



Modernizing Performance Appraisal Practices:

A Consulting Project for Teixeira Duarte
Engenharia e Construções, S.A.

João Salgueiro

Dissertation written under the supervision of Professor Rute Xavier.

Dissertation submitted in partial fulfilment of requirements for the
MSc in Management with a Specialization in Strategy,
Entrepreneurship, and Impact, at the Universidade Católica
Portuguesa, 2nd of January 2024.

Resumo

O modelo de avaliação de desempenho de uma empresa é crucial para uma gestão eficaz dos recursos humanos. Na Teixeira Duarte Engenharia e Construções, S.A., as práticas de avaliação permaneceram inalteradas desde a sua implementação. Portanto, há uma necessidade de modernizar as práticas de avaliação, garantindo o acompanhamento das práticas contemporâneas e o crescimento e desenvolvimento dos trabalhadores.

Este estudo oferece recomendações para atualizar o modelo de avaliação de desempenho da TDEC para as suas funções corporativas. Para estruturar esta pesquisa, foram formuladas cinco questões-chave. Inicialmente, são explorados os vários componentes e atores envolvidos em modelos de avaliação de desempenho, culminando com a pergunta "O que deve a TDEC implementar e melhorar no seu modelo de avaliação de desempenho?". Esta questão fundamental orienta a pesquisa para estratégias práticas e acionáveis para modernizar o sistema de avaliação.

Este estudo é sustentado por uma extensa pesquisa, recorrendo a literatura e jornais de alto prestígio, complementada com uma análise de benchmarking a empresas dentro e fora da indústria da construção. A metodologia envolve principalmente a realização de entrevistas para coletar dados qualitativos.

O estudo conclui que o modelo atual de avaliação de desempenho, baseado em quatro critérios principais, é inadequado. Sugere-se a criação de subcritérios específicos dentro de cada critério principal para refinar o foco da avaliação. Além disso, recomenda-se a integração de autoavaliação obrigatória, reconhecendo o seu impacto significativo nas avaliações dos funcionários. Também é aconselhada a implementação de um mecanismo formal de feedback, abordando uma lacuna crucial no modelo existente.

Título: Modernização das Práticas de Avaliação de Desempenho: Um Projeto de Consultoria para a Teixeira Duarte Engenharia e Construções, S.A.

Autor: João Vasco Henriques Salgueiro

Palavras-chave: Modelo de avaliação de desempenho; Teixeira Duarte Engenharia e Construções, S.A. (TDEC); Componentes; Atores; Entrevistas; Práticas atuais; Critérios de avaliação; Autoavaliação; Feedback; Análise de benchmarking.

Abstract

A company's performance appraisal model is vital for effective human resources management. In Teixeira Duarte Engenharia e Construções, S.A., the appraisal practices have remained unchanged since their implementation, therefore, there is a need to modernize and improve the appraisal practices within the company. Ensuring it keeps pace with contemporary standards and effectively supports its workforce's growth and development, is extremely important.

This study aims to offer insightful recommendations to modernize TDEC's performance appraisal model for its corporate functions. To structure this research, five key questions were formulated, with the initial question exploring the various components and actors involved in performance appraisal models. The study culminates with its most crucial question: "What should TDEC implement and improve in their performance appraisal model?" This question guides the research towards practical, actionable recommendations for modernizing TDEC's appraisal model.

This study is sustained by extensive research, focusing on high-quality literature and journals, and complemented by a benchmark analysis of companies both within and outside the construction industry. The methodology primarily involves conducting interviews to collect qualitative data.

The study concludes that the current performance appraisal model, based solely on four main criteria, is inadequate. It suggests the introduction of specific sub criteria within each main criterion. Also, the integration of mandatory self-assessment is recommended, recognizing its significant impact on employee evaluations. Furthermore, the implementation of a formal feedback mechanism is advised, addressing a gap in the existing model. These enhancements aim to create a more effective, modern, and comprehensive appraisal model.

Title: Modernizing Performance Appraisal Practices: A Consulting Project for Teixeira Duarte Engenharia e Construções, S.A.

Author: João Vasco Henriques Salgueiro

Keywords: Performance appraisal model; Teixeira Duarte Engenharia e Construções, S.A. (TDEC); Components; Actors; Interviews; Current practices; Appraisal criteria; Self-assessment; Feedback; Benchmark analysis.

Acknowledgements

I extend my heartfelt gratitude to my family for their unwavering support, love, and guidance throughout my academic journey, culminating in this successful study. Their belief in me has been invaluable.

A special thanks to my girlfriend Maria, whose motivation and trust have been a guiding force, challenging me to excel.

I am deeply grateful to my supervisor, Rute Xavier, for her invaluable insights and guidance, which have been crucial in shaping this project.

I also thank Madalena França, Nuno Bento, and Nuno Costa from Teixeira Duarte, S.A., for their support and insights, which were pivotal in developing this project, and to the directors of Teixeira Duarte Engenharia e Construções, S.A. for their participation and time.

To those who contributed anonymously, your input has been vital, and I thank you warmly.

Lastly, my friends deserve a special mention for their support and for making my academic years unforgettable, particularly those who helped immensely during the writing of this dissertation. Your camaraderie has been a source of happiness and strength.

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1. Introduction

In the dynamic landscape of the construction industry, there is a complex chain of production and corporate positions that go from skillful laborers to strategic decision-makers. In such a diverse business environment that includes micro enterprises and big corporations, Human Resources Management (HRM) emerges as a foundation for sustainable growth and organizational success. For industry giants, such as Teixeira Duarte Engenharia e Construções, S.A. (TDEC) this holds particularly important to effectively orchestrate production operations with management functions.

TDEC is an emblematic Portuguese family corporation with a global presence and a renowned history. Having started as a small construction business over 100 years ago, it has grown to be a major organization in its core business, going through generations that have each left their mark in the company's books. The values of TDEC, rooted deeply in the family's tradition, are marked by a focus on diversification, innovation, and forward-thinking. A significant strategic move was made in 2010, when TDEC became part of the larger conglomerate Teixeira Duarte S.A. (TD), which expressed the family ambition to expand into a multitude of industries. Today, under the broad umbrella of TD, TDEC is still a pivotal and major component the group. TD has then extended its reach into various sectors, including concessions and services, real estate, hospitality, distribution, and automotive. With a presence in 22 countries and managing 173 different entities (Teixeira Duarte, S.A., 2022), TD is an example of global reach and versatility. This expansion not only reflects the group's strategic diversification but also underscores its commitment to innovation and excellence in every venture it undertakes, with its long history starting with TDEC.

Throughout its more than 100 years of existence, TDEC has been exposed to significant crises and recessions, as well as periods of growth and recovery, which has made it a resilient and matured enterprise. The construction industry is particularly vulnerable to critical variables, such as fluctuating material costs, workforce seasonality, supply chain disruptions and investment availability (Alfadil, Kassem, Ali, & Alaghbari, 2022), which was notably tested during the COVID-19 pandemic. Despite a history of steady and sustainable growth, the pandemic severely affected the company's financial stability. After a period of positive net profits, the year 2019 marked the start of a downturn on TDEC's growth sustainability. The subsequent Ukrainian conflict and resulting high inflation reduced profitability. In the 2022 financial statement, Manuel Maria Calainho de Azevedo Teixeira Duarte, the group's Board of

Directors' chairman, observed that inflated construction costs led to losses in contracts lacking clauses for price adjustments in materials and labor. Additionally, Angola's economic downturn and the automotive industry's decline in the country are additional concerns at this point in time. However, the CEO highlights the consolidation of TD's presence in key markets like Portugal, Brazil, and Mozambique in 2022.

To sustain any company's growth, human resources have to follow the necessities of the business. TD has counted with 9489 employees across all activity sectors, at the end of 2022. Construction is the activity sector that employs the biggest number of people, totaling 53% of all the firm's employees. TDEC employees are mainly male, accounting for 81% of the workforce. However, TDEC now faces a critical problem which may affect the company's vision and strategy for the future. The performance appraisal model by which all employees' performance is measured is outdated and not flexible. The current model, designed 25 years ago, lacks major attributes and components that are critical for an effective, appropriate, and fair performance appraisal. As of now, and as this study will demonstrate later on, corporate employees are being evaluated on rather ambiguous and inadequate terms.

Therefore, the scope of this study is focused on the corporative functions of TDEC. It will mainly analyze the psychological, behavioral, technical, and organizational dimensions that must be considered during performance evaluation, while considering all the variables by which project management, strategic decision making, financial planning, and legal operations are influenced. To achieve final recommendations on how to improve the current appraisal practices, an internal and external analysis of TDEC were the next step to investigate how to update, and make the performance appraisal model more accurate and effective to evaluate in a transparent, consistent, and appropriate manner all the corporate section of TDEC employees'.

To accomplish meaningful results and provide appropriate, realistic and clear recommendations, five research questions will lead this study. The first question is: "What are the components and actors of performance appraisal models?". The second question must be: "What are the most common and existing models?". The third question should then be: "What are the current performance appraisal model and appraisal practices at TDEC?". The fourth question is "What performance appraisal practices have the main competitors of TDEC and other non-related corporations in Portugal implemented?". And finally, "What should TDEC implement and improve in their performance appraisal model?".

2. Literature Review

HRM has been researched extensively in the past time. Particularly, developing a study in the field of employee performance appraisal, such as this one, requires a thorough examination of existing research. By digging into past research and methodologies, it is possible to gain a serious understanding of what performance appraisal models have been investigated and implemented, and therefore, what practices and criteria might be the most suitable to implement in the performance appraisal of the corporate section of TDEC.

2.1. Job Performance Models

Primarily, scrutinizing models that conceptualize job performance and its dimensions is key to achieving base knowledge and start building up a thoughtful analysis. Numerous scholars have analyzed the foundational dimensions upon which job performance should be constructed. While unanimity in this domain remains elusive, three models have emerged that aptly characterize the essence of performance in the context of this project. However, an appropriate approach to differentiate these models is to divide them into four possible sets, which will make it easier to assess each model's suitability and relevance. The models can be crossed between occupational focus, which implies theories focused on specific job families or applicable across jobs, and developmental context of dimensions, to either being stand-alone dimensions or dimensions developed as part of a set of dimensions. (Viswesvaran & Ones, 2000).

