



Lisbon School
of Economics
& Management
Universidade de Lisboa

MASTERS IN MANAGEMENT (MIM)

MASTERS FINAL WORK

INTERNSHIP REPORT

THE ROLE OF PLANNING AND ACCOUNTING IN SMEs

JOSÉ DUARTE CARDOSO MARQUES FERNANDES

OCTOBER - 2023



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RESUMO

As Pequenas e Médias Empresas (PME) têm assumido um papel cada vez mais relevante nas estruturas económicas, especialmente ao nível do crescimento económico, criação de emprego, inovação e diversidade de mercado. Para este crescimento das PME, há vários fatores críticos associados, entre os quais o planeamento estratégico, a contabilidade organizada, e a evolução tecnológica. Este estudo pretende investigar as relações entre os tópicos apresentados, estudando a influência do planeamento estratégico e da contabilidade organizada no desempenho das PME, quais as vantagens de ambos e a forma como a evolução tecnológica afetou o seu desenvolvimento. Sendo o estudo realizado no âmbito na Greenvolt Next, uma empresa especializada na área das energias renováveis, é estudado o caso específico da Greenvolt Next, com o objetivo de perceber a importância das variáveis apresentadas no seu desenvolvimento e operação.

Este estudo assenta numa metodologia qualitativa, conduzida através de entrevistas feitas a profissionais com cargos relevantes na Greenvolt Next Portugal, que foram desafiados a responder a um conjunto de perguntas sobre a empresa e as variáveis referidas.

Os resultados obtidos, permitem interpretar que há uma clara influência da contabilidade organizada e do planeamento estratégico no desenvolvimento da PME Greenvolt Next, sendo notório o crescimento sustentável, o aumento do controlo, a antecipação de problemas e a minimização do risco. A evolução tecnológica desempenha um papel fundamental no desenvolvimento do planeamento e da contabilidade, segundo as observações dos entrevistados.

A nível académico, o presente estudo permitiu desenvolver o conhecimento sobre a influência do planeamento e contabilidade no desenvolvimento, explorando relações que ainda não tinham sido estabelecidas. A nível empresarial, permite que as PME valorizem a importância e investimento associado ao planeamento estratégico e contabilidade organizada, de modo a aumentarem a eficiência, e promoverem o crescimento sustentável, a antecipação de problemas e minimização do risco.

Palavras-Chave: PME, planeamento estratégico, contabilidade organizada, evolução tecnológica

ABSTRACT

Small and Medium-sized Enterprises (SMEs) have taken on an increasingly important role in economic structures, especially in terms of economic growth, job creation, innovation and market diversity. There are several critical factors associated with the performance of SMEs, including planning, organized accounting, and technological evolution. This study aims to deep investigate the relationships between the topics presented, studying the influence of strategic planning and organized accounting on the performance of SMEs, the advantages of both and how technological evolution has affected their development. Since the study was carried out at Greenvolt Next, a company focused on renewable energy, the specific case of Greenvolt Next is studied, to understand the importance of the topics presented in its development and operation.

This study is based on a qualitative methodology, conducted through interviews with professionals in relevant positions at Greenvolt Next Portugal, who were challenged to answer a set of questions about the company and the subjects mentioned.

The results obtained allow us to interpret that there is a clear influence of organized accounting and strategic planning on the performance of the SME Greenvolt Next, with sustainable growth, increased control, anticipation of problems and minimization of risk. Technological evolution plays a fundamental role in the development of planning and accounting, according to the interviewees' observations.

At an academic level, this study has made it possible to develop knowledge about the influence of planning and accounting on development, exploring relationships that had not yet been established. Regarding the business level, it allows SMEs to appreciate the importance and investment associated with strategic planning and organized accounting, to increase efficiency, and promote sustainable growth, the anticipation of problems and the minimization of risk.

Keywords: SMEs, strategic planning, organized accounting, technological evolution

ABBREVIATIONS

CRM – Customer Relationship Management

KPI – Key Performance Indicators

SAP – System Applications and Products in Data Processing

SDG – Sustainable Development Goals

SME – Small and Medium-sized Enterprises

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CHAPTER 1 - INTRODUCTION

1.1 Study Background

Small and medium-sized enterprises (SMEs) play a crucial role in the economic structure of countries all over the world due to their major contributions to economic growth, job creation, innovation, and market variety (Gherghina et al., 2020). Their capacity for innovation and adaptation encourages product and service diversity, which boosts competitiveness, efficiency, and customer choice. Since they are frequently small local enterprises, the jobs produced contribute to the growth of local and regional communities while lowering economic disparities across regions. SMEs account for the majority of job vacancies globally in terms of employment (Ayoko, 2021; Serrasqueiro et. al., 2021). Despite their importance, SMEs face some challenges, such as limited access to credit and resources, as well as a lack of institutional support (Gamage et. al., 2020; Hoekman & Taş, 2020).

