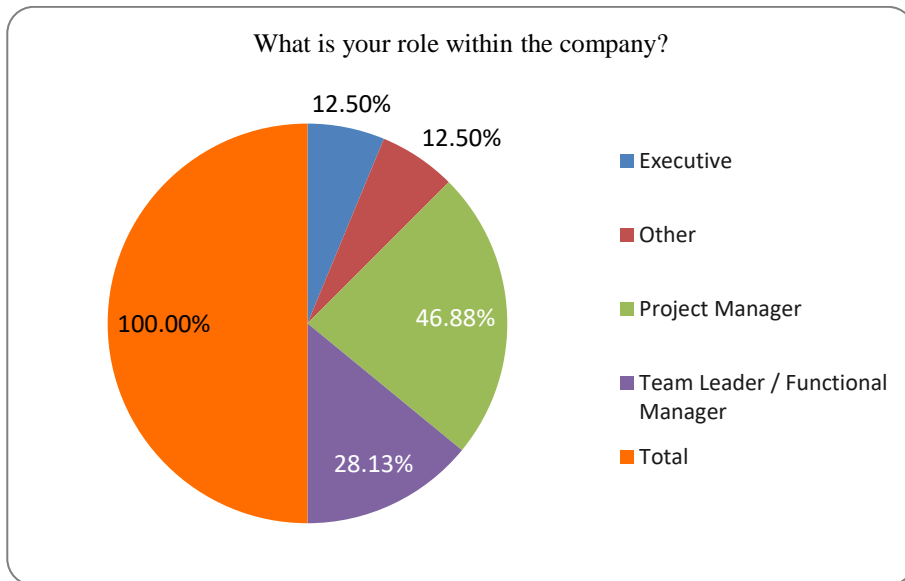
3.1.2 Identification – Company size

Most of the respondents work in companies that operate on an international scale, with 56.25% of respondents. We can see that the National scale and regional scale are similar with the 21.88% of respondents.



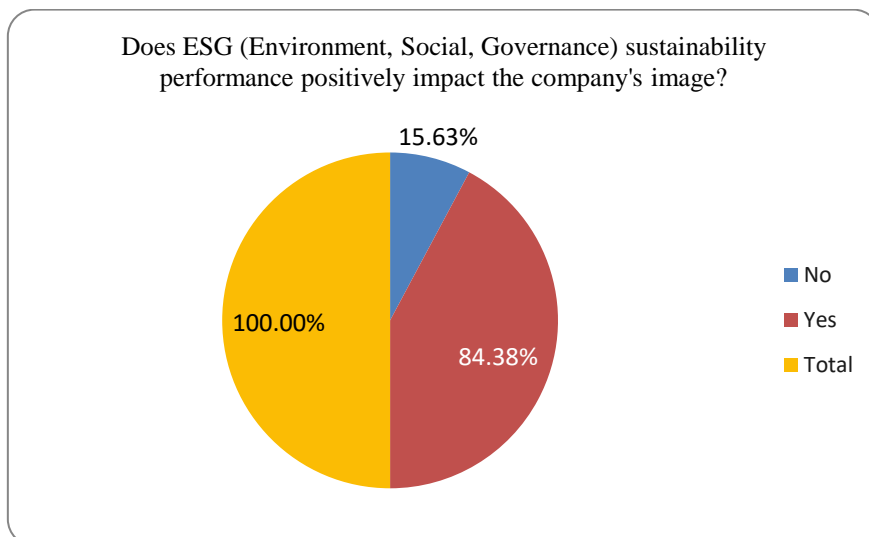
3.1.3 Identification – Company scale of operation

Most of the respondents are employed in the company as project managers; 46.88% of the respondents belong to this category. We also see a good proportion of team leaders/functional managers, 28.13%.



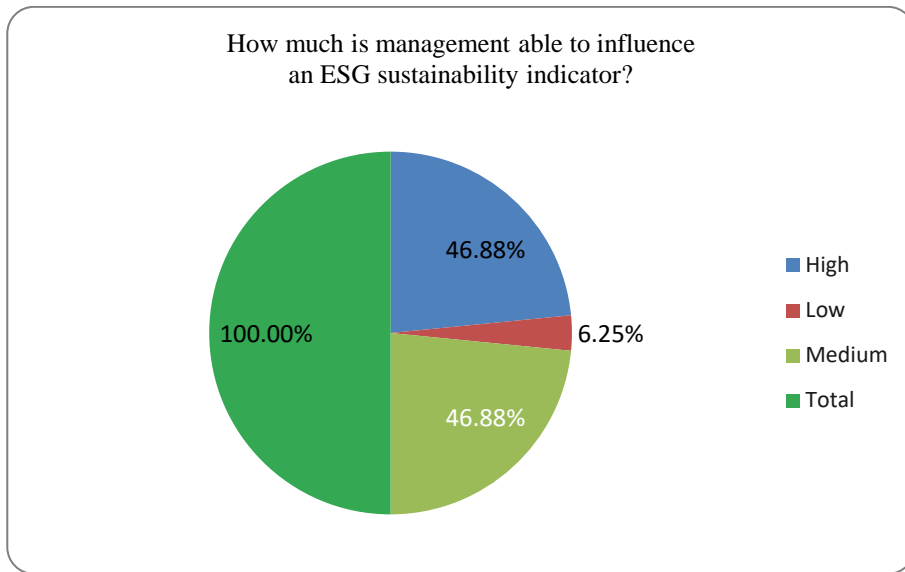
3.1.4 Identification – Roles of the respondents

A large proportion of respondents believe that ESG (Environment, Social, Governance) sustainability performance has a positive impact on the company's image. As many as 84.38% of the respondents, in fact, found the impact to be positive.



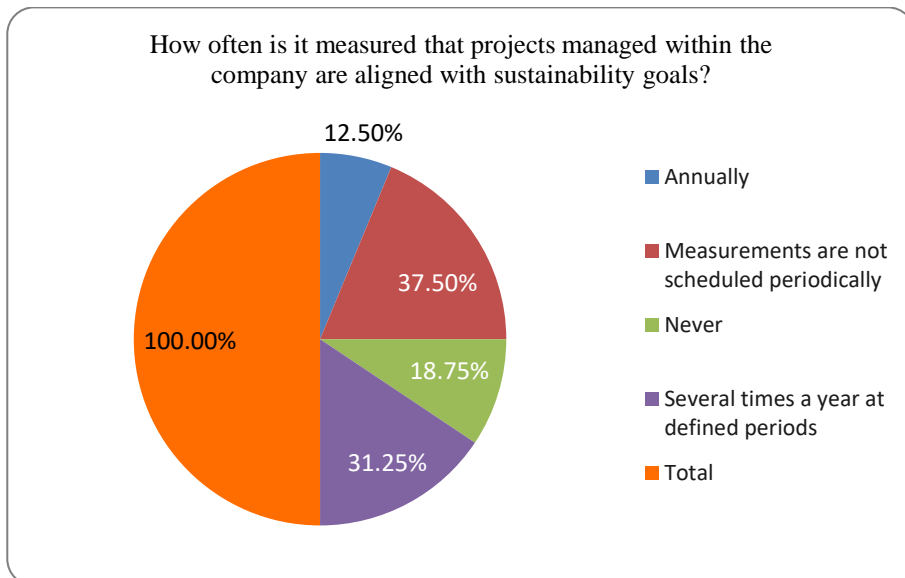
3.1.5 Identification – Impact of ESG factors on company's image

As far as management influence is concerned, only a very small percentage of 6.25% considered it to be zero with respect to ESG indicators. Almost all respondents believe that management can influence an ESG sustainability indicator.