After reviewing the four possible categories, the stand-alone dimensions crossed with applicable across jobs is the most relevant and most aligned with the purpose of this study. Within this category, three different models of job performance have been developed, which together, complement each other. In early times, job performance was limited to task performance, and Edwin Fleishman, as cited by (Viswesvaran & Ones, 2000), took different approaches on how to clarify which dimensions should be considered. "The four were: behavior description approach, behavior requirements approach, abilities approach, and task characteristics approach. (...) Moreover, According to Murphy (1989) task performance entails the accomplishment of duties and tasks that are specified in a job description." (Viswesvaran & Ones, 2000). This can be entitled as the Task Performance model.

As research on the topic of job performance appraisal started to build up, various researchers argued that much more than task performance should be taken into the equation of measuring and evaluating an employee's job performance. In result, the Organizational Citizenship

Behavior (OCB) model has added important dimensions to the previous discussion. OCB is the “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization” (Organ, 1997). Therefore, this model adds a human behavioral component to job performance, allowing to measure and evaluate considering noncontractual requirements of the position one performs in a company. Fundamentally, the OCB model attaches new dimensions to the Task Performance model, which include altruism, compliance, sportsmanship, courtesy and civic virtue.

However, it is explicit that only positive productivity has been addressed at this point. Negative productivity must also be considered in the job performance appraisal. The Counterproductive Behaviors model was developed with that intent, to add to the equation human actions that negatively affect one’s performance and ultimately harm the company’s effectiveness. Deviant behavior is perceived as being among the major drivers of financial loss and organizational distress. Defined as “voluntary behavior that violates significant organizational norms and in so doing threatens the well-being of an organization, its members, or both” (Robinson & Bennett, 1995). The same authors performed a multidimensional scaling study to properly classify which dimensions would accurately measure the impact of such performance. On that account, the results expressed four important dimensions: production deviance which includes actions such as leaving early, taking excessive breaks and intentionally working slow; property deviance, understood as sabotaging equipment, accepting kickback, stealing from the company and lying about hours worked; political deviance, which entails showing favoritism, gossiping about co-workers, blaming co-workers and harmful competing; and finally, personal deviance, which at a more individual level includes sexual harassment, verbal abuse, and stealing from and endangering co-workers (Robinson & Bennett, 1995).

These three models aggregated provide a great and strong basis for defining the most important attributes of job performance. By cross-examining all the characteristic performance includes, it is possible to make an relevant assessment on what criteria and components should be defined for the employee’s performance evaluation model, which will further enhance the company’s effectiveness and efficiency while pushing the employees to do and be better on their jobs. Consequently, achieving long-lasting and sustainable competitive advantage entails having an efficient and effective harmony between all aspects of the business. To achieve just that, human resources are arguably the most important topic to be discussed, not only in terms of having the right number of employees, but to attract the best talent and retain it within the organization.

“Imagine that a company’s goal is to grow and remain competitive over the long term. In this situation, companies must put in place a suitable performance measurement system, which will allow them to measure and assess every area of their activities in a planned and systematic manner” (Vuong & Nguyen, 2022).

2.2. Appraisal Components and Sources

The process of evaluating the performance of employees in a corporation requires various players and different inputs that must be dynamic and have a personalization component. Overall, we can identify two main actors in this process: the rater, who uses the appraisal model and procedures as a structure for its evaluation work; and the ratee, who will participate in the process and be subject to its practices and requirements.

Performance appraisal is heavily influenced by the perceptions a rater has on the work and attitudes of an employee (the ratee), and these “are shaped as much by the appraisal procedures (the system defined by the organization) as they are by those who execute them (the rater)” (Birtch & Chiang, 2010). Therefore, managing the perception of employees towards the procedure is also a key component of the performance appraisal model. In connection with this factor, studies have proved that reactions also play a key role in how an employee recognizes justice and adjusts its overall motivation and ultimately its work output. Scholars have identified that the ratees’ reactions are dependent on individual characteristics that include feedback orientation (Linderbaum & Levy, 2010) and intrinsic motivation (Kuvaas, 2006). However, as research has shown, raters are also affected by specific factors. This player is mainly influenced by personality (Raymond & Sharples, 2012), abilities, and skills (Bernardin & Villanova, 2005). These personal features that influence ratees and raters were described as *process* variables that directly related to performance appraisal systems (Levy & Williams, 2004). Furthermore, the same authors also investigated and concluded that structural variables “could drive rater and ratee behaviors and the overall performance appraisal effectiveness” (Levy & Williams, 2004). Further research found that the main structural variables were performance standards and dimensions (Whiting, Podsakoff, & Pierce, 2008), rating source (Haines & St-Onge, 2012), frequency (Bhave, 2014), and purpose of the appraisal (Greguras, Robie, Schleicher, & Goff, 2003).

The rating sources are also an important component of performance appraisal models. The sources can be perceived as whom provides the feedback and evaluation on the performance of

an employee. “The most common method for measuring performance is a supervisory rating” (Ellington & Wilson, 2016). However, research has shown that having only one source of assessment originates bias and inconclusive results, therefore, “some organizations substituted traditional top-down assessments with multisource feedback” (Barbieri, Micacchi, Vidè, & Giovanni, 2023). Although more inputs seem to result in an unbiased evaluation, research has concluded that “obtaining information from different sources can be useful, but that different sources differ systematically in the conclusions they suggest about overall performance levels” (DeNisi & Murphy, Performance Appraisal and Performance Management: 100 Years of Progress?, 2017). Although this may seem as a constraint, it is impossible to refute that “different rating sources provide unique perspectives on the target individual's performance, and that the additional information provided to the target will be helpful” (DeNisi & Kluger, 2000). Nevertheless, the latter scholars have proposed that, in the case of 360-Degree Appraisals, the different raters must not provide evaluation on all areas, but rather on specific criteria in which rater is best qualified to provide rating on (DeNisi & Kluger, 2000).

2.3. Current Practices

Developing the most appropriate practices for performance appraisal has historically been a challenge. Even though the extensive research existent today has helped organizations design and decide on which models provide the best ratings and feedback, there is no consensus on what the perfect performance appraisal model should be. As mentioned, there has been great developments in this area, with practices varying from single source (supervisor) to a 360-Degree feedback system where ratings and feedback come from peers, managers, colleagues, and clients. (Dr. Balu, Cheeran, & Joshi, 2017).

There are several methods/models of performance appraisal that are commonly used across all industries. After thorough investigation and linking with what has been discussed so far in this study, I have selected a list of the most relevant ones.

2.3.1. Graphic Rating Scales

This method uses a scale to assess employee performance on various criteria, providing reliability and consistency over time. Graphic Rating Scale is a scale that lists a number of traits and a range of performance for each. The rater is asked to identify the score that best describes the employee's level of performance for each trait, which serves as a basis for the overall evaluation (Aggarwal & Thakur, 2013). This is method is, however, extremely exposed to bias.

2.3.2. Management By Objectives (MBO)

This approach sets specific goals and objectives for employees, which are then used to evaluate performance. MBO is an easy to implement model and to measure, as it is highly connected with the job functions specifications and descriptions. Additionally, it facilitates employee counseling and guidance as tasks are normally well defined and appropriate. However, it can be difficult for the employees to agree on goals, and it undermines personal traits such as honesty, integrity, teamwork, etc. that are also important when evaluating job performance, as shown earlier (Aggarwal & Thakur, 2013).

2.3.3. Assessment Centers

This technique involves the use of various exercises and simulations to assess employee performance in different scenarios. The ratees are evaluated based on their performance during the assessment period, which usually is between one and three working days. The characteristics evaluated in a typical assessment center include assertiveness, persuasive ability, communication ability, planning and organizational ability, self-confidence, resistance to stress, energy level, decision making, empathy, administrative ability, creativity and mental alertness (Majid, 2016). Ultimately, performance appraisal is based on observations by the raters, self-evaluation and peer-evaluation.

Even though assessment centers focus on crucial criteria, that both contemplate function specific and personal traits, it is expensive to implement and extremely time-consuming (Aggarwal & Thakur, 2013). Moreover, it only focuses on the behavior during the assessment time, which can greatly differ from the usual or predominant performance.

2.3.4. Behaviorally Anchored Rating Scales (BARS)

BARS combines elements of rating scales and critical incidents, using specific behavioral examples to evaluate performance. There are five stages of BARS, which are generation of critical incidents, developing performance dimensions, relocating incidents, rating of level of performance for each incident and development of final instrument (DeCenzo & Verhulst, 2015). These provide an evaluation predominantly based on job performance on specific occasions (the incidents). Therefore, it can greatly limit the amount of input the raters have. Additionally, BARS requires the development of specific dimensions for each function, which can be seen as beneficial, for being tailored to every single employee, or as negative, for being extremely time-consuming and resource intensive. Another criticism of this model comes from

dimensions being activity oriented instead of results oriented, which holds true as the technique does not take into account the results of the identified incidents.

2.3.5. 360-Degree Appraisal

This method involves gathering feedback from multiple sources, including supervisors, peers, subordinates, and customers, to assess employee performance. The model suggests that feedback interventions focusing on task performance are generally useful, but their effectiveness depends on various factors. It also highlights that feedback interventions that focus on the self-level can interfere with subsequent performance by diverting attention away from the task and triggering strong affective reactions (DeNisi & Kluger, 2000).

Even though 360-Degree appraisals are excellent to provide development tools and feedback through a multisource rating system, it is also highly time consuming and sensitive to organizational culture. Additionally, maintaining the privacy and confidentiality throughout the process, connected with the fact that it involves various and differentiated entities, may be challenging (Aggarwal & Thakur, 2013).

3. Methodology

The purpose of this study is to investigate and analyze past and current practices of performance appraisal in order to modernize the current performance appraisal model of TDEC for the corporate functions. Having started by reviewing the extensive past research on the topic, with a bottom-up approach, it was already possible to highlight important components and details that should be part of the performance appraisal model. Furthermore, after synthesizing this data, further research was done over the existing performance appraisal models, always looking back at the components and specificities that were now being seen implemented into models. Focusing exclusively on review and research articles from top journals, i.e., journals that score Q1 and Q2 on SCImago Journal & Country Rank, allowed for a meaningful and trustworthy literature review.