Several factors can be associated with the recent growth and development of SMEs, such as strategic planning and organized accounting. Planning makes it possible to anticipate problems and minimize the risk (Azeitão & Roberto, 2010). Strategic planning and parallel control mechanisms improve efficiency rates, reinforce security, and enhance the organizational quality of corporations (Hensey, 1986). Developing organized accounting methodologies, including all of the company's transactions, is essential to have a reliable and updated sample of the company's current situation (Rodrigues & Borges, 2014). The development of planning and accounting is linked to technological evolution, which has facilitated and improved planning capacity and accounting records, through new and more efficient software capable of different analyses (Attaran, 2023; Troub, 1982; Kokina & Blanchette, 2019). Planning and accounting also influence decision-making and can mean the difference between the success and failure of a business (Alves & Ussman, 2006).

This report aims to study the role and relationship of accounting and planning in SMEs, based on the case study of Greenvolt Next, a SME that operates in the renewable energy sector, and faced exponential growth throughout the last couple of years. As the company is developing and changing its organizational structure, this report objective is to analyze the importance of planning and accounting in Greenvolt Next operation.

1.2 The Main Problem and Research Questions

The choice of the theme of this research derives from the internship at Greenvolt Next Portugal in the Financial area and is motivated by the critical importance of SMEs for the economy and the necessity of better understanding the importance of how effective accounting practices and well-structured strategic planning can influence their performance and growth.

At an academic level, the present research aims to enhance the existing literature on the role played by planning and accounting in the organization's performance.

At an academic level, the present research aims to enhance the existing literature on the role played by planning and accounting in the organization's performance.

In the case of Greenvolt Next Portugal, which is growing exponentially, establishing itself as one of the main players in the renewable energies sector. Strategic planning and accounting were critical for the development and establishment of the company's current situation, enabling it to optimize resource allocation, sustain growth, and maintain a sustainable approach. This study aims to understand what measures have been taken to improve planning and accounting in the organization, why they have been taken, as well as to understand the evolution of accounting and planning within the organization. Therefore, on a business level, the main conclusions and findings of this research aim to expose the importance of planning and accounting and their relationship with the competitiveness of organizations. This study aims to highlight the importance of strategic planning and organized accounting, and to understand how technological developments, such as new programming techniques and new software, have impacted the evolution and improvement of those factors.

Hence, the present study is designed to answer the following research questions:

Q1: What is the importance of planning in a SME?

Q2: What is the importance of organized accounting in a SME?

Q3: How significant is technological evolution and what is its importance for planning and accounting?

1.3 Structure of the Report

This project begins with an introduction describing the background of internship and stating the main problem and research questions of this study and the structure of the report. Chapter two presents the literature review with the importance and

contextualization of SMEs as well as the evolution of the concepts of planning and accounting, presenting its importance and advantages for an organization. The influence of technological evolution on the development of planning and organized accounting is then analyzed. Also in the literature review, the relationship between planning, accounting and the SDGs is presented. Chapter three presents the conceptual model that guides the empirical research in this study. In Chapter 4, an overview of the firm and the internship is provided. It begins with a presentation of the company and is followed by a study of the sector in which it operates and a list of its main competitors. The company's services and goods are next described, and lastly the internship's parameters and tasks are listed. Chapter 5, the research methodology and data analysis, describes the methodology adopted and the methods used to collect the data. Still in chapter 5, it is presented the analysis of the data and the discussion of the main findings with the proposed recommendations. Finally, chapter six sets out the conclusions, limitations and suggestions for future research.

CHAPTER 2 – LITERATURE REVIEW

2.1 Small and Medium Enterprises

Small and Medium Enterprises (SMEs) play an important role in the economic structure of societies around the world as they contribute significantly to economic growth, job creation, innovation and market diversity (Gherghina et. al., 2020). They have an entrepreneurial and adaptable nature, which allows them to respond and adapt quickly to market changes, creating business opportunities and challenging large companies (Al-Haddad et. al., 2019). Their ability to innovate and adapt promotes the diversification of products and services, which increases competition, efficiency, and consumer choice (Serrasqueiro et. al., 2021). In terms of employment, SMEs account for the vast majority of job openings in many countries, since they are typically local businesses, the jobs created contribute to the development of local and regional communities, while reducing economic disparities between regions. (Ayoko, 2021; Iqbal et. al., 2021; Liñán et. al., 2020).

SMEs also play an essential role in social and economic inclusion, providing employment opportunities for segments of the population that are sometimes ignored by the labor market of large companies, such as young people, the elderly and women. (David & Oyeyinka, 2014; McQuaid & Webb, 2020; Virani, 2023). Despite their importance, SMEs face some challenges, such as limited access to credit and resources, as well as a lack of institutional support. In this regard, developing public policies that support and facilitate the development and growth of SMEs is essential in promoting strong and equitable economies. (Gamage et. al., 2020; Hoekman & Taş, 2020).