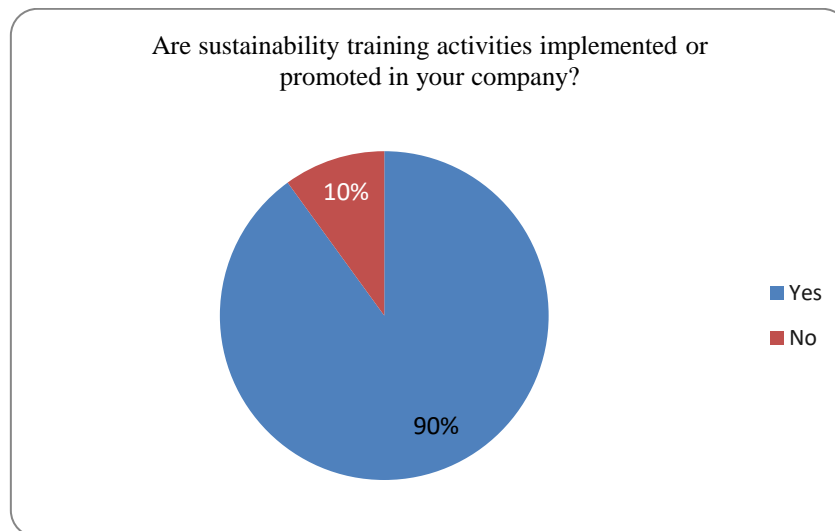
3.1.6 Identification – Influence of the management on the ESG factors

Another question in the survey aimed to establish how often the alignment of managed projects with sustainability goals is measured. It is good to appreciate that in 81.25% of the cases, measurements are actually carried out.



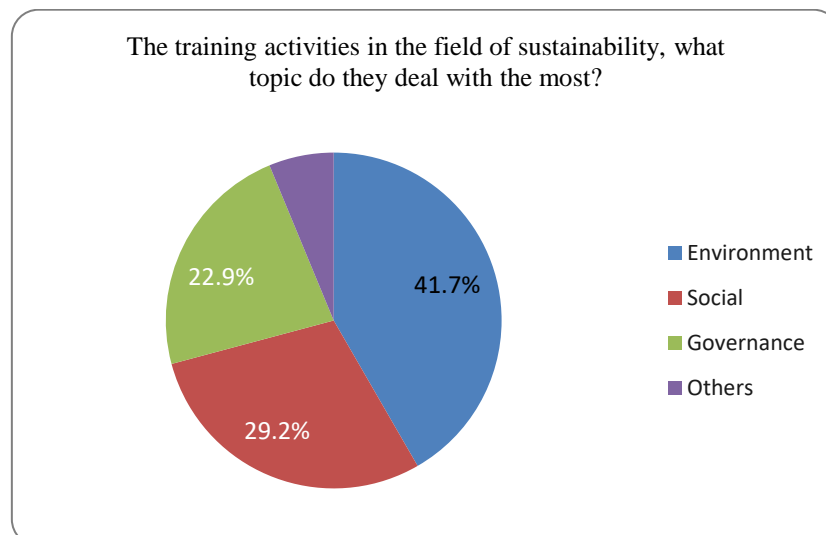
3.1.7 Identification – Frequency of monitoring

Finally, the survey showed that in 90% of companies, training activities dedicated to sustainability are implemented or promoted.



3.1.8 Identification – Presence of training activities

In 41.7% of the cases, it is training in the environment sphere, while in 29.2% of the cases, it is the social sphere that is concerned. The governance sphere closes with 22.9%.



3.1.9 Identification – Topics of training activities

3.2 Project managers and sustainability

When we talk about sustainability, we mean the possibility of executing a project, which involves the balance between resource consumption and resource regeneration. But we

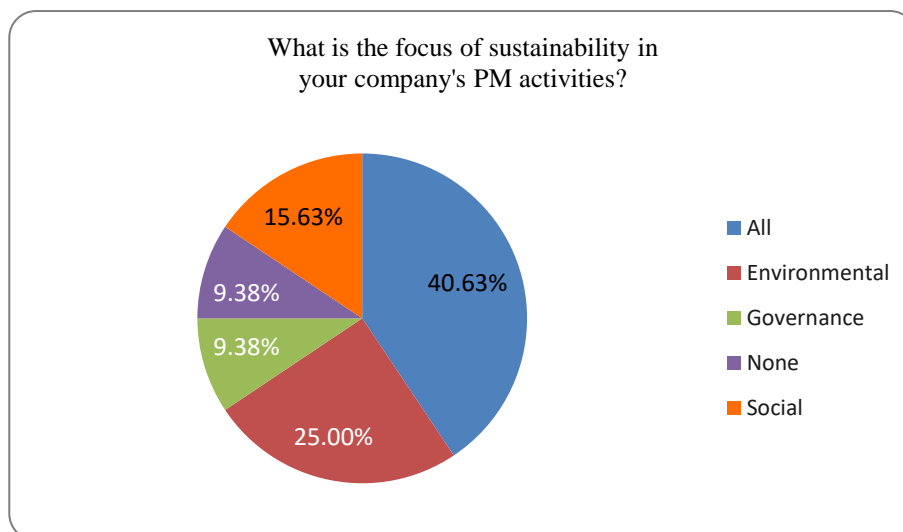
also mean the possibility of performing an action that can satisfy our needs, without compromising the possibility for generations to come to do the same.

We could divide the whole concept into three parts:

1. Environmental sustainability: its prerogative is to ensure the stability of the environment and our planet, therefore, to maintain ecological and respectful processes that do not pollute or waste.
2. Social sustainability: it consists of balancing the available resources without compromising the possibilities for generations to come.
3. Governance sustainability: the development of integrated and rigorous sustainability is based on a solid and efficient governance structure. This is the basis for initiating a solid process of shared value creation between the parties.

All the companies interviewed are unanimously supportive of this concept. Sustainability is therefore taken into account in a project, so that it can be developed and adapted to current needs.

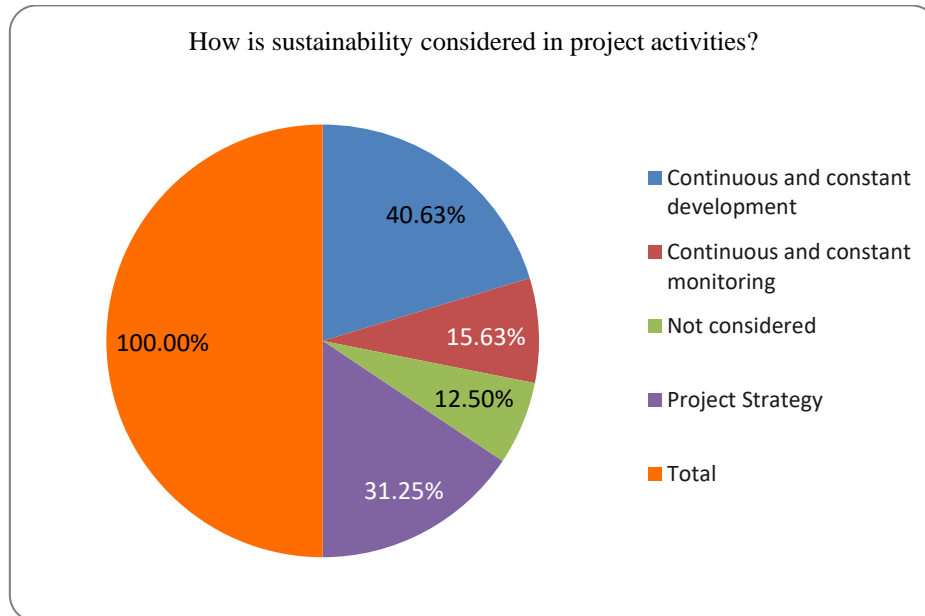
The chart 3.2.1 aims to understand what the focus of sustainability is in companies.