3.1. Research Design

This research design outlines the approach undertaken to develop a recommendation for a modernized performance appraisal model, specifically tailored for the corporate functions of TDEC. Given the complexity of TDEC's operations, this study aims to recommend a robust, adaptable, and appropriate appraisal system that aligns with the company's culture, strategic vision, and any specific necessities.

Continuing with a bottom-up approach, the methodology of this research consisted of the following steps:

3.1.1. Study of TDEC's Organizational Structure

An analysis of TDEC's organizational hierarchy and structure was conducted. This step helped to understand the similarities and differences between different departments and roles within the corporation, also providing insight on the company's information flows and responsibility levels.

3.1.2. Analysis of Functions and Job Descriptions

This study then examined the specific functions and respective job descriptions within TDEC's corporate area. This analysis aimed to identify key performance indicators, role-specific competencies, and responsibilities that are critical for the success of each role. Additionally, it allowed to understand what information was already available and registered on this matter.

3.1.3. Investigation of Current Performance Appraisal Practices at TDEC

This study conducted interviews with directors of several corporate departments at TDEC to gain insights into the existing performance appraisal processes that were in practices at this time. These interviews with employees on top-management positions in the company also allowed for an understanding of the effectiveness and potential areas for improvement in the current appraisal methods.

3.1.4. Benchmark Analysis in the Construction Industry and Beyond

Finally, a benchmark analysis was conducted, focusing on performance appraisal practices in other big corporations within and outside the construction industry in Portugal. Therefore, this analysis included TDEC's main competitors and other companies in non-related industries. The aim was to identify best practices, innovative approaches, and industry standards that could be adapted or adopted by TDEC.

3.2. Data Collection

Modernizing the current performance appraisal model for TDEC requires the collection of meaningful and effective insights and data. Therefore, interviews with top-management employees, i.e., directors of several departments, were conducted to understand how the leadership positions perceives the current appraisal methods and to gain insights into the dimensions that should be evaluated in the future. These interviews were conducted remotely and were divided into two parts: initially, the focus was on gathering feedback on the existing performance appraisal model currently practiced at TDEC, and secondly obtaining feedback and insight from the directors on those practices and on what changes should be done. This process helped to identify problems and challenges and already validate some future recommendations. In the Appendix, as Figure 12, it is possible to find the interview guidelines that were crafted to direct the conversation towards the critical points of interest. However, it is important to note that these guidelines served only as a foundational framework rather than rigid directives. In practice, some of the interviews unfolded naturally and organically, allowing for a natural flow of dialogue that covered all the necessary topics.

To add to the direct data from the interviews, a benchmark analysis was conducted, as previously mentioned, encompassing 9 different companies to provide a diversified view of performance appraisal practices. This analysis began with the collection of secondary data by

researching the companies' websites, annual reports, and periodical articles. Whenever this publicly available data was insufficient or non-existent for a given company, employees of those companies were approached to delve deeper into the appraisal methods implemented and to gather any additional information.

Of the 9 companies analyzed, two operate in the construction industry, being competitors of TDEC and providing relevant information for this study. The remaining seven companies operate in a diverse number of industries, including energy, pulp and paper, insurance, technology, banking, and consulting. This diversified selection was intentional, as companies from different industries offer distinct perspectives on performance appraisal practices. This approach ensures that the findings are not confined to construction but include potentially adoptable practices from other sectors.

Additionally, a factor of choice of the companies analyzed was proximity, i.e., preference was given to those where I had personal or direct contacts of employees or where there was ample public information available.

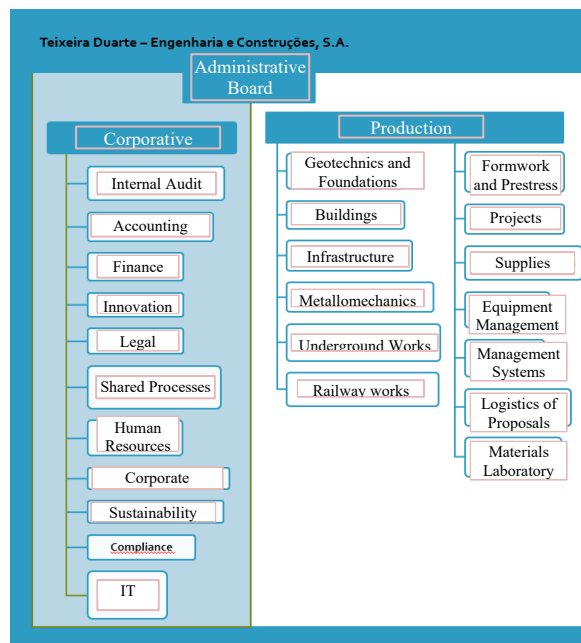
3.3. Data Preparation for Analysis

As mentioned, primary data was collected through interviews with directors of several corporate departments of TDEC. Therefore, the qualitative data from these interviews was analyzed using an inductive method. The analysis started by scrutinizing the interview transcripts for relevant passages and quotes, which were then coded. Each code was defined with a description and was also supported by various quotes from the different interviewees. This iterative process of coding ensured that the data was prepared for a meaningful analysis which was aligned with the research objectives, specially allowing for an examination of patterns and key insights.

4. Results & Analysis

4.1. The organization: A look into TDEC's organizational structure

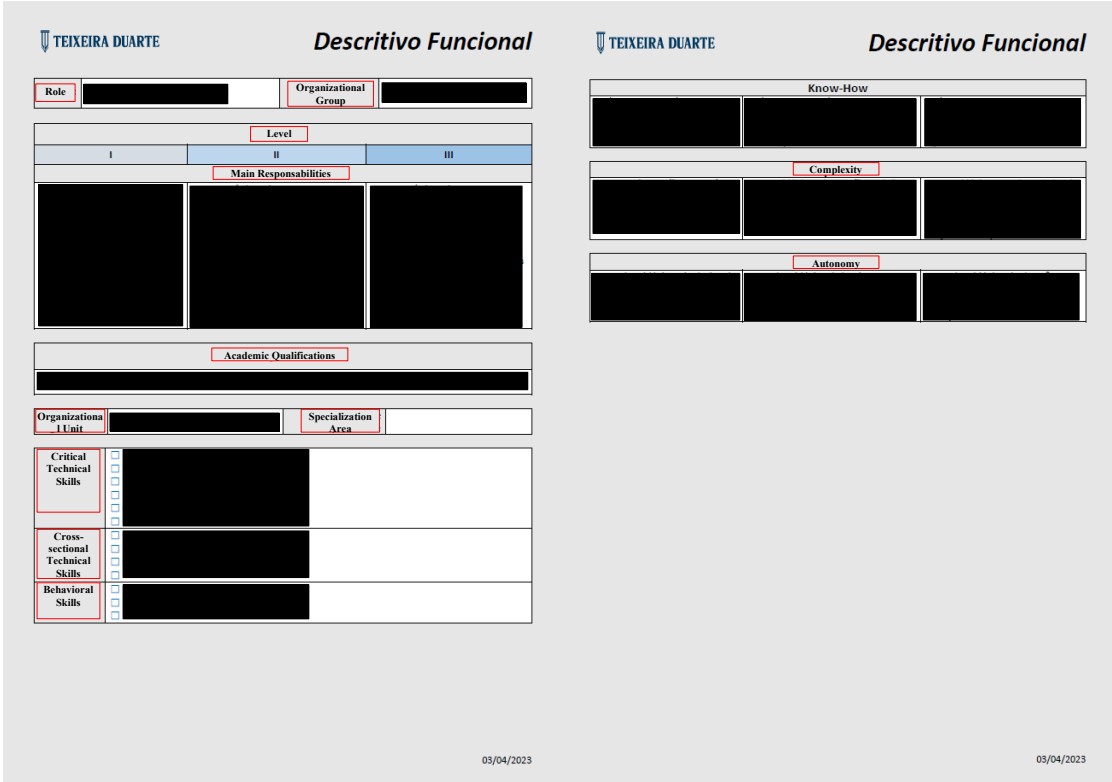
In the organizational structure of TDEC, a division is made within the construction group of TD and two functional areas arise: the corporate functions and the production functions. This study is exclusively focused on the corporate functions of TDEC, which are organized between eleven departments. Each department fulfills specific organizational needs, as can be observed in Figure 1 below.



*Figure 1 - TDEC's organizational Structure taken from TD's organizational structure (translated to English)
Source: The Author's translation of the original file in Portuguese provided by TDEC*

Within these different departments, there is a variety of roles or positions organized in an ascending hierarchy: starting from Technician, moving up to Specialist, then to Coordinator, followed by Manager, and culminating at the Director position. This hierarchical structure represents the progression of responsibility and expertise within the organization.

The complexity and responsibilities of each role vary along the hierarchy. For instance, more foundational positions like Technicians have up to four different levels that, in an ascending order, reflect different competences, responsibilities and requirements. In contrast, top-management roles such as Directors may have just one level.



*Figure 2 - Function description file (Censored and translated to English)
Source: The Author's translation of the original file in Portuguese*

Each role is documented and explained in detail in a file, as seen in Figure 2 above and in the original and censored file in Portuguese which can be found in the Appendix as Figure 11. All these files are comprehensive and contain rich information that is crucial for understanding the specifications of each function, and therefore, understanding what performance metrics may be applied to each. They detail the primary responsibilities associated with each level of a function, the specific organizational group that the function belongs to, and the specialization area within the company. Furthermore, these files also state the critical technical competences required at each level, as well as cross-level technical abilities. They also highlight the behavioral competences necessary for each level, the level of know-how, the complexity of the role, and the degree of autonomy expected at each level.