2.2 Planning

Given the market situation, companies need to continuously improve and innovate their management processes while adopting different strategies to stimulate creativity. The combination of these factors becomes essential when it comes to small and medium-sized enterprises, as they can determine whether companies prevail and possibly become more competitive or in the worst case, go bankrupt. Anticipating events is one of a SME most valuable advantage, as it is critical to find management techniques who promote competitive advantage, minimizing the risks (Azeitão & Roberto, 2010; Espinoza,2022).

The increase of control is also vital for the SME, as it promotes the equilibrium and more efficiency (Hensey, 1986).

As a way of defining objectives, strategic planning is a method used by an organization for the long term, as well as the policies and strategies needed to achieve them, involving the allocation of resources to fulfil the organization's mission and values (Ommani, 2011). In addition to a clear vision of objectives, strategic planning conveys confidence when communicated effectively and minimizes uncertainty in the decision-making process (Velikikh, 2021).

Strategic planning is a core responsibility for good business management, as it represents problem-solving and the goals to be achieved (Lee, 2023), influencing the strategic direction of the organization and to coordinate and integrate important decisions (Lo, 2021). Among the various objectives of strategic planning, future development is one of the main ones (Stojanović & Milanović, 2010). The definition of priorities, strategies and necessary measures serves to realize the success of the objectives (Stojanović & Milanović, 2010).

Strategic planning takes the freedom to become what you want and do what you want, to get where you want to go (Carvalho, 2013). Planning must consider the company's internal and external levels. About the internal level, this includes information about resources, capabilities, experience and knowledge. Externally, it is important to recognise the market in which the company is integrated, especially considering supply and demand, as well as stakeholders and the political, economic and social state of the world and the market (Carvalho, 2013).

2.3. Accounting

The definitions of accounting are quite dissonant and imprecise (Silva, 1959). The concept of accounting has evolved over the years and centuries, since, firstly, it was used to measure and control assets and later it gained other uses and definitions, with the creation of various currents of thought (Bauchadze, 2022; Faria & Moreira, 2010). Bankruptcies were considered the great boosters of accounting, since to counteract the high number of bankruptcies, it was necessary to increase the quality of accounting records so that organizations could be monitored more accurately and in greater detail (Trigueiros, 2004). Already in the 20th century, other scholars deepened their research into accounting, such as Fabio Besta, who told us about the right to account; D'Alvise,

who introduced concepts such as inventory, forecasts and administrative functions related to the transition of wealth; and Masi, in 1947, who introduced the concept of registration (cited by: Faria & Moreira, 2010).

Currently, the process of accounting involves more than just conducting an economic inventory, as it also entails being accountable to outside parties, such as creditors, owners, and others, by outlining how the firm was designed and conducted (Trigueiros, 2004). An accountant's task is to prepare reports illustrating the results of a business over a given period (Trigueiros, 2004). Accounting must describe and record operations that affect the value of an asset, which is the combination of assets and liabilities that an organization has at its disposal in order to fulfil its social objective. (Rodrigues & Borges, 2014).

Accounting information that measures economic performance and capitalizes on development opportunities (Silviu, 2014), should be perceived as a set of financial instruments designed to help institutions and those who are part of them, namely leaders, to understand distinct resource needs, in the efficient distribution of resources between all parties and projects, in planning and in results (Dillard & Roslender, 2011).

Accounting is a critical factor in the process of organizational change, since it is this concept that has the role of providing information. It is necessary to direct the resources of the accounting area towards management support, to organize information, whether in the form of reports, maps, or tables, Information that can be used by different sectors of a company, since the same data can be used to gather various types of information (Alves & Ussman, 2006; Bauchadze, 2022). The main objective of accounting is to produce information to help in decision-making, providing material for planning, control and evaluation, in the good and efficient development of a company, in order to minimize and identify risks (Alves & Ussman, 2006; Khoshnaw, 2014; Nexhmie & Krasniqi, 2017).

2.4. Technological Evolution

Technological evolution is a dynamic and continuous process that aims to solve humanity's problems and generate significant improvements in people's quality of life (Quershi et. al., 2020). From the first tools invented in the Paleolithic period to modern advances in artificial intelligence, technology has been a fundamental indicator of human growth and development. (Huang, 2021; Wolff, 2021). The emergence of information

and communication technologies accelerated technological evolution in the 20th century (Brinkman et. al., 1997). The invention of the transistor, the microprocessor, and the introduction of the Internet triggered a digital revolution that has transformed every aspect of our lives, from the way we communicate and search for information to the work we do and the way we entertain ourselves (Löwstedt, 2021; Ross, 1998).