3.2.1 PM and Sustainability – Focus of company's PM activities

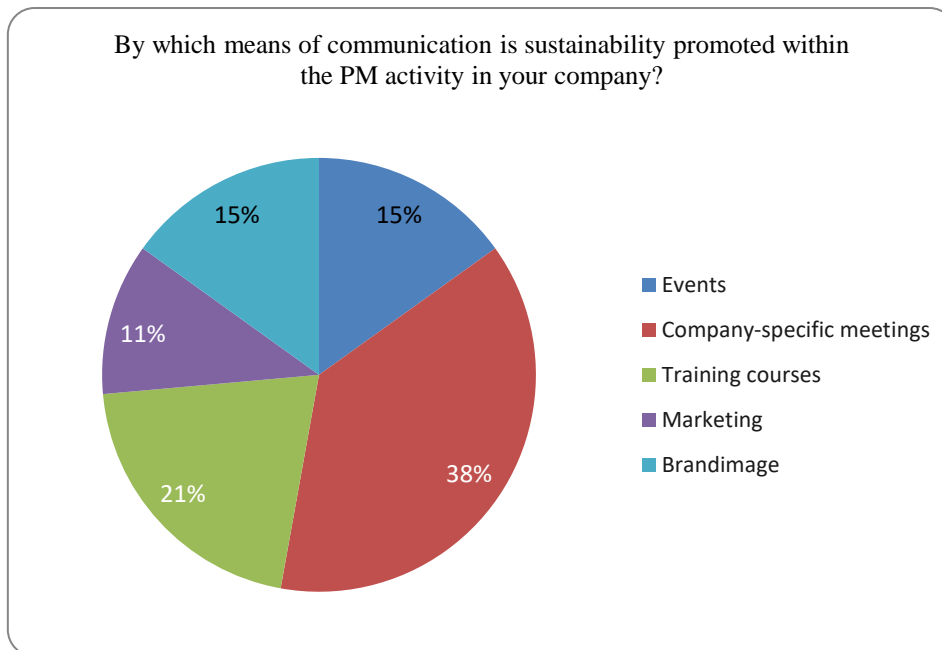
The majority of the companies surveyed give unanimous importance to all parts, demonstrating a great deal of responsibility for creating sharable and sustainable results. If we were to look at individual topics, environmental sustainability is the one that is taken into consideration the most; this highlights a greater sensitivity to the environment and pollution of our planet. The social theme is also of undoubted importance in a project in order to develop and complete it. Governance, on the other hand, is given marginal

consideration. Finally, it is pleasing to note that the total absence of sensitivity to sustainability is a marginal condition, 12,50% of the companies involved in the survey.



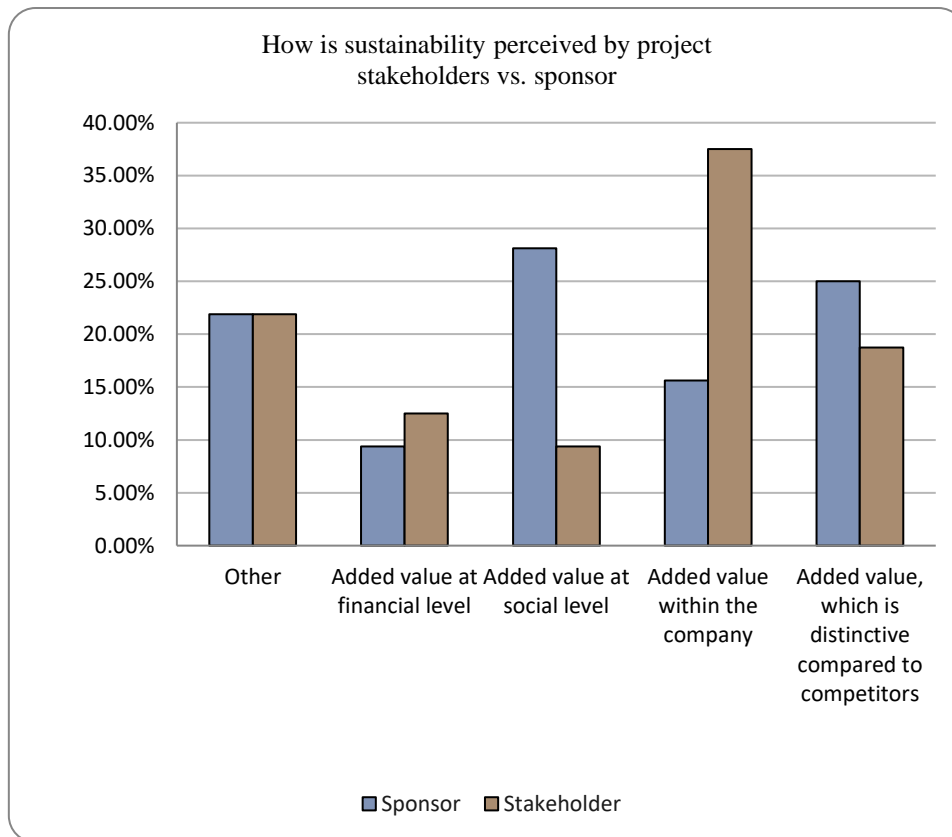
3.2.2 PM and Sustainability – Sustainability in project activities

As can be seen in the graph 3.2.2, the majority of respondents see sustainability as continuous and constant development; there is a continuous commitment to improvement, documentation, and discussion in order to enhance and deepen every aspect. As we see in the graph, sustainability is also seen as an integral part of the project strategy; it is here that decisions can be influenced in order to achieve the set sustainability goals. The monitoring factor is also important; this confirms that companies want to have a monitoring process that assesses whether the set aspects are actually achieved.



3.2.3 PM and Sustainability – Sustainability promotion

When it comes to the promotion of sustainability in the company, the graph 3.2.3 shows that in most cases (38%) this takes place during specific company meetings. On these occasions, employees are explained in detail about the company's efforts and various sustainability-related activities are promoted. Moreover, in the case of large companies, these take the form of important moments of confrontation between various departments. Other equally popular means of communication are events (also open to external audiences), information paths and brand image activities. Pure marketing is not as popular as a tool; this is understandable, since marketing is usually used for external communications, whereas more specific and customized tools are used for communications to employees, in this case to project managers.



3.2.4 PM and Sustainability – Sustainability perception

The chart 3.2.4 compares sponsor and stakeholder perceptions of value and highlights the objectives they have on sustainability. Stakeholders are more interested in creating added value within the company, while for sponsors this is not a priority area. On the contrary, the Sponsor tends to put more emphasis on the social aspect, believing that it is the contribution to society as a whole that gives more prominence to their project. Finally, both parties consider the distinctive added value compared to competitors to be relevant. In this sense, it is the common opinion of stakeholders and sponsors that conscientiously setting and committing to sustainability values can give advantages in terms of visibility and reliability towards customers. The added value on the financial level, in the end, is only marginally taken into consideration; undoubtedly setting sustainability goals can lead to an increase in turnover and margin, but these are not the main drivers of sustainability in project management.