The organizational structure of TDEC offers quite a tangible context for the job performance models discussed in Chapter 2.1. The progression in the responsibilities and competences required from Technician to Director aligns with the performance dimensions outlined in these

models, such as task proficiency and contextual performance. Furthermore, the technical and behavioral competencies required at each level of a function accurately reflect the aspects of “job knowledge” and “work quality” mentioned in the research articles analyzed previously in this study. Furthermore, the different degrees of autonomy and complexity across roles go in line with the concepts of “initiative” and “creativity” in job performance. By examining TDEC's function descriptions and comparing with the theoretical context of Chapter 2.1, we can observe how theoretical performance standards and explanations manifest in a real-world setting. This insight is crucial for identifying potential modernization aspects for TDEC's performance appraisal system and making it specific for each role within the company's corporate functions.

4.2. The current performance appraisal model

A key focus of this study is to delve into the performance appraisal practices currently implemented at TDEC. This deep dive into TDEC's current model is mandatory for an effective investigation based on two research questions of this study: “What is the current performance appraisal model and appraisal practices at TDEC?” and “What should TDEC implement and improve in their performance appraisal model?”. A thorough analysis of TDEC's current methods will provide insight on specificities and the effectiveness of the existing model, and it will also demonstrate which certain areas have potential for improvement.

Firstly, it is again important to note that the current performance appraisal model of TDEC was designed and implemented 25 years ago. As such, the designing was subject to various constraints at the time, including the technology available, the access to knowledge on the topic, the non-existence of advanced management theories, company culture, company size, organizational structure, and industry standards, as stated by several directors during the interviews conveyed. This challenging context under which the model was developed, underlines the necessity for a reform and reevaluation of the appraisal system to align with current best practices and technological advancements.

Nevertheless, TDEC crafted a set of guidelines to orientate the performance appraisal process of its employees. These guidelines can be divided into two different categories. The first category is a set of criteria that is applicable across all functions and areas within TDEC, i.e., applied both to corporate and production areas. The second category is a set of four individual criteria, which were observed, during the interviews, to only be applied to the corporate area of

the company. Figure 3 illustrates the criteria applicable across functions, while Figure 4 illustrates the four individual criteria designed specifically for the corporate functions.

A	Work Safety Standards	Evaluates the degree of compliance with safety standards and respect for them.
B	Achieves Expected Results	Evaluates the degree of commitment and orientation towards efficiency and effectiveness.
C	Responsible/Autonomous	Evaluates the degree of responsibility and autonomy with which the task and function are carried out, without the need for constant supervision.
D	Team Member	Evaluates the ease of establishing and maintaining good relationships with people and the ability to work as part of a team.
E	Punctuality/Attendance	Shows an extraordinary sense of punctuality, with exemplary attendance.
F	Learning Ability	Evaluates the interest shown in improving professional knowledge.
G	Ability to Manage and Train People (only applied to management)	Evaluates the ability to provide excellent and safe working conditions, as well as opportunities for the promotion of team members, instilling in them the spirit of teamwork and company.

*Figure 3 – First category - Evaluation criteria applicable across all functions (translated to English).
Source: TDEC*

A	Work output quality	This criterion relates to the proficiency of an employee on the responsibilities one has.
B	Leadership and strategic vision	Reflects personal traits and capacity for critical thinking and alignment with the company’s vision.
C	Professional growth	Focuses on new competences acquired and enhanced skills that will promote one’s professional development.
D	Teamwork	Evaluates the ease of establishing and maintaining good relationships with people and the ability to work as part of a team.

*Figure 4 – Second category - Evaluation criteria exclusively designed for corporate functions
Source: The Author’s work based on data gathered in the interviews*

These criteria represent some key aspects of job performance, extending beyond task performance to slightly include Organizational Citizenship Behavior, as explored in Chapter 2.1. However, there is a clear limitation that arises from the singularity of these criteria, which

is the lack of specificity. This one-dimensional criteria may lead to broad and ambiguous evaluations, as will be demonstrated later in Chapter 4.3 of this study. This generality in appraisal criteria puts precise performance assessments at risk.

Therefore, introducing sub-criteria within each main criterion would significantly enhance the model by allowing it to be tailored to each function. This additional dimension of specificity would also clarify the expectations underlined in each criterion, making it more accurate and clear. Furthermore, the current ambiguity in the appraisal criteria opens the door for raters to interpret them subjectively, which consequently fosters biases and inconsistencies in evaluations across various departments. A more detailed and function-specific set of criteria and sub-criteria would mitigate these issues, contributing to a more accurate, fair, and uniform performance appraisal process within TDEC.

Raters are then required to score each criterion on a scale from 5 to 1, with 5 indicating the highest performance and 1 the lowest. This scale is described below in Figure 5.

5	Exceptional	Excellent strength in this area; a role model for this behavior; often exceeds expectations.
4	Good	Very strong in this area, sometimes exceeding expectations; recognized by others for this strength and sought after for guidance.
3	Effective	Consistent performance in this area, meeting expectations like most others; consistent, but does not stand out from others.
2	Needs Improvement	Inconsistent and difficult to evaluate due to mixed observations; sometimes a strength or stable, sometimes a weakness; results fall short; missed opportunities due to this inconsistency.
1	Insufficient	Urgent need for improvement in this area; hinders performance; if not corrected, can impede or harm the career and/or team.

Figure 5 - Performance appraisal scoring framework
Source: TDEC

After analyzing the TDEC’s performance appraisal model’s components, it becomes evident that it aligns with the Graphic Rating Scale system. This system is detailed in Chapter 2.3.1 of this study. In such a system, a structured form lists various criteria alongside a corresponding performance scale rating for each. The rater's task is to select a score that most accurately reflects the employee's performance level for each listed criteria.

4.3. The decision-makers: interviewing TDEC’s corporate directors

To further investigate the specific performance appraisal practices at TDEC, as outlined in one of the research questions of this study, interviews with directors from different departments were identified as the most appropriate and effective method for data collection. These directors, who all have the responsibility for conducting performance appraisals within their respective departments, offered insights into the processes and criteria used during these evaluations. The interviews were conducted through online meetings. This data gathering approach not only allowed for a deeper understanding of TDEC's performance appraisal processes but also provided a rich and diverse perspective on how different departments within the company process the task of evaluating employee performance.

As outlined in Chapter 3.3, a comprehensive coding tree was developed to synthesize and categorize the insights obtained from the interviews with the firm's directors. With the inductive approach previously described, I entered the interviews with key focal points in mind but aimed to provide a safe environment for the directors to express their opinions and concerns on the topic. Nevertheless, these specific areas of interest included: the performance appraisal process utilized in each department; the feedback giving practices each director employs within their teams; and the directors' perceptions of the current evaluation model. Figure 6 illustrates this coding tree and is a visual representation of the valuable information gathered from these discussions.

Code	Code Description	Quotes ¹
Guided performance evaluation process	The director follows the guidelines and requirements established by TDEC	<ul style="list-style-type: none"> • “I only do what the company requires me to do in terms of performance appraisal” • “Even though I don’t find the model sufficient, I follow what is required. But I really that these practices were more extensive and accurate” • “We are not required to explain employees the appraisal done, but we are required to formally register them”
Beyond the defined process	The director goes beyond the guidelines and requirements	<ul style="list-style-type: none"> • “I follow the defined performance appraisal model, but I have added some components that don’t conflict with the company's requirements”

¹ The quotes were translated from Portuguese to English by the author, as interviews were entirely conducted in Portuguese.

	established by TDEC	<ul style="list-style-type: none"> • “I have simply added components that I find to be lacking in the current model”
Broad and vague performance evaluation criteria	Evaluation criteria used in the performance evaluation process are very unclear and open room for biased evaluations, generating discontent	<ul style="list-style-type: none"> • “Quality and quantity of work cannot be accurately measured. They have so many variables” • “They (criteria) are not specific and relevant for the work the team performs” • “The criteria should be more specific” • “The criteria I need to use is purely vague and broad, it has so many variables and influencing factors underlying”
Director’s view of the appraisal model.	How directors perceive the current model and what are their opinions	<ul style="list-style-type: none"> • “If I were to describe the model in one word, I would use “insufficient”” • “This process and these criteria are just formal, in reality they are not very appropriate” • “The natural cause of this problem is firstly because it has not been updated over an excessively long period of time, and then because it was originated from the core business of Teixeira Duarte, which is the construction industry”
Weak performance evaluation for the top-managers	Top managers essentially get no feedback on their performance at TDEC	<ul style="list-style-type: none"> • “As a director, I am not evaluated, or at least, no one has told me I am” • “I think I am evaluated through the same model employees are, but I never receive any communication regarding that” • “Our evaluation is not formal, basically, if our teams are doing a good job, it means our performance is good”
No formal feedback for top management	Top managers do not receive feedback formally, but rather naturally during their functions	<ul style="list-style-type: none"> • “I never received feedback in a formal way” • “The administrator that evaluates me basically gives feedback whenever we have the chance to chat, but it’s not a formal moment” • “I had to ask my administrator for feedback, if not, I would just not get it” • “I wish they would discuss with me what I need to improve and what is going well”

Performance feedback	How is feedback given to employees on their performance	<ul style="list-style-type: none"> • “Feedback is more spontaneous and informal, I just give it in our day-to-day operations” • “The feedback I give is just provided in a qualitative form. Mainly by describing how the year was and specifically pointing out moments that transmitted good or bad qualities”
Untimely feedback	Due to performance evaluation being tied to appraisal period, some feedback may be untimely and obsolete;	<ul style="list-style-type: none"> • “The appraisal meetings are only scheduled for end of the first semester and we receive the feedback too late” • “On the feedback sessions we usually cover the whole year and share how it went” • “Sometimes we are giving feedback on topics that the employees have already worked on and improved, which makes for quite a strange conversation”.
Use of self-assessment	Self-assessments are inconsistently used at TDEC as some departments do it while the others do not	<ul style="list-style-type: none"> • “I added a required self-assessment to all the employees I evaluate” • “I had to add self-assessment to make the model more robust”
Value of self-assessment	How employees who are subject to self-assessment perceive this practice	<ul style="list-style-type: none"> • “The people I evaluate feel that self-assessment adds a lot to the discussion” • “The employees feel defended in some sense, in fact, the self-assessment gives them some power in the decision of their final appraisal” • “These three sources of input provide good guidance into the real performance of the employee and good arguments for further discussion”

Figure 6 - Coding tree for the interviews with TDEC's Directors
Source: The Author's work based on data gathered in interviews

Topics	Observations, N=5
Director follows the formal guidelines and requirements for performance appraisal	5
Director does not follow the formal guidelines and requirements for performance appraisal	0
Director goes beyond the guidelines and requirements	3
Director does not go beyond the guidelines and requirements	2
Director is satisfied with the criteria used	1
Director is unsatisfied with the criteria used	4
Director does not use self-assessment	2
Director uses of self-assessment	3
Director gives formalized feedback	3
Director does not give formalized feedback	2
Director's performance is formally appraised	0
Director's performance is not formally appraised	5
Director receives formal feedback from the executive board	0
Director does not receive formal feedback from the executive board	5

Figure 7 – Observation of key attributes
Source: The Author

Figure 7 illustrates that while all departments at TDEC comply with the organization's established performance appraisal guidelines, three departments have proactively seek to enhance the model by adding new components. This initiative is mainly driven by the directors' widespread dissatisfaction with the current criteria, which are seen as too broad, ambiguous, and not fully aligned with the needs of their respective departments.