With the development of artificial intelligence, we are now at the forefront of even more technological innovations, since the AI has enormous potential to bring about deeper transformations as its applications are explored in areas such as health, education, security, transportation, and many others (Bajwa et. al., 2021; Crompton & Burke, 2023; Shiohira, 2021). However, with great opportunities come significant challenges, and the privacy, security, inequality and ethical issues of AI are becoming more prominent as we enter a new era of technology (Bakiner, 2023; Elliott & Soifer, 2022).

2.4.1. The importance of technology in the evolution of planning

The use of technology as an important tool for developing and improving planning has become inevitable in professional contexts. Whether in urban planning, business planning or personal planning, the ability to incorporate technological advances has been key to increasing the efficiency, accuracy and feasibility of various management and implementation strategies (Abirami et. al., 2023; Javed et. al., 2022; Porter, 1991; Priyanka & Thangavel, 2020). Initially, the planning process was essentially manual and paper-based, which made it vulnerable to numerous constraints, such as the loss or deterioration of documents, as well as the inability to share information in real-time with various stakeholders. However, with the breakthrough of information and communication technologies, the ability to efficiently collect, analyze and distribute information has revolutionized the planning process (Attaran, 2023; Troub, 1982).

One example of technology in planning is enterprise resource planning (ERP) software. This integrated system allows organizations to manage and coordinate all aspects of their operations, from production to distribution, through a single platform. Companies are now able to predict future trends, identify potential problems and make sound decisions with unprecedented speed and efficiency, thanks to advanced analytical tools (Katuu, 2020; Kitsantas, 2022; Moon, 2007).

The use of Geographic Information Systems (GIS) in urban planning has completely transformed the way we plan and manage our cities. GIS provides interactive,

real-time visualization of urban data, allowing urban planners to make more informed decisions about infrastructure development and resource distribution. Regardless of the power of technology, it should not be seen as a one-size-fits-all solution to planning challenges (Jebur, 2021; Masser & Ottens, 2019; Yeh, 1999).

2.4.2. The importance of technology in the evolution of accounting

The development of information and communication technologies has resulted in significant changes in the way accounting is practiced, making it more efficient, precise and strategic (Ghasemi et. al., 2011; Johari et. al., 2020; Taiwo, 2016). One of the most obvious consequences of using technology in accounting is the automation of accounting routines with the accounting software that made possible to automate various administrative tasks, reducing the time spent on repetitive tasks and reducing human errors (Kokina & Blanchette, 2019). This has allowed accounting professionals to focus on more strategic and valuable tasks, such as financial data analysis, tax planning and business consulting (Wilson & Sangster, 1992; Yoon, 2020).

With the introduction of cloud storage and online platforms, accounting data can now be accessed and updated in real-time from anywhere in the world (Khanom, 2017). This has increased the flexibility and speed of accounting operations, making decisions more dynamic and efficient (Brandas et. al., 2015; Fahlevi & Purnomo, 2023). Another significant advance is the emergence of data analysis technologies, which have enabled more in-depth analysis and valuable insights into financial data (Bhimani, 2020). Modern accounting software can generate detailed reports, identify trends, and even predict future results, helping with strategic decision-making and efficient financial management (Bose et. al., 2023; Sabharwal & Miah, 2021). In addition, the integration of artificial intelligence solutions promises to bring even more transformations, allowing complex tasks to be automated and more in-depth and accurate analyses to be made available (Himeur et. al., 2023; Li & Zheng, 2018).

2.5 Planning, Accounting and SDGs

Strategic planning, accounting, and the Sustainable Development Goals (SDGs) are three critical elements that must coexist in any organization seeking to promote sustainable development (Guarini et. al., 2022). Efficient planning and necessary accounting, aligned

with the SDGs, can help organizations promote positive changes while ensuring operational efficiency and economic responsibility (Makarenko & Plastun, 2017; Morton, 2017).

The strategic planning process is the process by which an organization defines its direction and makes decisions about the allocation of resources to pursue that strategy. When aligned with the SDGs, the strategy can guide the organization towards actions that promote economic, social and environmental development (Brown & Malekpour, 2019; Fleacă et. al., 2018; Morton, 2017). Accounting, on the other hand, serves as a tool for monitoring and controlling the implementation of these strategies. Proper accounting allows a company to track its financial and operational performance, providing a critical assessment of the efficiency and effectiveness of its strategies. It also enables transparency and accountability, both of which are essential in the age of the SDGs, when stakeholders are increasingly demanding accountability from companies (Donald & Way, 2016; Montero & Le Blanc, 2019; Wilekes et. al., 2022).

Incorporating the SDGs into planning and accounting opens the door to "Sustainable Development". This is an approach that goes beyond traditional economic indicators to include environmental and social ones. It provides a more comprehensive picture of organizational performance over time, as well as the organization's influence on society and the environment (Bebbington & Unerman, 2018; Liu et. al., 2018; Makarenko & Plastun, 2017).