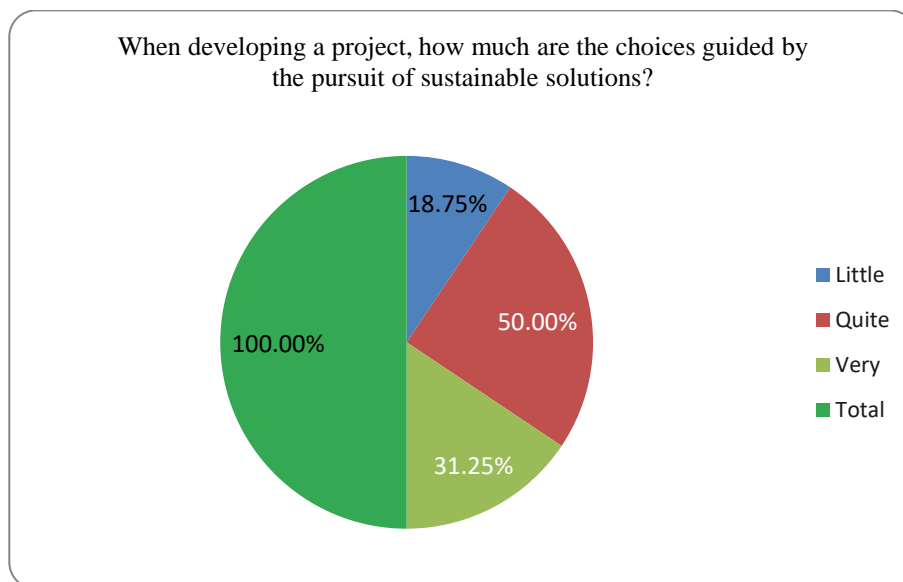
3.3 Environmental

Concepts related to environmental sustainability were certainly one of the first aspects introduced in companies as they are very concrete and tangible actions by the entire society.

The concept of environmental sustainability refers to the entire process of change in which the utilization of resources, the investment plan, the orientation of technological development and institutional changes are all in tune and enhance the current and future potential to meet society's needs and expectations.

This means not only being green or emitting less CO₂, but a whole process that considers waste, the market (demand), the life cycle of a product (durability), the materials/resources used, and the production process.

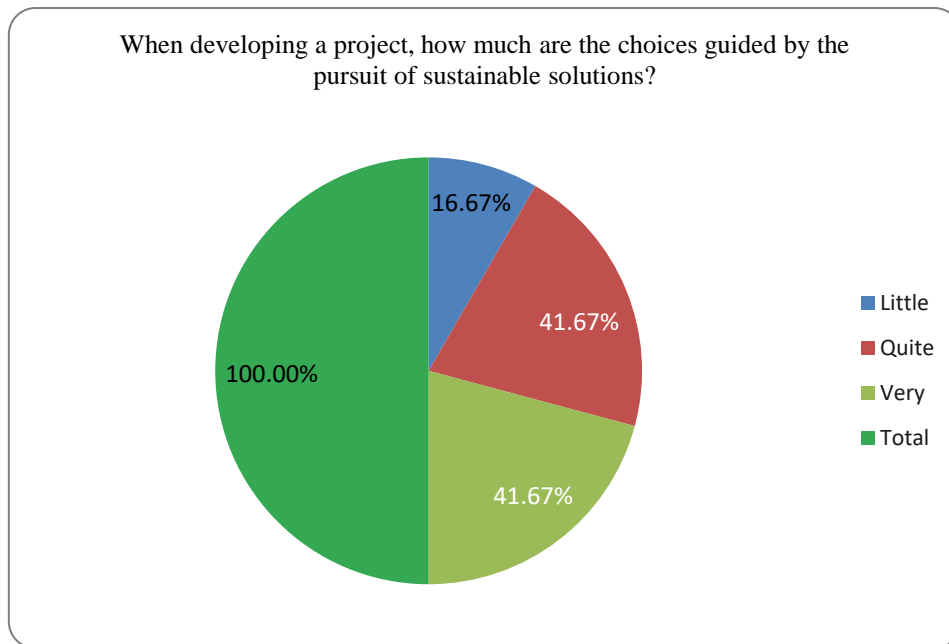
Consequently, at the beginning of a new project, these aspects must be analysed and taken into account to achieve the objectives and help the company to be sustainable during the evolution of the project and in the life cycle of the future product or service once the project is completed.



3.3.1 Environmental – Sustainable solutions during project development (total sample)

Taking the global sample of respondents as a reference, 68.75% of them state that little (18.75%) or quite (50%) consideration is given to the search for sustainable solutions during the project phases, so it does not seem to be an established, consolidated practice to assess sustainability aspects from the beginning of a project.

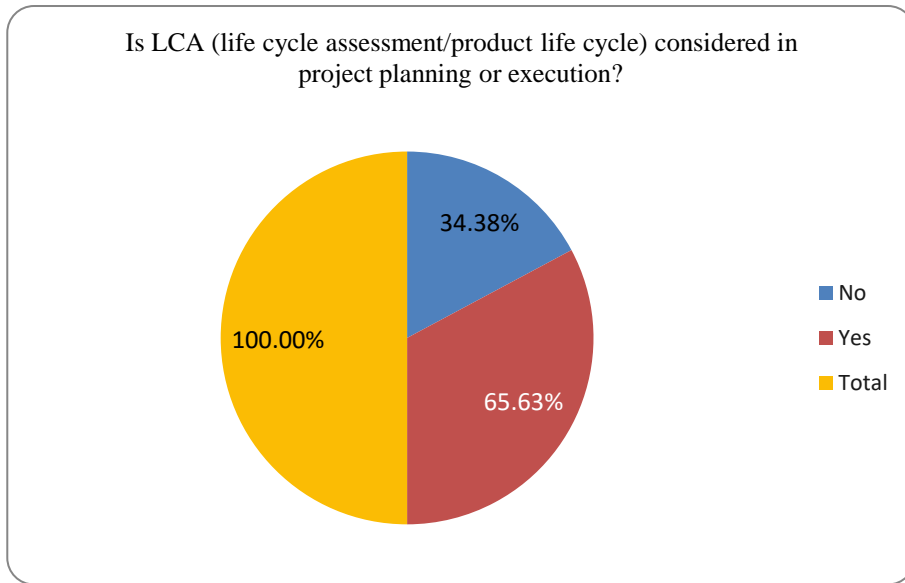
If we filter our sample, we notice that company size influences this practice. Indeed, large companies (>1000 employees) indicate that for 41.67%, sustainability aspects are highly considered during the design phases, so there seems to be a greater sensitivity on this issue.



3.3.2 Environmental – Sustainable solutions during project development (big companies with more than 1000 employees)

Life Cycle Assessment (LCA) is a methodology for assessing the environmental impacts associated with all phases of the life cycle of a commercial product, process, or service. The chart 3.3.3 shows that 65.63% of the companies in which our respondents operate, LCA is considered, compared to 34.38% who do not take these aspects into account.

Again, filtering by company size shows that the larger the company, the more life cycle assessment is considered during the design stages to have a more sustainable product, service, or process.