A common view among the directors is that the existing criteria are mainly qualitative. In practice, these criteria are not considered adequately suitable because they also lack specificity and relevance to the work carried out in each department. One key factor contributing to this unsuitability is the system's long period without updates and its origin in the construction industry, as mentioned previously, which may not be adequately adapted to corporate departments, as mentioned by one of the interviewees.

During one of the interviews, a director pointed out that the criteria were too vague and are influenced by multiple “hidden” variables, as quoted in Figure 6. To solve this, the introduction of sub-criteria was suggested to all the interviews. The general consensus was in fact that these sub-criteria should be implemented, but tailored to the specific functions, and ideally, even to

the level of the position. Additionally, it was proposed that the sub-criteria should be assigned varying weights based on their relevance to the function. Furthermore, it's essential that these sub-criteria are concise, clearly defined, and detailed to avoid any confusion, ensuring a more precise and relevant performance appraisal process.

In terms of self-assessment, there is general agreement among the directors on its significance and appropriateness. Despite this consensus, the implementation of self-assessment happens differently in the different departments, with some directors incorporating it into their appraisal process, while others have yet to do so. It is important to note that self-assessment is not a requirement of the current appraisal process.

The feedback mechanisms within TDEC's departments also vary considerably. While three directors have established a formalized process with annual meetings for feedback, the other two opt for a more spontaneous, on-site approach as situations arise, therefore, not having a structured feedback mechanism. Similarly, it is important to note that feedback is not a requirement of the current appraisal process.

Adding to this, one director emphasized the importance of submitting feedback into the HRM digital system. This would enhance transparency in the appraisal process and serve as a protective measure for both directors and employees, aiming to mitigate conflicts. Moreover, there is a consensus among many directors on the need of having a designated moment to discuss performance feedback.

One director also elaborated on the role of feedback, viewing it as a director's responsibility to identify and address any gaps in an employee's potential work capacity and real output. In those instances, transparency and careful communication are critical. The director also highlighted that feedback should not only be accurate but also timely, to ensure its relevance and effectiveness for both the employees and the directors. Inadequate timing in delivering feedback can lead to scenarios like the one presented in Figure 6, where negative feedback is provided on issues that the employee has already improved, which undermines the employee's motivation and capability of changing. Therefore, a well-timed and formal feedback process is a point of improvement of the current model.

In the context of performance appraisal for directors at TDEC, a notable observation is that none of the directors indicated undergoing a formal evaluation process. Most of them mentioned that even if such process occurs, they are not communicated about it or receive any feedback

regarding their performance. Therefore, an important aspect that emerged from the interviews is the lack of formal feedback mechanism also for directors. Similarly to the employees process, feedback tends to be informal, emerging organically from routine interactions with the board administrators, rather than from formal sessions dedicated to performance evaluation. As highlighted in Figure 6, one director even noted the necessity to proactively seek feedback, as it was not forthcoming from the administration.

Despite some directors expressing comfort or neutrality with this informal environment, there was a consensual acknowledgment that feedback has the potential to motivate them. Additionally, it was observed during one interview that normally only positive aspects are highlighted in these informal feedback interactions. However, one director emphasized that identifying areas for improvement is equally, if not more, crucial than acknowledging successes and areas of continuity.

This leads to the proposition that a formal appraisal system for directors should not only focus on their achievements but also challenge them to exceed expectations, particularly in managing people and workflow processes. Given that directors are already recognized for their superior capabilities and skills, the focus of their performance appraisal should shift from skill and task performance to evaluating their team's work output and the achievement of objectives. This approach would ensure a more comprehensive and growth-oriented evaluation, based on leadership capacities.

4.4. Beyond TDEC: benchmark analysis

4.4.1. Appraisal practices of TDEC's main competitors in the construction industry

Despite the Portuguese construction industry having a modest market size, it is renowned for its strength and expertise, especially due to the successful internationalization of several companies into global markets. TDEC stands as a prime example of this successful internationalization of Portuguese construction expertise. However, TDEC is not alone in this achievement. Mota-Engil, alongside Grupo NOV (formerly known as Grupo Lena), are also key players, marking their presence as competitors in the industry not only in Portugal but also in the several different countries. These companies, with their international success and robust market presence, were identified as extremely relevant and appropriate subjects for the benchmark analysis in this study.

4.4.1.1. *Mota-Engil*

Mota-Engil, a leading Portuguese multinational founded in 1946 and active in 22 countries, specializes in construction and infrastructure, also being present in several business areas that matches with TD's global presence as a group. As one of the top 30 European construction global contractor and a top 100 Global Power of Construction in the World in 2020, it's led by Chairman and CEO Carlos Mota Santos (Mota-Engil, SGPS, S.A., 2022). Its significance as a main competitor and a publicly traded company makes it a crucial benchmark for analyzing TDEC's performance appraisal practices, offering valuable industry insights for potential improvements.

Mota-Engil's status as a public company allowed for easy access to information through their Annual Consolidated Report, in which they disclosed their performance appraisal practices. This valuable information offered insights on their appraisal methodologies and strategies and can be seen in Figure 8.

Performance Assessment:

Objective: the major objective of Performance Assessment is the personal and professional development and guidance of People, thus guaranteeing recognition, meritocracy, and promotion of the GROUP's sustainable growth.

Scope: all workers of the GROUP (including all geographies/businesses of the GROUP).

Methodology: performance is focused on measurable results and desired behaviours and attitudes.

- Qualitative Assessment: competences with 50% weighing.
- Quantitative Assessment: objectives with 50% weighing (alignment of business objectives with individual performance).
- Process with several Stakeholders: Managers; Peers, Clients and Partners; Self-Assessment.

Operationalisation: annual assessment process composed of various stages for ensuring the ongoing follow-up of the performance of our people.

Steps: definition and confirmation of targets; ongoing evaluation; self-evaluation; evaluation of the previous year; standardisation and communication of the evaluation.

Figure 8 - Extract from the FY2022 Annual Consolidated Report and Accounts non-ESEF version of Mota-Engil, in English
Source: Mota-Engil's website - financial information webpage

By analyzing this excerpt, it becomes evident that Mota-Engil's performance appraisal model aligns with the 360-Degree Appraisal framework, given its emphasis on collecting inputs from a variety of different stakeholders and incorporating a qualitative component focused on employee competencies. However, this qualitative aspect accounts for only 50% of the final appraisal score. The other half is based on an objectives appraisal, which aligns individual performance with the business objectives of the company. This unique performance appraisal model combines elements of the Management by Objectives (MBO) model with those of the 360-Degree Appraisal model, resulting in a diversified evaluation system that addresses both qualitative and goal-oriented aspects of performance.

Efforts to gain deeper insights into this unique performance appraisal model were made through various attempts to contact employees of Mota-Engil. Unfortunately, these received no responses.

4.4.1.2. Grupo NOV

Grupo NOV, a family-owned Portuguese group headquartered in Santa Catarina da Serra, Leiria, was founded in 1974 by António Vieira Rodrigues and is currently led by CEO Joaquim Paulo Conceição and António Rodrigues' children. Originally, and in similarity with TD, it was a construction and engineering company and has diversified into sectors like automobile, communication, real estate, heavy industry, tourism, and energy. Operating in multiple countries including Portugal, Angola, Brazil, and others, it reported revenues of €121.1 million in 2022 (Grupo NOV, 2023). The company emphasizes human resource stability, with over 13% of its 1,251 employees having more than 25 years of service (Grupo NOV, 2023).

Due to Grupo NOV's being a private company, public access to information about their performance appraisal processes was notably scarce. However, to bridge this gap, an administrator from the group's automobile branch was contacted to provide deeper insights. This provided valuable information, revealing that Grupo NOV utilizes a similar, but slightly more developed performance appraisal model in comparison to TDEC's current model. This model is applied consistently across all of the group's diverse business sectors, ensuring a uniform approach to evaluating employee performance throughout the organization. Moreover, the evaluation process is done annually, conducted by one rater, a supervisor which has leadership responsibilities, and complemented with a self-assessment process.

The company uses a Graphic Rating Scale similar to TDEC for its performance appraisal, featuring a 6-level scale. The levels range from "Unsatisfactory" for consistently below-standard performance, to "Needs Improvement" for employees not meeting standards but not always poor. "Satisfactory" is for meeting expected levels but without consistent reliability, while "Satisfactory Plus" is for employees who consistently meet the desired standards. "Very Good" represents consistently high performance, and the top level, "Exceptional", is for outstanding and exemplary performance that consistently surpasses expectations.

At Grupo NOV, the performance appraisal system utilizes six primary criteria, each further detailed by specific sub-criteria, as shown in Figure 13 in the Appendix. These main criteria - Work Characteristics, Responsibility, Knowledge, Attitude, Commercial Characteristics, and

Leadership Characteristics - cover a broad range of areas, from task-related abilities to behavioral and leadership qualities. For instance, the “Work Characteristics” criterion includes aspects such as “Planning and Organization”, “Quality”, and “Commitment”. However, this criterion also presents some ambiguity in sub-criteria like “Speed of Execution” and “Timely Completion”. “Responsibility” is also divided into individual sub-criteria, while “Knowledge” assesses both technical skills and cultural alignment. Moreover, “Attitude” is broken down into sub-criteria that effectively evaluate workplace behavior and interpersonal interactions. This structure, with its division into well-defined sub-criteria, ensures a level of precision and diminished ambiguity in the performance appraisal process at Grupo NOV.