CHAPTER 3 - CONCEPTUAL FRAMEWORK

The conceptual framework of this study was constructed based on the works of several authors, namely Nexhmie and Krasniqi (2017), Morton (2017) and Makarenko and Plastun (2017). The authors referred state that planning and essential accounting, in alignment with the SDGs, may assist organizations foster beneficial changes while guaranteeing operational efficiency and fiscal responsibility. It was considered relevant to study the contextualization and importance of SMEs for the economies, and the role played by planning and accounting and its relationship with SME growth.

Strategic planning allows the enterprises to anticipate problems and minimize the risks. Anticipating events is one of a SME most valuable advantage, as it is critical to find management techniques who promote competitive advantage, minimizing the risks (Azeitão & Roberto, 2010). Regarding accounting, it must present records of all the company's transactions, presenting a reliable sample of the company's current situation (Rodrigues & Borges, 2014) with the intention of creating data to aid in decision-making, supplying material for planning, controlling and evaluating, in the good and efficient growth of a firm, in order to reduce and detect risks (Alves & Ussman, 2006; Bauchadze, 2022). The evolution of planning and accounting has been influenced by technological evolution, that enabled new tools and software to improve the efficiency of planning and accounting permitting new, in-depth analyses (Attaran, 2023; Troub, 1982).

In line with the above and the literature review, the proposed conceptual model is shown in figure 1.

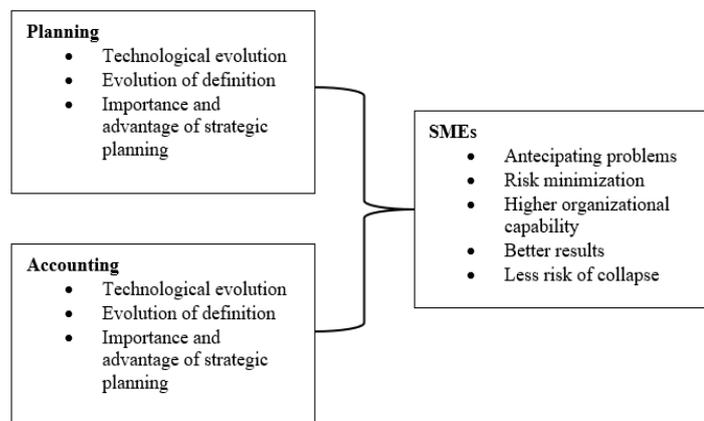


Figure 1– Conceptual Framework

Source: Author's Elaboration

The Role of Planning and Accounting in SMEs

Table I presents the concepts included in the literature review, the basis of the conceptual framework, with the objective of better understand the relationship between the subjects presented:

Table 1– Frame of References

Concepts	References
<p>SMEs</p> <ul style="list-style-type: none"> • Contextualization 	<p>Al-Haddad et. al., 2019; Gherghina et. al., 2020; Serrasqueiro et. al., 2021; Ayoko, 2021; Liñán et. al., 2020; Iqbal et. al., 202; David & Oyeyinka, 2014; McQuaid & Webb, 2020; Virani, 2023; Gamage et. al., 2020; Hoekman & Taş, 2020</p>
<p>Planning</p> <ul style="list-style-type: none"> • Importance and advantages of strategic planning 	<p>Azeitão & Roberto, 2010; Stojanović & Milanović, 2010; Carvalho, 2013;; Bojkovska & Jankulovski, 2017; Hensey, 1986; Ommani, 2011; Velikikh, 2021; Lee, 2023; Lo, 2021</p>
<p>Accounting</p> <ul style="list-style-type: none"> • Evolution of the definition • Importance and advantages of organized accounting 	<p>Silva, 1959; Faria & Moreira; Trigueiros, 2004; Rodrigues & Borges, 2014; Bondarenko et al., 2017; Kadocsa, 2006; Garrison et. al., 2010; Christensen et. Al., 2015; Rodrigues & Borges, 2014; Alves & Ussman, 2006; Silviu, 2014; Dillard & Roslender, 2011; Khoshnaw, 2014; Nexhmie & Krasniqi, 2017</p>
<p>Technological Evolution</p> <ul style="list-style-type: none"> • Contextualization • The importance of technology in the evolution of planning • The importance of technology in the evolution of accounting 	<p>Huang, 2021; Quershi et. al., 2020; Wolff, 2021; Brinkman et. al., 1997; Löwstedt, 2021; Ross, 1998; Bajwa et. al., 2021; Crompton & Burke, 2023; Shiohira, 2021; Bakiner, 2023; Elliott & Soifer, 2022; Abirami et. al., 2023; Javed et. al., 2022; Porter, 1991; Priyanka & Thangavel, 2020; Attaran, 2023; Troub, 1982; Katuu, 2020; Kitsantas, 2022; Moon, 2007; Jebur, 2021; Masser & Ottens, 2019; Yeh, 1999; Ghasemi et. al., 2011; Johari et. al., 2020; Taiwo, 2016; Kokina & Blanchette, 2019; Wilson & Sangster, 1992; Yoon, 2020; Brandas et. al., 2015; Fahlevi & Purnomo, 2023; Khanom, 2017; Bhimani, 2020; Bose et. al., 2023; Sabharwal & Miah, 2021; Himeur et. al., 2023; Li & Zheng, 2018</p>
<p>Planning, accounting and SDG</p> <ul style="list-style-type: none"> • The relationship between planning, accounting and SDG • Sustainable Growth 	<p>Guarini et. al., 2022; Makarenko & Plastun, 2017; Morton, 2017; Brown & Malekpour, 2019; Fleacă et. al., 2018; Morton, 2017; Donald & Way, 2016; Montero & Le Blanc, 2019; Wilekes et. al., 2022; Bebbington & Unerman, 2018; Liu et. al., 2018; Makarenko & Plastun, 2017</p>