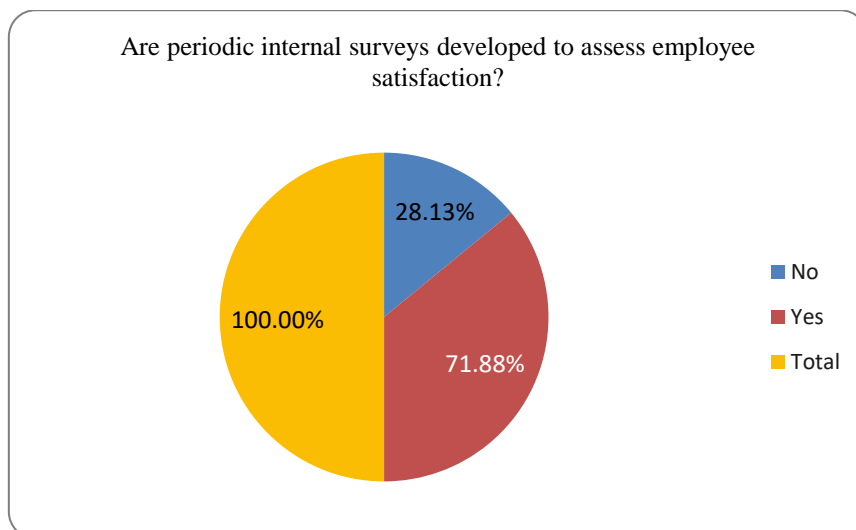


3.3.3 Environmental – LCA consideration

3.4 Social

Large organisations consider the social impact for their employees, and in recent years, even SMEs are making efforts to adopt a socially sustainable philosophy that influences the market to their advantage.

As we can see from the chart 3.4.1, 71.88% of companies develop surveys to understand the needs of their employees.



3.4.1 Social – Employee satisfaction monitoring

Conducting periodic surveys to assess employee satisfaction is important for several reasons:

- Internal surveys can help the PM to identify possible problems and to organize a clearer and more precise workflow, such as: processes, list of activities to be carried out, timelines, identification and exchange with stakeholders and choice of KPIs to monitor the progress of the project.
- For the PM, regularly collecting feedback from the team and acting on the results can help improve the retention of the team working within the project.
- Creating a fulfilling work environment increases productivity and quality of work and generates the lowest number of errors within the project, speeding up internal processes, tracking the progress of the project, increasing the well-being of the team, communication transparency brought by the PM, but above all the focus on the most valuable activities.
- Satisfied employees improve the reputation of the company and the ability to attract new specialized talent to join the project team.

In addition, the company that assesses the satisfaction of its employees can create benefits packages tailored to their needs; unfortunately, as we can read from the chart above, 28.13% of organisations do not consider a screening on the well-being and needs of their employees.

Companies that aim for social responsibility maintain a complex balance between ecological philosophy, personal convictions, and the goal of achieving maximum productivity.

In this sense, a duality of non-financial factors related to the social responsibility of PMs must be considered, which interact with each other for business success:

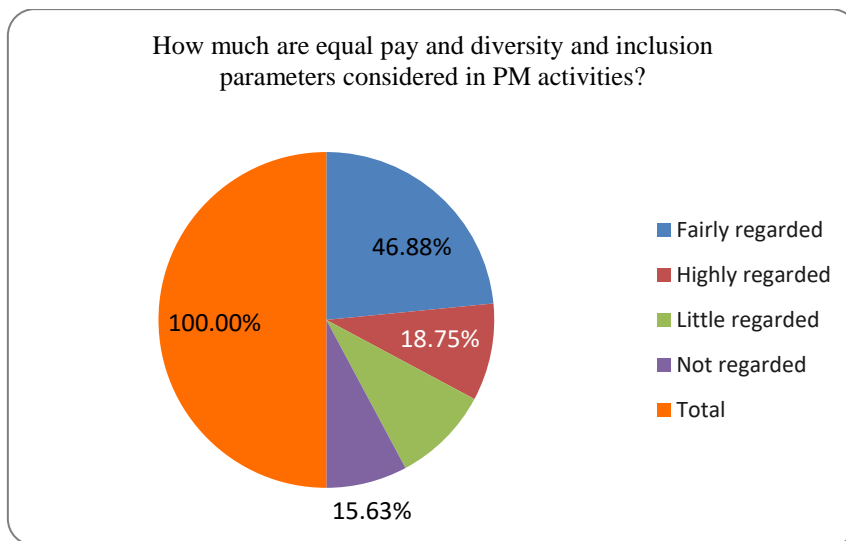
- On one hand, we find the company and the environment in which it operates. Here, the PM has the ability to improve customer relations and create greater loyalty; enhance brand image and brand reputation with investors; help reduce legal and regulatory risks; and develop better performing external relationships based on mutual satisfaction.
- There are several practices that companies together with PMs can adopt to become socially sustainable, for example:
 - engaging in social responsibility projects, such as donations to non-profit organizations.
 - sponsorship of charity events or volunteer programmes.

On the other hand, organizations can also work to improve conditions for their employees, such as providing fair wages; health benefits; workers' rights and gender equality; a healthy and functional work environment; safety at work; satisfied employees; improved turnover; attracting new talent and inclusion of people.

Again, there are many tools that a company can adopt in cooperation with PMs in the development of activities, in order to gain solid engagement in the work team and provide good welfare. Here are some examples:

- insurance policies for health, life, disability, and other contingencies.
- wellness programmes including gym, yoga classes and nutritional counselling.
- work flexibility with the option to work from home, have flexible working hours or share work with colleagues.
- on-site childcare or discounts for external services.
- training and professional development to help employees improve their skills and advance their careers.
- financial incentives such as bonuses, awards, salary increases or stock options.
- counselling and assistance with personal or family problems, psychological support, or legal advice.
- paid leave and time off for family emergencies, holidays, or sick days.
- collaborative networks such as platforms for linking various digital tools and sharing materials and projects, chat rooms, videoconferencing, corporate social.

From the chart 3.4.2, we can see how much the PM's activities consider equal pay, gender equality and the inclusion of people in project teams.



3.4.2 Social – Equal pay, diversity, and inclusion as parameters

Within the survey area, only 18.75% of the companies are visibly oriented towards sustainability and the PM implements crucial factors in creating a cohesive and motivated team to achieve project goals as effectively as possible.

To ensure social sustainability, appropriate measures must be taken, such as:

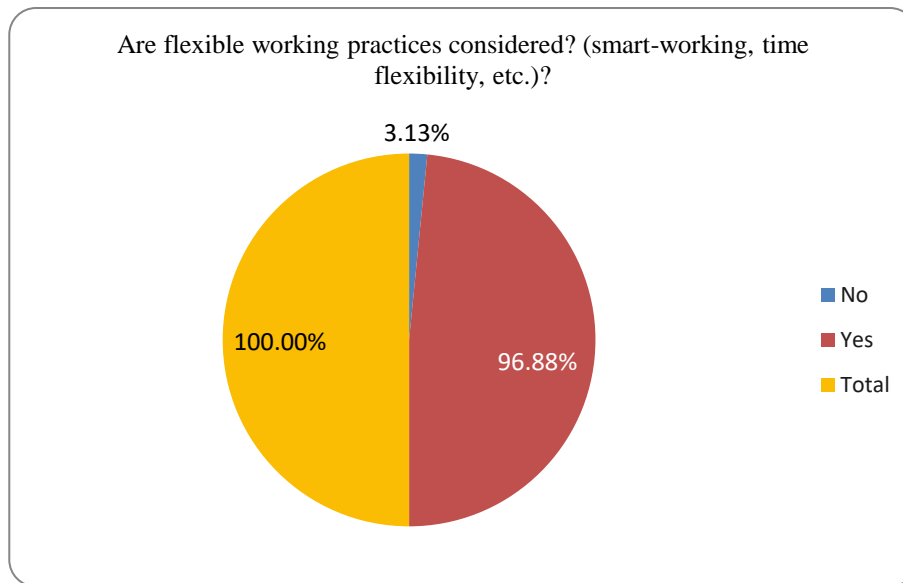
- the systematic review of recruitment and promotion policies, including those of work teams.
- staff training to prevent unconscious bias.
- the creation of a safe and inclusive working environment in the operational team.
- the introduction of parental leave policies.
- other reconciliation measures such as work life balance that facilitate teamwork and limit conflicts.