4.4.1.3. Key Takeaways

Examining the main competitors of TDEC has revealed some crucial points of interest. Given that both companies analyzed are similar in business terms to TD, it's possible to find some similarities and differences in the models implemented at each competitor. Mota-Engil has implemented a hybrid model that merges attributes from 360-Degree Appraisal model and the Management by Objectives model. This practice is in fact very different from the one currently implemented at TDEC. However, in the qualitative assessment, competences are evaluated, each represents the only overlapping point with TDEC. The key takeaway from Mota-Engil's performance appraisal model, is that it reveals the possibility of innovating in this matter and implementing modern performance appraisal techniques to such a diversified group like TDEC. Additionally, it also reveals that it is indeed possible to apply the same model to all business areas of TDEC, if it can adjust to each sector accordingly.

Moreover, Grupo NOV has very similar practices to the ones implemented at TDEC. The use of the Graphic Rating Scale, a simple yet still effective model, seems to be a standard among construction conglomerates in Portugal. Nevertheless, it is extremely important to point out the fact that the main criteria used in the appraisal, are all divided into sub-criteria that help not only the rater but also the ratee have a clear understanding what performance is being measured on. This can be agreed to be the main takeaway from analyzing Grupo NOV, as it is a feature lacking in the current appraisal model of TDEC, as stated previously and proven in the interviews.

4.4.2. Appraisal practices in other non-industry-related corporations

In this research section, a thorough investigation was conducted into the performance appraisal practices of various corporations operating in Portugal, now focusing on industries not directly related to TDEC's core business, construction and engineering. This analysis aimed to address the latter part of the research question: "What performance appraisal practices have the main competitors of TDEC and other non-related corporations in Portugal implemented?"

To gain in-depth insights into the practices of these non-related corporations, confidential interviews were conducted with two employees, referred to as Employee X from Company A, and Employee Y from Company B. Both employees requested anonymity, and accordingly, their respective companies' names have also been withheld. More information on the companies is provided in the respective sections. These interviews provided valuable firsthand information on the performance appraisal systems in use at their companies.

Additionally, comprehensive data was collected for other corporations through researching their websites and other public sources. In some cases, there was an attempt to get further insights by contacting employees of some of the companies explored. However, these attempts were not successful, mainly due to confidentiality reasons.

4.4.2.1. BNP Paribas

BNP Paribas, headquartered in Paris, is one of Europe's largest financial institutions, offering services in personal banking, corporate banking and institutional banking. The feedback on its performance appraisal system was gathered from an employee in one of its Operations teams in Lisbon, Portugal. The performance appraisal system shows characteristics similar to the 360-Degree Appraisal model. In this approach, employees have to collect feedback from colleagues with whom they have collaborated on various projects or other tasks. This feedback, once compiled into a file, serves as a basis for the employees' self-reflection on their achievements and areas for improvement. In the performance appraisal model of BNP Paribas, managers engage with team members who have interacted with the evaluated employee to assess their performance. These assessments are then discussed in semiannual formal review sessions between the employee and manager, where they compare feedback, align their perspectives, and develop a future action plan based on the evaluation. Key performance areas include content quality, team communication, and client interaction, rated on a 1-6 scale by managers.

4.4.2.2. *Tranquilidade*

Tranquilidade, a major insurance provider in Portugal, serves both individuals and businesses. As a subsidiary of the Italian Generali group, it benefits from the expertise and resources of its well-established parent company. Tranquilidade's performance appraisal model can be characterized by its focus on employee involvement in goal setting, as these play a crucial role in defining their objectives for the year. This can be done either independently or in collaboration with their managers. The appraisal frequency varies across departments, with some conducting biannual reviews and others conducting quarterly evaluations. A unique feature of this model is its focus on process automation and workload reduction as primary performance metrics. This approach encourages employees to enhance efficiency and reduce errors. Additionally, each department utilizes traditional performance metrics.

Key metrics used in the appraisal include process automation, workload optimization, and traditional job-specific metrics. The model integrates elements of Management by Objectives (MBO) and Objectives and Key Results (OKR), creating a blend that allows for both goal-setting and the measurement of progress towards these goals through quantifiable outcomes.

4.4.2.3. *KPMG*

KPMG is a leading consultancy firm that specializes in audit, tax, and advisory services. Headquartered in New York, the firm employs about two hundred thousand people globally. Through a current employee of the firm's office in Lisbon, information on KPMG's performance appraisal process was accessed. It incorporates Objectives and Key Results (OKR) and 360-Degree Appraisal models. Employees and supervisors set yearly goals, focusing on both business-related objectives and personal development, which may include quantitative and qualitative aspects. Performance is monitored throughout the year, with feedback being constantly gathered from colleagues and clients on various projects. Semiannual reviews rate performance on a scale from 5 to 1, with 1 being the highest score. These reviews also guide the setting of goals for the next year. Key metrics for the appraisal include project-related metrics for business goals and self-determined metrics for personal goals.

4.4.2.4. *Hitachi Energy*

Hitachi Energy, based in Zurich, Switzerland, is a global technology firm focused on sustainable energy solutions and advisory services for diverse industries. Similarly, the information on its performance appraisal model was gotten through a past employee of the firm.

Therefore, at Hitachi Energy, performance appraisal is a collaborative process between employees and managers, mainly based on the Management by Objectives (MBO) model. Annual meetings are held to review progress and set new goals. Employees are encouraged to define goals across various dimensions, including performance, professional development, and teamwork, with the option to assign weights to these goals. Managers can adjust weights if necessary. While mandatory reviews occur annually, additional sessions can be scheduled upon request. Performance is assessed on a 1-5 scale, with the weighted grades influencing career and salary decisions.

4.4.2.5. EDP

EDP (Energias de Portugal) is the largest power and energy solutions provider in Portugal, with a primary focus on power generation, distribution, transportation, and participation in electricity markets. EDP's performance appraisal model is based on Objectives and Key Results (OKR). Annually, employees are evaluated in four main dimensions, including three collaborative aspects and one individual aspect specific to their professional segment. Under these dimensions, objectives are set. The evaluation then involves a reflective process with objective questions to assess the individual contributions to the company and the completion of the objectives proposed. EDP maintains a merit-based culture by distinguishing between different performance levels, with "meeting expectations" as the benchmark.

4.4.2.6. Company A

An interview was conducted with an anonymous employee, referred to as Employee X, working as a Software Engineer at a Portuguese technology corporation. This company has been awarded several HRM related prizes, counting with a workforce of over 1500 employees, and is an international reference for innovation and rapid business expansion. Even though it is a relatively young corporation, it has internationalized its business across the globe, working mainly remotely and having digital and physical hubs in different geographies.

Employee X's primary responsibilities revolve around software development and troubleshooting within a five-person team, including a team leader. The appraisal process in this company is individualistic, focusing on the employee's contribution and responsibility over specific project parts. The company conducts two main appraisal sessions annually, with the "Year-end Review" being the most significant one. Employees set their objectives at the start

of the year, which mix personal and team-oriented goals, aligning with the team's needs and the company's vision each year.

The performance appraisal includes continuous monitoring by team leaders through daily 30-minute meetings, the "Dailies," where work progress and challenges are discussed with the entire team. This allows team leaders to check on task performance continuously, assess technical skills, teamwork, and proactivity. Feedback is ideally given every two weeks in one-on-one meetings, focusing on progress towards the goals of each employee.

The company's internal tool for HRM allows for employees across the organization to provide voluntary and public feedback. This feedback is considered during the formal appraisals, enhancing the team leader's understanding of an employee's performance. Self-assessment is also a semi-annual requirement, in which employees rate themselves on the same criteria as team leaders provide rating on, but with the demand for detailed justifications.

Appraisals are conducted using a matrix crossing four main criteria with the employee's position level. Each position level has sub criteria that is aligned to the expected performance in the main criterion for an employee on that specific level. A visual representation of the matrix can be observed below in Figure 9. The scoring scale has only three levels, which include “exceeds expectations”, “meets expectations”, and “not there yet”. Consistently scoring “exceeds expectations” indicates that the employee is ready for the next position level's responsibilities, and therefore may be rewarded accordingly.

	Criterion 1	Criterion 2	Criterion 3	Criterion 4
Position Level 1	Sub-criterion 1.1	Sub-criterion 2.1	Sub-criterion 3.1	Sub-criterion 4.1
	Sub-criterion 1.2	Sub-criterion 2.2	Sub-criterion 3.2	Sub-criterion 4.2
	Sub-criterion 1.3	Sub-criterion 2.3	Sub-criterion 3.3	Sub-criterion 4.3
Position Level 2	Adds to the sub-criteria above:	Adds to the sub-criteria above:	Adds to the sub-criteria above:	Adds to the sub-criteria above:
	Sub-criterion 1.1	Sub-criterion 2.1	Sub-criterion 3.1	Sub-criterion 4.1
	Sub-criterion 1.2	Sub-criterion 2.2	Sub-criterion 3.2	Sub-criterion 4.2
	Sub-criterion 1.3	Sub-criterion 2.3	Sub-criterion 3.3	Sub-criterion 4.3
...

Figure 9 - Visual representation of the appraisal matrix of Company A
Source: Author

The final scoring is subjective, based on the team leader’s perception rather than a quantitative weighted average. This approach allows the manager to decide the final score, considering the

employee's overall performance across the criteria. According to Employee X, the system, updated last year to this more complex model, is accurate and satisfying, valuing employees who exceed expectations. However, he notes the significant influence team leaders hold in final scoring. Therefore, top management has to review all appraisals to check for inconsistencies or outliers in team evaluations.