Source – Author’s Elaboration

CHAPTER 4 - COMPANY AND INTERNSHIP OVERVIEW

4.1 The Company

Greenvolt Next Portugal, previously named Profit Energy, is a company specialized in the development, construction, and maintenance of energy production through photovoltaic solar systems and LED lighting as an energy efficiency measure (Greenvolt Next, s.d.). Greenvolt Next was created in 2017 (with the name Profit Energy) and is a leader and pioneer in renewable energy and sustainability, playing a key role in the global transition to a cleaner and more sustainable future (Profit Energy, s.d.).

Established as one of the main players in the Portuguese market in the renewable energy and LED lighting sector, Profit Energy (currently named Greenvolt Next) was bought by the Greenvolt Group in 2021. Greenvolt acquired 70% of Profit Energy. The Greenvolt group, upon the acquisition of Profit Energy, described the company as follows: “It is a reference in the renewable energy sector, dedicating itself to the development of energy efficiency projects, as well as the installation of photovoltaic solar projects, including engineering, procurement, and construction project development, as well as the provision of operation and maintenance services”¹ (Negócios, 2021).

Greenvolt Next Portugal offers two main solutions: solar energy and LED lighting. As for the former, there are two purposes for solar energy: self-consumption and sale. The company advocates the "independence and power of decentralized solar energy for greater economic and environmental sustainability of our planet" ² (Greenvolt Next, s.d.).

Throughout its existence, Greenvolt Next Portugal has grown and left its positive mark. With each passing day, the company remains more committed to leading the evolution of sustainable energy. Greenvolt Next is already present in Poland, and sooner will be present in other countries (Greenvolt, s.d.).

¹ Retrieved, 14 September, 2023, from <https://www.jornaldenegocios.pt/empresas/energia/detalhe/greenvolt-recebe-luz-verde-para-comprar-profit-energy>

² Retrieved, 14 September, 2023, from [Energia Solar | Greenvolt Next Portugal](#)

4.1.1 Vision, Mission, and Values

The company has a clear vision, which it strives for every day: to transform the way the world consumes energy by fostering the transition to renewable sources, while driving progress in this area and excellence in services.

With the slogan "Energy next to you", Greenvolt Next's mission is to contribute more and more to the fight against climate change, such as reducing carbon emissions. It is also based on fundamental values such as innovation, sustainability and social responsibility. Developing technical and financial solutions in the renewable energy and energy efficiency sector that enhance not only companies' competitiveness and sustainability but also our planet, creating business opportunities for investors and partners.

Hence, it is evident that Greenvolt Next Portugal, through its commitments, values, and actions, makes a significant contribution to several Sustainable Development Goals particularly to SDG 5 – Gender Equality, SDG 7 – Affordable and Clean Energy, SDG 8 – Decent Work and Economic Work, SDG 12 – Responsible Consumption and Production and SDG 13 – Climate Action (United Nations, s.d.).

4.2 Business Sector and Main Competitors

4.2.1 Business Sector

Greenvolt Next operates in the renewable energy and sustainability sector, dedicating itself to the development of energy efficiency projects, as well as the installation of photovoltaic solar projects.

In addition to being a crucial component of plans and scenarios to combat climate change, renewable energy sources have also been shown to be effective in reducing energy reliance or in promoting new economics sectors and activities in certain nations (Würzburg, Labandeira, & Linares, 2013), Portugal is not an exception in this scenario and has unequivocally committed to the energy transition, aiming to reduce its greenhouse gas emissions and striving for carbon neutrality by 2050. According to Fontoura (2021) in the article "Energy Predictions for 2021," Portugal stood out in 2020 in global renewable energy production, ranking as the fourth country with the highest solar energy production.