In summary, attention to the equality variables is crucial to the success of the project, as they contribute to a collaborative, innovative and motivating working environment that fosters good results.

46.88% of the companies apply these criteria sufficiently, but not yet satisfactorily. In the end, we can clearly see that many organizations are not in line with the ESG indicators aimed at sociality. In fact, 18.75% consider the above-mentioned aspects too little and 15.63% totally neglect the fundamentals of employee welfare, projects, and the organization itself.

In the last chart 3.4.3, however, we see that as many as 96.88% of organizations apply flexible forms of work.

Responses to the changes that have taken place in recent years have accompanied this evolution with dynamic scenarios and different approaches from the traditional organization.



3.4.3 Social – Flexible working

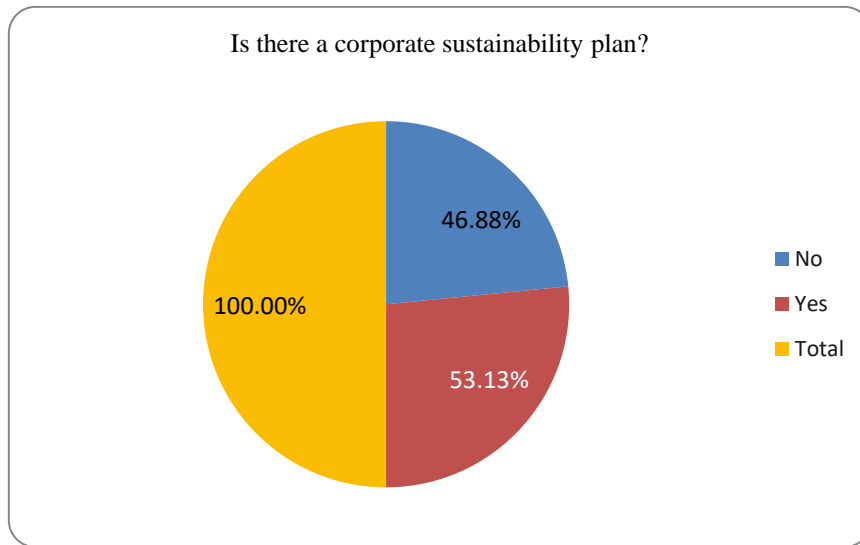
Smart working and work flexibility in project development are now part of corporate welfare policies that bring both benefits to employees in terms of improved work life balance, and to companies in terms of reduced maintenance costs, reduced absenteeism, and productivity growth, but above all it creates the desire to increase engagement, attraction of so-called talents, and bringing within the new modality an improvement in organizational well-being and business processes.

Therefore, putting the person at the centre and building relationships based on trust and mutual development between PM and employee embraces this new approach to work and contributes to providing multiple personal and professional benefits.

3.5 Governance

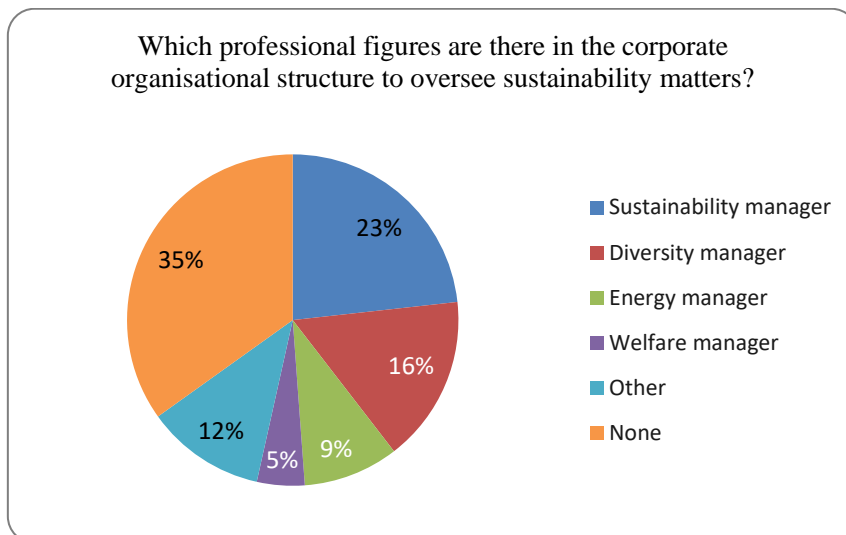
Project management is a critical factor for the success of any initiative, including those with sustainability objectives. Project managers play a crucial role in the governance of a project, and their decisions can significantly impact the sustainability outcomes of a project. Therefore, it is essential to understand the role of project managers in achieving sustainability objectives and the governance structures that facilitate their decision-making processes.

As the chart 3.5.1 depicts, almost half of the companies included in the survey have not a corporate sustainability plan. Conversely, the 53% indicated that their company has a plan in place, meaning this information can be used to gain insights into the current state of sustainability practices in the surveyed companies. These insights could be used to understand that the development of strategies to improve sustainability practices in the business world is not yet common practice.



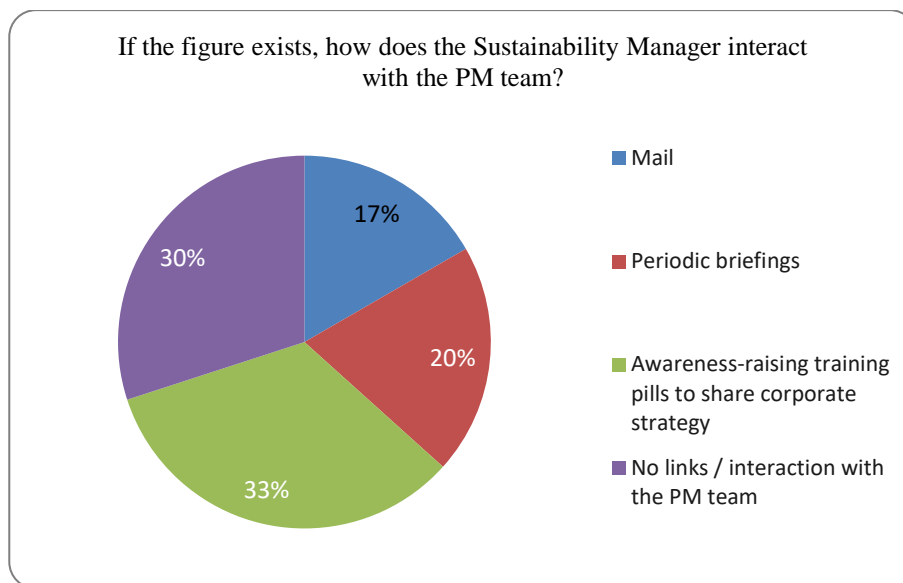
3.5.1 Governance – Corporate sustainability plan

The following chart 3.5.2 shows how the different professional figures are distributed within the companies, if any. Almost 35% of the companies surveyed have no person responsible for sustainability issues. The other percentages are distributed as follows: 23.3% by the Sustainability manager, 9.3% by the Diversity manager, 4.7% by the Welfare manager and 11.6% by other figures within the company. These values allow us to better understand the maturity of these companies and their attitude towards sustainability. The results suggest that there is a growing trend among companies to assign responsibility for sustainability to at least one person.