The performance appraisal model at Company A is designed to assess an employee's performance within their specific role. It goes a step further by clearly outlining the sub-criteria required for advancement to the next level, providing employees with a transparent roadmap for achieving rewards and promotions. The use of a three-level scoring system for these sub-criteria gives clarity and understandability to the evaluations, a feature that is greatly appreciated by the employees. Additionally, the feedback registration and publicity seems to be regarded as very important and in fact, it seems that it enhances motivation to perform well in order to get positive feedback from colleagues and superiors. Also, this feedback is taken into consideration in the final decision regarding the employees appraisal, which adds multiple sources of input which, as research has shown, is proved to be extremely beneficial for both the rater and the ratee.

However, a critical aspect to consider is the method of final scoring. Being determined by the subjective evaluation of the rater, rather than a weighted average, this approach can introduce biases into the final score. In fact, it has happen before, emerging the necessity for top management revision of all evaluations.

Overall, the framework of defining main criteria, which are then subdivided into specific sub criteria for each level, in addition to a mix of individual and team-oriented objectives, appears to be highly effective. The inclusion of self-assessment for employees also enhances the appropriateness of this model, completing what seems to be a comprehensive performance appraisal model.

4.4.2.7. Company B

Another insightful interview was conducted with an anonymous employee, referred to as Employee Y, from Company B. This Portuguese corporation, which has reported revenues of over €2 billion, operates in the production and retailing of paper-related products and features a business structure with both production and corporate management sectors. The workforce of this company exceeds 3000 employees across all international and national operational

geographies. Its organizational structure and business operations, although distinct from TDEC's industry, share similarities, making Company B an ideal candidate for this benchmark analysis.

Employee Y's role at Company B involves consolidating financial information and preparing monthly reports for the executive board. The performance appraisal cycle begins in March with a meeting to define eight objectives for the year: four functional, which are directly related to the employee's role, and four cross-sectional, which are related to the company's strategic vision and the team's objectives. An example of a cross-sectional objective is to comply with the deadlines for the reports, while a functional objective might involve enhancing communication skills. Objectives are rated on a scale from 1 to 4, with 4 indicating that the employee exceeded expectations and 1 being below expectations. Each objective's weight is determined by the supervisor, but always in line with the employee's expectations as well. The final score is given by a weighted average, in which 70% is based on the achievement of objectives and 30% on the employee's professional development over the year.

As a new appraisal cycle starts, functional objectives are normally replaced, but cross-sectional objectives may remain unchanged even if these were completed. The evaluation period is from March to December, and during these months every employee can seek feedback on their progress. A formal mid-year review between June and August assesses the employee's performance until that point in time. All feedback and objectives, along with their respective weights, are recorded on a digital HRM platform. The cycle concludes with a self-assessment that happens from January to February, which is then followed by a final meeting with the superior to discuss the employee's final score and the rater's feedback at the end of February. The performance appraisal at Company B is an individual process between the supervisor and the employee, however, team-oriented objectives may require some input from team members.

The performance appraisal system at Company B mirrors the Management by Objectives (MBO) model discussed in Chapter 2.3.2 of the thesis. While this model evaluates performance based on the execution of an employee's specific role, it tends to overlook personal aspects, focusing mainly on objectives that are aligned with task performance. The inclusion of self-assessment in the process is a valuable feature, allowing employees to participate and contribute to their performance evaluation.

The use of a rating scale based on meeting or exceeding expectations is both clear and direct, enhancing employees' understanding and awareness of their performance levels. Similar to the

practices observed in Company A, Company B employs a blend of individual and team-oriented objectives. Providing regular feedback and the formal mid-cycle review session to discuss progress, is also significantly effective in maintaining a continuous dialogue about performance. However, despite the final score being determined through a weighted average that considers all aspects of the appraisal, the primary sources of input are typically limited to the rater and the ratee. This limited input can introduce bias into the appraisal process.

4.4.2.8. Key Takeaways

From the companies analyzed in this section, several key points must be pointed out. The first common attribute across most of them is the use, even if partial, of the Management by Objectives model. In fact, this model is suitable for the needs and context of the companies in question, however, it seems to be most effective when used in coordination with a 360-Degree Appraisal model. In this sense, the objectives set need to cover both task and behavioral dimensions, which is exactly what happens in Company B. Moreover, the use of a simplified scale with only 3 levels, being “exceeds expectations”, “meets expectations”, and “not there yet”, as Company A implements on its performance appraisal model, is in fact a clear and direct scoring scale that prevents ambiguity and confusion for both the rater and the ratee.

Another common ground between KPMG, Tranquilidade, BNP Paribas and Company A is that the supervisor, i.e., the rater, actively seeks alternative sources of input and take these in consideration when producing the final appraisal. This practice is extremely important to produce an accurate, effective, and least biased possible performance appraisal.

It is also important to note Company A’s feedback mechanism. With an approach similar to the 360-Degree Appraisal, as explained previously, the employee is constantly given feedback by his team leader, and can get feedback from other colleagues or superiors. The fact that this feedback is always registered in the HRM platform allows the employee to check on it at any time and improve the performance and maintain the motivation. This practice can improve substantially the conflicts that may arise from not giving feedback, while attributing transparency to the performance appraisal model.

5. Discussion

5.1. Theory in practice

In the analysis presented in Chapter 2.1 of job performance models, three critical dimensions emerged that compose the theoretical framework of job performance: task performance, organizational citizenship behavior (OCB), and counterproductive work behaviors. These dimensions are crucial and capture the essence of what it takes for an employee to excel in their role.

Task performance serves as a basis for all these dimensions, it is the dimension that, as research corroborates, is essential to build a performance appraisal model; therefore, appraisal models must integrate criteria reflecting this aspect. Returning to Figure 4 in Chapter 4.2, TDEC's model for corporate functions acknowledges this importance with Criterion A, which evaluates the quality of work output. OCB is equally vital, as it fosters, preserves, and enhances the organizational culture and a positive work environment, which are crucial for any growing company. Yet, TDEC's model for corporate functions currently lacks criteria that cover this dimension, suggesting an area for potential improvement and modernization. Counterproductive behaviors, while important to recognize, are not typically assessed directly in performance criteria. Instead, they are often inferred from the other two dimensions since behaviors such as "taking excessive breaks" directly influence task performance and OCB. Moreover, more serious acts, like "sexual harassment" or theft, are usually dealt with disciplinary measures rather than performance appraisals, as they directly question the employee's place in the organization, as indicated by one director interviewed.

Nevertheless, while TDEC's performance appraisal model does incorporate fundamental elements of job performance, there is an opportunity for refinement, particularly in the inclusion of OCB in its criteria, to fully cover the range of behaviors that constitute what is perceived as employee performance.

Given this, some current performance appraisal models, researched on Chapter 2.3, may arise as completer and more appropriate. Without contemplating TDEC's specificities and necessities, the 360-Degrees Appraisal model is the best structured and covers all relevant aspects of performance appraisal. However, when delving into how appropriate it would be to implement it at TDEC, some constraints are found, mainly because this model requires numerous different input sources. As so, despite TDEC having a structured hierarchy, in reality

teams are not extensive, as functions are not entirely filled and there is no necessity for such, and employees are often directly under the director's supervisory, which creates a flat hierarchy. Therefore, having enough and diversified sources and ensuring confidentiality may be challenging. Additionally, TDEC's adherence to traditional practices suggests that a rapid shift to an appraisal system like the 360-Degrees model might be met with resistance from employees and even decision-makers. Cultivating an openness to such a significant change will require time and planning in order to ensure a successful transaction. However, it remains a worthwhile long-term goal. For perspective, Mota-Engil, with a workforce four times that of TDEC, has successfully adopted the 360-Degree Appraisal model, which indicates the potential benefits and serves as an inspiration for TDEC to progressively work towards embracing this model.

Modernizing a fundamental aspect of HRM such as the performance appraisal model demands careful deliberation and a gradual approach. Employee comfort with evaluation processes is crucial and considering TDEC's adherence to the same practices for a quarter of a century, any abrupt change could be overwhelming. Therefore, the recommended course of action for TDEC is to keep the Graphic Rating Scales model, but incorporating substantial enhancements based on the insights acquired with this study. This approach will ensure a smooth transition and maintain continuity, while still moving towards a more effective appraisal system.

The interviews, as detailed in Chapter 4.3, reveal a dissatisfaction among directors with the current performance appraisal model. Nonetheless, there is a substantial and consensual readiness to embrace change and help in the modernization of the existing model. This willingness is mainly evidenced by the directors' proactive suggestions to integrate additional elements like self-assessment and structured feedback into the current model, indicating an openness to strategies that could refine and enrich the current appraisal process.

The insights obtained from the interviews with top-management employees have provided evidence of the necessity for the introduction of two critical components into the current appraisal system. Firstly, self-assessment is undoubtedly a vital addition, serving not only as an extra layer of evaluation but also as a tool for reducing biases, which has been repeatedly proved by research, as it empowers employees to present their perspective and potentially mitigate perceived injustices while contributing to more precise assessments. Secondly, implementing a formalized feedback mechanism is also mandatory. While directors note that informal feedback is part of the daily routine, it is clear that a structured opportunity for feedback, in particular concerning the final performance evaluation, is essential for the appropriateness and

transparency of the model. This means that such a formal setting would not only reinforce motivation and the quality of work but would also provide a dedicated meeting to discuss areas for growth and to affirm the behaviors and contributions that should be sustained. All these enhancements would mark a significant step forward in aligning the appraisal process with best practices and ensuring it is as fair and productive as possible.

5.2. Adopting and adapting

The benchmark analysis conducted offered valuable insights into best practices both in and outside the industry in which TDEC operates. Therefore, utilizing this research to adopt and adapt suitable practices can significantly benefit TDEC into modernizing the current performance appraisal model.

Mota-Engil, a market leader and role model in HRM practices within the construction industry, serves as a vital benchmark, particularly for its implementation of the 360-Degree Appraisal model, as discussed previously. This model, despite its challenges, is highly relevant and should remain a point of reference for TDEC, as mentioned before. Similarly, Grupo NOV offers inspiration with its slightly more developed use of the Graphic Rating Scales model, having created a set of main criteria, each with specific, clear and indicative sub criteria. However, its six-level scale tends to create ambiguity and inconsistencies for being too broad in the differences between each level.