4.2.2 Main Competitors

Regarding Greenvolt Next's main competitor, the focus goes to EDP, a global company, present in 29 countries, aspiring to lead the energy transition and committing to be completely green by 2030. They provide an integrated offering of energy and services for residential and business customers. (EDP Portugal, s.d.) EDP Commercial/Renewables target market partially aligns with Greenvolt Next target market. Their strengths lie in the competitive pricing of their services, responsiveness, and the company's reputation.

Prosolia Energy, Helexia, DSTsolar and Energycon are other competitive players in the renewable energies sector. The demand for renewable energy sources is increasing and causing the renewable energy sector to experience continuous growth, with numerous companies seeking to enter and invest in the market.

4.3 Products and Services

Greenvolt Next Portugal is involved in engineering, procurement, and construction activities, ensuring the effective implementation of renewable energy projects. The company is specialized in the development, construction and maintenance of energy production projects through renewable sources and energy efficiency, with a strong focus on photovoltaic solar systems and LED lighting. Their efforts contribute to a more sustainable and eco-friendly energy landscape. Therefore, Greenvolt Next is an environmental engineering company specialized in the development and design of energy production projects using renewable sources. In addition to engineering services, the company structure enables the provision of the following services to its clients: Commercial development of proposals according to the needs; Technical development of Photovoltaic Solar Power Plants and LED Lighting Systems; Control and Maintenance of developed projects.

Aligned with the ambition to combat climate change and promote a more balanced and sustainable world on environmental, social, and economic levels, Greenvolt Next offers the opportunity install photovoltaic solar systems and LED lighting without any initial investment throughout the PPA model.

4.4 Internship Scope and Main Activities

The internship took place between December 2022 and March 2023 at the company Greenvolt Next, which belongs to the Decentralized Production category of the Greenvolt Group, with headquarter located at Rua C, Núcleo Empresarial, 56 Venda do Pinheiro 2665-601 (Greenvolt Next , s.d.).

Greenvolt Next involves a board of directors and eight departments, Commercial, Finance, Purchasing and Logistics, Engineering and Project, Maintenance, Operations, Marketing and Communications, QAS and Human Resources. The internship took place in the Finance Department, as a Financial Controller. The finance department is responsible for presenting the company results, and its mission is to alert, correct and implement procedures so that the company achieves the expected results and can continue its growth path. The Finance Department contains seven members: the finance director, who reports to the board and heads the department, two senior controllers, who aid the finance director throughout the implementation and development of new procedures and optimization methods, and by overseeing the work carried out by 4 junior controllers. The primary role of the junior controllers is to monitor daily operational activities, including cost control and projects management as well as analysis of accounts receivables and payables, among other operational activities.

The main activities of the internship consisted of:

- Financial management of Greenvolt Next projects, following up and monitoring the physical and financial execution of projects, identifying deviations from established targets, and defining corrective and preventive actions, such as re-budgeting and consequent changes to the project margin, or correcting the costs allocated in the system;
- Billing to costumers of the photovoltaic installations as established milestone is achieved;

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- Analysis of the balance of trade receivables, collecting evidence that support the information in order to align with the client and receive the respective amount;
- Analysis of the company financing, intra-group financing and bank financing, with the creation of a control file with relevant information, which allowed Greenvolt Next financing to be monitored;
- Creation of the finance department procedures manual, which is essential for the organization and smooth running of the department. The manual consists of an analysis and detailed description of the functions carried out by the finance department, and is currently used when integrating new members as well as reallocating tasks within the department;
- The analysis of the various KPIs associated with the operation and financial results. The Key Performance Indicators are crucial for assessing the company's current performance, checking the number of ongoing projects and evaluating future needs and corrective measures.

CHAPTER 5 – RESEARCH METHODOLOGY AND DATA ANALYSIS

5.1 Methodological Approach

The purpose of this research is to clarify the connection between the literature review subjects and analyze the specific case of Greenvolt Next, a SME in the renewable energy sector, studying the importance of planning and accounting in the company's development, therefore this study has a descriptive-explanatory character (Saunders et al., 2019).

This study uses Saunder's Research Onion. The Saunders' "Research Onion" illustrates the stages involved in the development of research work namely, Research Philosophy, Research Approach, Research Strategies, Research Choice, and Research Time Horizon (Saunders et al., 2019). Concerning the collection of data, it consisted of three interviews with specialized professionals in management positions at Greenvolt Next. Those interviews allow to clarify the relationship between the themes developed in the literature review, therefore the methodology of this research is qualitative and the study's philosophy is interpretivism, as this research aims to interpret the interviewees ideas regarding planning, organized accounting and its importance for SMEs, especially in the case of Greenvolt Next. The approach is inductive and the research strategy can be viewed as a case study as it depends on the collection of specific information of three specific individuals. Hence, this report is a mono-method qualitative study since it only used one data collection technique (Saunders et al., 2019). Regarding the time horizon, this research is cross-sectional as the collection of data occurred in a pre-determined and specific time (Saunders et al., 2019).