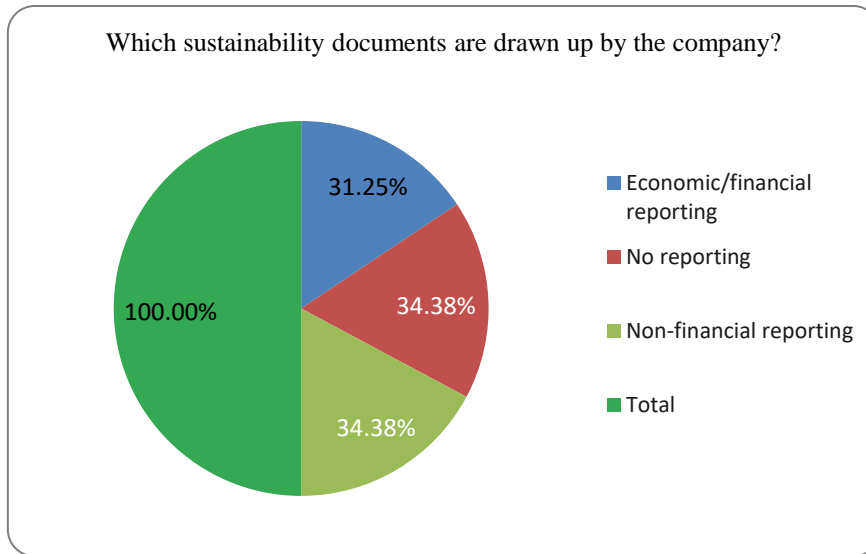
3.5.2 Governance – Professional figures to oversee sustainability

The chart 3.5.3 may explain how communication to and from the sustainability manager to the project management team usually works. Most are handled through awareness-raising training and the sharing of company strategy (33.3%). About 20% of companies organize regular meetings to discuss sustainability issues and 16.7% use written form, such as e-mail. What remains is that almost $\frac{1}{3}$ have no interaction between the sustainability manager and the PM team. This situation lays the foundation for improvement in terms of communication and collaboration between the sustainability manager and the PM team in many companies.



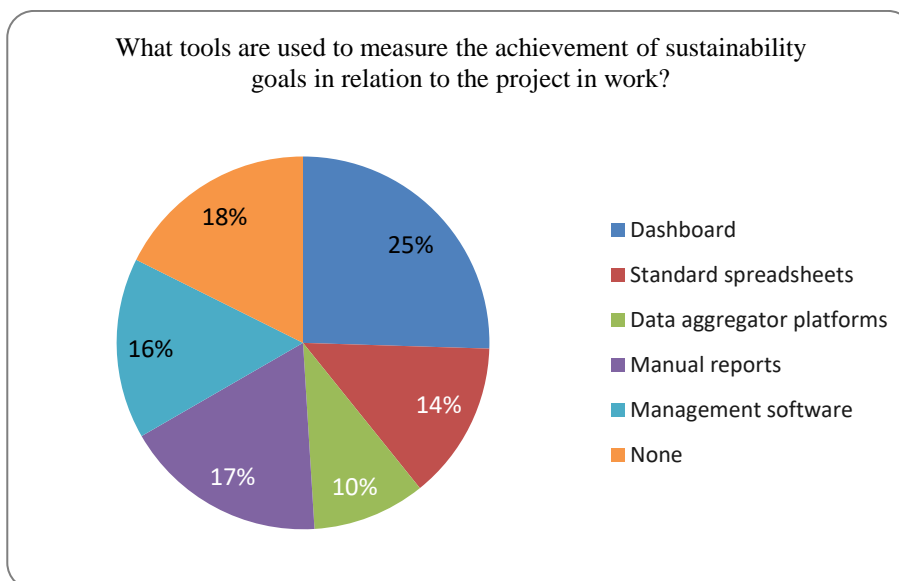
3.5.3 Governance – Interaction between sustainability manager and PM team

This chart 3.5.4 can help us understand if there are companies that write sustainability-related documents and which ones. As illustrated, the division is one third for each of the fields, i.e., financial reports, non-financial reports, and no reports. This information can be useful to understand the extent to which companies are reporting on their sustainability practices.



3.5.4 Governance – Sustainability documents

One of the most important charts is the 3.5.5 below, which shows that for 25.5%, dashboard tools are the most used to measure and verify the achievement of sustainability goals, followed by manual reporting (17.6%). Management software and spreadsheets are used by 15.7% and 13.7% of the companies respectively, while data aggregation is used by 9.8%. Furthermore, for about 17.6%, there are no measures to understand the achievement of objectives. This leads to the conclusion that there is still room for improvement in the use of tools and systems that can help companies understand the status and results of their sustainability targets.



3.5.5 Governance – Measuring tools

3.6 Additional feedback

To further confirm the validity of the survey responses, we asked an experienced project manager to comment on some specific topics.

We interviewed Stefano Santambrogio, who now holds the position of “Continuous improvement and sustainability manager” at Argo Heraus, a company with more than 15,000 employees, which operates internationally in the metallurgy and precious metals sector.

Santambrogio believes that the survey results are quite representative of the current situation of companies regarding sustainability management. However, there are some areas where, in Santambrogio’s opinion, companies could focus more on improving their sustainability practices.

In particular, Santambrogio believes that the interface between the sustainability manager and the project management team is of key importance for the integration of sustainability into the core activities of the company. Therefore, companies should invest in training and raising the awareness of the project management team on sustainability and corporate strategy.

Furthermore, the use of automated measurement tools could be an important step to monitor the achievement of sustainability goals and to identify areas for improvement. Companies should consider using dashboards, management software and data aggregator platforms to improve their sustainability management.

Finally, Santambrogio believes that reporting and promoting a culture of sustainability are important to improve transparency and communication with stakeholders. Companies should consider drafting sustainability documents and invest in training and awareness-raising for all employees on sustainability.

In general, Santambrogio’s opinion is that companies should actively engage in integrating sustainability into their core business activities and promote a more sustainable future. Taking these actions could be an important step towards this goal.

4 Conclusions

Large international companies have led the way by adopting ESG goals as a corporate philosophy in order to boost their attractiveness and reputation. The PM activity, a focus in organizations undergoing transformation, plays a central role in aligning project management and support for sustainability goals.

To support these objectives, new specialized figures such as Sustainability, Diversity, Energy and Welfare managers have emerged to ensure targeted skills, minimize errors and training costs, and create added value for the company and the product/service. Active and effective communication regarding the monitoring of achieved sustainability results also plays a primary role in ensuring that stakeholders are always informed about the economic and cultural efforts that the company implements on a daily basis during the course of its operations.

This summary document makes explicit how companies are structuring (or intend to re-structure) their operations to minimize any possible sources of negative environmental, social, and economic impact.

Implementing and promoting a business strategy devoted to sustainability and supporting consumers who increasingly seek out companies in line with these values reinforces the following benefits:

- better cost management.
- more careful use of economic and non-economic resources (raw materials, diversity, inclusion).
- better control of problematic situations.
- increased quality of products and services.
- positive effects on corporate reputation.
- greater stakeholder adherence.
- new possibilities for innovation and economic development.