Company A's approach, with function-specific criteria and a continuous feedback system, is also suitable and appropriate for TDEC to adopt, even though the extensive sub-criteria for each position level may be too elaborate for immediate adoption. Moreover, two other practices from Company A also stand out for potential immediate implementation: the feedback mechanism, which facilitates the feedback process and makes it accessible at all times, and the three-level scoring scale, which reduces ambiguity and clarifies evaluation scorings.

Other companies in the benchmarking study, despite not providing directly applicable practices for TDEC, were essential in assessing the viability of different approaches. A crucial consideration for TDEC is to balance formality in the appraisal process with complete transparency, which is exactly a need that was emphasized by all directors at TDEC during the interviews. Therefore, effective communication is key to this transparency, and any changes to the appraisal process that may be implemented in the forthcoming future, should be carefully planned and thoroughly explained to all employees. Careful communication of scores and

feedback during the appraisal process is also critical, especially as TDEC's employees will have to adjust to a new depth of self-awareness about both negative and positive aspects of their performance. As such, managing their reactions and expectations will be central to ensuring a smooth transition and the successful implementation of these new practices.

6. Conclusion & Recommendations

Enhancing TDEC's performance appraisal model is not just a step towards organizational growth, it is surely a leap into its future, as for TDEC, the path to innovation, which has long been a key component of the company's vision, lies in sustainable and gradual improvements. To facilitate this journey, a detailed set of recommendations is provided as a culmination of all insights gathered in this study, which were thoughtfully crafted to guide the organization smoothly through this transformative phase. These recommendations are designed to align with TDEC's current practices while setting a clear trajectory for future development.

Recommendations	Implementation Horizon	Ease of Implementation	Observations
Continue to utilize the Graphic Rating Scales model.	Short-term	Simple	This continuity is to ensure a progressive modernization. The model might be changed in the future.
Change the current four main criteria to “Competences”, “Behaviors”, “Contribution” to the “Organization”, and “Relationships”.	Short-term	Simple	This change will allow for an appropriate development of sub criteria and will cover all the dimensions of job performance analyzed.
For each main criterion, add specific and clear sub criteria. A proposed list can be found below.	Short-term	Challenging	Each sub criteria develop must be described in detail and documentation must be prepared and accessible for every employee. The challenge of this recommendation lies on reaching a consensus on both the sub criteria to be implemented and their descriptions. Therefore, these sub
Competences	Quality of Work		
	Autonomy		
	Knowledge		
	Efficiency		
	Technical Abilities		
Behaviors	Commitment		
	Resilience		
	Reliability		

	Ownership at Work			criteria may be adjusted for each department, meaning that different departments may be allowed to have different sub criteria, keeping the same main criteria, to adjust the model to specific attributes.
	Civic Virtue			
Contribution to the Organization	Innovative Mindset			
	Training			
	Involvement			
	Added Value			
	Culture Fit			
Relationships	Empathy			
	Integration			
	Cooperation			
	Openness			
	Availability			
A weight will be attributed to each sub criterion and to each main criterion.		Short-term	Simple	The weights on the main criteria must remain the same for all departments. However, there must be room to discuss the variation on weights of sub criteria in each department.
Replace the current scoring scale to a three-level scale, with 1 representing “Below Expectations”, 2 being “Meets Expectations” and 3 representing “Beyond Expectations”.		Short-term	Challenging	This change is only appropriate if sub criteria are introduced. Once again, TDEC must be aware that all these changes must be consensual.
Implement self-assessment as a requirement for all employees		Short-term	Simple	The self-assessment process must be equal to the rater’s process of appraisal, but performed by the employee.
Formalize feedback sessions and its recording by the supervisor.		Medium-term	Challenging	Feedback sessions will imply more time

			availability and another process to be performed, however, implementation is vital.
Implement technological solutions that allow the rater to update and submit the performance appraisal at any time. Additionally, the platform must allow for feedback to be recorded by the supervisor. Also, a timeline with the appraisal over time should also be available for consultation both for the rater and the ratee, alongside an historical record of all performance appraisals processed.	Short-term	Challenging	The use of modern HRM platforms and systems is extremely necessary when modernizing practices. Having the possibility for constant appraisal submission in the system makes the process continuous. The feedback record must be available for consultancy by the employee at any time, ensuring full transparency.
Progressively implement 360-Degree Appraisal model components.	Long-term	Challenging	As repeatedly stated in this study, TDEC must continue this modernization work and aim for the full implementation of the 360-Degree Appraisal model. Progressively adding multiple sources of feedback must be the initial addition towards that long-term goal.

Figure 10 - Table with final recommendations and respective impact analysis
Source: The Author

7. Appendix

*Figure 2 - Function description file (Original file in Portuguese, censored)
Source: TDEC*

Guidelines for the interviews with TDEC's directors:

Introduction:

My name is João and I am conveying a research on the performance appraisal practices at TDEC. As part of my thesis, I need to evaluate the current practices of performance evaluation in TDEC in order to determine which areas need to be improved or added, to ultimately make recommendations towards a more appropriate and complete performance appraisal model.

Proposed questions to ask each director			
Nr	Question	Purpose	Expected Type of Answer
1	What is your role/position and how does your day-to-day look like? Provide a brief description of what you do as a director.	Understand what the attributes of one's are job routine that will support criteria creation.	Open answer
2	Can you describe your current performance appraisal process? For example, what criteria are used when evaluating your performance and how managers evaluate it	Understand the employees' perception of the current performance appraisal model.	Short open answer

3	How well do you think the current appraisal criteria reflect the employees' performance?	Understand if the current model already effectively considers the job-related dimensions.	Short open answer
4	In your opinion, what are the most important factors that should be considered when evaluating job performance?	Start to specify in the interviewee's role and have specific feedback regarding the employee's perception of current performance appraisal for its role.	Open answer
5	What is your opinion on contextual dimensions and personal traits also being considered in performance appraisal?	Introduce the new dimensions and validate if these are relevant to study further or not.	Yes/No
6	What do you think about incorporating a self-assessment requirement in the current model?	Understand if self-assessment is crucial and valued.	Short open answer
7	How do you transmit feedback to your employees?	Check if current feedback is in fact valuable or not and understand negative aspects.	Short open answer
8	What kind of feedback do employees value the most?	Understand what kind of feedback the employees expect and wish for from performance appraisal.	Short open answer
9	Are there any specific tools or methods you believe should be incorporated into the performance appraisal system?	Check if directors have feedback on practices that they have been subject from previous professional experiences.	Short open answer
Estimated interview time: 40min			

Figure 12 - Guidelines for the interviews with TDEC's directors
Source: Author

Main Criteria		Sub Criteria	
A	Work Characteristics: Assess the ability to organize work, considering aspects like understanding requests, planning, and coordinating execution with other activities and colleagues.	A.1	Planning and Organization: Assesses structured planning and coherence in work, including interpersonal aspects.
		A.2	Quality: Measures the precision and attention to detail in work output.
		A.3	Speed of Execution: Gauges the efficiency and speed in task completion.
		A.4	Commitment: Evaluates the level of dedication in performing work tasks.
		A.5	Effectiveness in Outcome: Measures the effectiveness of outcomes against effort and objectives.
		A.6	Timely Completion: Evaluates the ability to complete tasks successfully and on time.
B	Responsibility: Measure the level of responsibility demonstrated, i.e., the capacity to be accountable for one's actions and assigned work in a conscious, consistent, timely, and independent manner.	B.1	Punctuality: Refers to the discipline in adhering to schedules.
		B.2	Autonomy: Evaluates the ability to work independently.
		B.3	Initiative: Gauges the ability to take proactive steps and make improvements or suggestions.
		B.4	Dynamism: Measures the level of enthusiasm and energy in job performance.
		B.5	Creativity: Assesses the capacity for creative problem-solving.
		B.6	Common Sense: Evaluates the ability to make balanced decisions and take responsibility for actions and outcomes.
C	Knowledge: Evaluate the ability to acquire knowledge and the level of knowledge gained, both generally and specifically related to the function performed.	C.1	Technical Ability: Measures expertise in one's field, ongoing learning, and practical application of knowledge.
		C.2	Procedures and Global Vision of the Group: Assesses understanding and integration of the group's culture, strategy, products, and procedures.
		C.3	Knowledge of Computer Tools: Evaluates proficiency in using computer tools relevant to the job.
		C.4	Acquisition of Knowledge: Gauges the ability to enhance and refine job-related skills and procedures.
D	Attitude: Assess the appropriateness of the posture/attitude and behaviors	D.1	Motivation: Assesses the employee's enthusiasm in adhering to organizational plans and goals.
		D.2	Team Spirit: Measures the employee's ability to work well within a team and contribute to shared objectives.

	in response to the demands of the role.	D.3	Availability: Evaluates the employee's readiness and willingness to take on work tasks as needed.
		D.4	Courtesy with Clients and Group Colleagues: Assesses the employee's ability to engage positively with clients and colleagues, ensuring they feel appreciated and welcomed.
E	Commercial Characteristics: Assess the commercial aptitudes of employees in roles of this nature.	E.1	Identification of Customer Needs: Measures the ability to recognize and direct customer needs within the organization.
		E.2	Negotiation Skills: Assesses the capacity to negotiate effectively and achieve profitable business outcomes.
		E.3	Prospecting for New Business: Evaluates the skill in identifying and persistently pursuing new business opportunities.
		E.4	Relationship with Clients: Measures the ability to foster long-term professional relationships through professionalism, courtesy, and effective service.
F	Leadership Characteristics: Evaluate employees in departmental leadership roles (without executive status) for attributes relevant to their function.	F.1	Team Motivation: Assesses the ability to motivate the team and respond to their concerns and expectations.
		F.2	Resource Management: Evaluates the skill in planning and cost-effective utilization of various resources.
		F.3	Coordination and Control: Measures the capability to coordinate and monitor the team's work and its outcomes.
		F.4	Conflict Management: Evaluates the skill in preventing and resolving workplace conflicts.
		F.5	Employee Development: Evaluates the contribution to the personal and professional development of team members.

Figure 13 - Grupo NOV's performance appraisal criteria (translated to English)
Source: Grupo NOV

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