Following the example of large companies, today even SMEs are moving towards a more sustainable philosophy, investing in change and their project managers taking on an increasingly multifaceted role to ensure that projects are aligned with ESG sustainability goals.

Sustainability has therefore become a key factor in project management and represents an important strategic asset for companies, but also and above all for investors who recognise its importance by selecting companies that have solid policies towards employees and thus invest in those with the best prospects for growth and lowest risks. The PM must ensure that projects are implemented in a sustainable manner, using renewable energy sources, reducing waste and residue, and minimizing pollution, biodiversity protection, work ethics, health, worker safety and other ESG factors.

To achieve and maintain the principles of environmental, social and governance sustainability, an appropriate checklist must be implemented:

- Has the company embraced an environmental policy with clear commitments and constant monitoring?

- Has the organization directed management and employees to determine and design environmental policies?
- Are environmental policies continuously monitored and improved?
- What actions are taken to ensure health and safety in the workplace?
- Have policies and standards for respecting diversity and preventing discrimination been determined?
- Have employees and managers been trained to follow the rules of the chosen safety policy?
- Has positive collaboration between the company and the community been promoted?
- Is the board of directors diverse and inclusive?
- Is there a committee to promote compliance with ESG criteria?
- Are there systems in place to measure ESG performance?

The checklist must be incorporated into all activities and policies that may impact the organization's sustainable change.

In particular, he/she must work with the organization's various departments to ensure that ESG policies and strategies are integrated into decision-making processes and projects to ensure strategic alignment and monitoring of progress. He/she must contribute to the creation, enhancement, and dissemination of a sustainable culture, communicate transparently and regularly on the impact of progress towards sustainability goals within the project and the company, propose and implement sustainability-related initiatives to increase awareness and accountability of his/her team. Finally, the PM must strengthen the link between internal and external communication, creating connections between different stakeholders.

For PM and project implementation this is a radical change, but what does this mean for companies?

Analysing the responsibilities of the PM as described above, it becomes clear that those organizations that cannot afford a specialized managerial figure dedicated to the topic of sustainability must rely on their PM, who will have to:

- indicate guidelines for behaviour and cultural change whereby trust autonomy, delegation and freedom become the basis for building a new working relationship.
- employ new technologies to overcome obstacles and manage information to always make it accessible.
- support the acquisition of new knowledge and skills in order to do their own job by applying ESG concepts within projects.

Ultimately, PMs, in order to be able to implement sustainable projects consistent with corporate policies and ESG criteria, should possess skills that are complementary and

evolving to the role, otherwise they risk 'Green Wishing', i.e., how PMs would like to but are not able to because they lack adequate training that would lead them to apply these criteria with confidence, ease and involvement.

Therefore, as the survey also shows, there is a need to provide companies with ongoing training paths that are as modular and PM-specific as possible, promoting structured methods to align company policies with an ongoing execution roadmap, so as to track performance against strategies, objectives, costs, human resources, investments, and results. Training must relate to artificial intelligence and automation, learning through the introduction of innovative management tools that are at the same time agile in terms of application such as: management software, dashboards, data aggregator and reporting platforms, but also AI and automation devices.

Lastly, but very important is the synergy/connection between figures specialized in the implementation of a sustainable strategy and project teams. Here again, the figures who play a major role in the conception of a medium/long-term sustainability strategy must raise awareness and increase techniques and working methods to combine the strategy with project objectives and activities.

Otherwise, there is a risk that the PM will only define environmental and short-term aspects, losing the vision of an overall design in a sustainable sense and trespassing into greenwashing.

Therefore, looking to the future, the knowledge and competence to achieve ESG objectives will be indispensable in the project manager's operational activity, which will become increasingly centred on the development of adaptive organizations.

References

T. H. Davenport, L. Prusak, *Working knowledge: How organizations manage what they know*, Boston, Harvard Business School Press, 1998.

Barney, J.B., (1991) “*Firm Resources and Sustained Competitive Advantage*”, *Journal of Management*, Vol. 17, No. 1, pp. 99-120.

B. Marr, G. Schiuma, *Measuring and Managing Intellectual Capital and Knowledge Assets in New Economy Organisations*, in *Handbook of Performance Measurement*, London, M. Bourne, Gee, 2001.

Peter McAteer, *Sustainability Is the New Advantage*, Anthem Environment and Sustainability Initiative, 2019.

Sandrine Dixson-Declève, Owen Gaffney, Per Espen Stoknes, Jørgen Randers, Jayati Ghosh, Johan Rockström, *Earth for All, A survival guide for humanity*, New Society Publishers, 2022.

Martin Abraham, *Encyclopedia of Sustainable Technologies*, Elsevier, 2017.

Wayne Visser, *The Top 50 Sustainability Books 1st Edition*, Routledge, 2009.

G. Levin, *Benefits – a necessity to deliver business value and a culture change but how do we achieve them?* Paper presented at PMI® Global Congress 2015—North America, Orlando, FL. Newtown Square, PA: Project Management Institute, 2015.

John Hagel III, John Seely Brown (JSB), *Work environment redesign*, Deloitte Consulting, 2013.

Niels Adler and Nicolas Magnette, *Pricing during inflation: Active management can preserve sustainable value*, McKinsey & Company, 2022.

John Hagel III, John Seely Brown (JSB), Maggie Wooll, *A pragmatic pathway for redefining work*, Deloitte Consulting, 2019.

Seth Stevenson, *Sustainable and inclusive growth: A weekly briefing*, McKinsey & Company.

Sven Smit, Anu Madgavkar, Kevin Russell, Jonathan Woetzel, Tracy Francis, Kweilin Ellingrud, Vivek Lath, Phillia Wibowo, Rebecca J. Anderson, *Toward a sustainable, inclusive, growing future: The role of business*, McKinsey & Company, 2022.

Magnus Tyreman, *Europe’s progress on sustainable, inclusive growth*, McKinsey & Company, 2022.

Katy Bartlett, Steffen Fuchs, Mark Kuvshinikov, Dick Westney, Peter Trueman, Simon Webb, *Managing project portfolios to unlock trapped capital*, McKinsey & Company, 2021.

Shu'aib Mahomed, Praveen Matta, Piotr Pikul, Filippo Rossi, Samer Theodory, *A new paradigm for project planning*, McKinsey & Company, 2020.

Shankar Chandrasekaran, Steffen Fuchs, Shakeel Kalidas, Gerhard Nel, and Prakash Parbhoo, *An ecosystem of partners: The foundation of capital project excellence*, McKinsey & Company, 2021.

Michael Birshan, Roel Hoyer, Alex Katen-Narvell, Dana Maor, *Resilient performance management in volatile times*, McKinsey & Company, 2022.

Ruth Heuss, Tip Huizenga, Mark Kuvshnikov, Prakash Parbhoo, *Action needed: Help us measure project sustainability*, McKinsey & Company, 2021.

Gudrun Cartwright, Tim Doubleday, *Delivering Smart Growth: a business strategy for a sustainable economy*, Business in the Community, 2019.

Nick Ismail, *Building to last: the industrial internet of things and sustainability*, Information Age, 2019.

J. Radeke, *Sustainability Managers Could Lead the Fourth Industrial Revolution*, Stanford Social Innovation Review, 2017.

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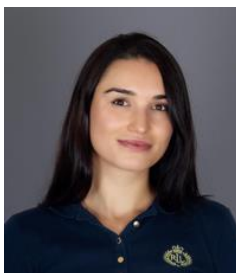
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