The objective of this study is to better understand the role played by planning and accounting in SMEs, with emphasis on the case of Greenvolt Next Portugal, a SME with an exponential growth in the recent years. The importance of planning and accounting in the organization is going to be analyzed throughout the interpretation of the interviews and the ideas formulated in the literature review that make up the proposed conceptual framework.

5.2. Data Collection Method

Firstly, this research started with the collection of secondary data through the review of the literature on the subject, to formulate the main problem and the research questions of this study. Moreover, the collection of primary data with the objective of clarify the

questions and main problem of the research, was made throughout semi - structured interviews (Saunders et al., 2019).

The mentioned semi-structured interviews, consisted of interviewing the Greenvolt Next CEO, the Finance Director and the Purchase and Logistics Director. The purpose of the interviews was to gain a deeper and more detailed understanding of the context of Greenvolt Next and its growth, evaluating the importance and role played by accounting and planning in small and medium-sized businesses. Other important and detailed topics discussed and analyzed throughout the interviews and covered in this report, were the importance of technological developments in planning and accounting, as well as sustainable growth and the strategic practices followed by the company. The interviews were conducted face-to-face, and the interviewees authorized the recording and use of the data collected.

The chosen method for the data collection was the interview because it allows the detailed and descriptive collection of information on the subject studied in this report. The interview also allows the interviewee to develop their opinion and it is possible to adjust the questions according to previous answers and the interviewee experience and point of view.

5.3 Sample Characterization

This study consisted of interviewing three professionals with relevant positions at Greenvolt Next Portugal. In terms of the age range of the sample, respondents were adults with 30 - 40 to years old representing. Regarding their highest level of complete education, all the interviewees had a master's degree.

Table II below presents an overview of the three interviewees:

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Table 2 – Sample Characterization

	Position in the company	Years in the company	Academic background	Professional background
Interviewee 1	Finance Director	1	Management and finance	Audit Consultant; Financial Controller
Interviewee 2	CEO	7 – founder of Greenvolt Next	Engineering	Sales Director; Commercial
Interviewee 3	Purchase and Logistics Director	6	Engineering	Commercial

Source – Author’s Elaboration

5.4. Structure of the Interviews

The collection of the data was made thorough a semi-structured interview, as all the interviewees were asked similar questions on the relevant topics, with the objective to adapt the interview to the interviewee's position and experience and to allow them to develop their ideas.

The interview began with introductory questions, contextualizing the interviewee on the objective and subject of the interview, as well as asking some personal questions, namely what their current position in the company, how long they have been in that position and their professional background. Following, with focus on planning and its importance, some questions were asked, namely the importance of strategic planning at Greenvolt Next, and examples of decisions taken based on planning. Technological developments and their impact on planning were also discussed. Accounting, namely its functionality and usefulness, was also discussed with the interviewees, asking about the impact of organized accounting, as well as the influence of new and more sophisticated accounting software. Lastly, Greenvolt Next's social responsibility is discussed, as well as the importance and necessity of this responsibility.

5.5 Data Analysis

5.5.1 The Role of Planning in SMEs

According to Interviewee 1, planning is an easy subject to discuss for the Finance Director of Greenvolt Next, as when he joined the company there was no planning at all nor a

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Finance Department. Based on this interview the better we are prepared and the more we anticipate issues or needs, the better our response will be. Interviewee 1 also presents a clear example of the influence of planning, *“Last year-end’s closing. We identified a series of problems together with the company’s management and had to plan how to close the accounts and what procedures to use to close the year so that the accounts were in line with reality. We identified that we had a considerable problem in valuing our stocks. In other words, we were able to react in good time. Without this planning, closing the year would have been more complicated, more serious situations could have arisen, perhaps even the bankruptcy of the company. There is a clear relationship between planning and minimizing risk and anticipating problems.”*

Purchase and Logistics Director presents a good example relating planning and decision making, stating that planning didn’t exist before and the company’s purpose was all about getting more business and nowadays, the adequate planning enables much better, quicker, and more efficient decision-making. Interviewee 3 also refers to the fact that planning leads to better and more responsible work.

Concerning the difficulties and challenges faced by SMEs and the relationship with planning, the observations *“If we had had 100% planning in our history, things would have gone better. The truth is that we’re talking about a company that doesn’t have enough resources to carry out everything it’s supposed to, so sometimes things have to be left behind.”* and *“cash flow and treasury are clearly our biggest challenge”* are presented in the interview 1 and 2.

Still regarding planning and its influence, Greenvolt Next’s Finance Director gives the example of the recent purchase of 100 per cent electric vehicles and how this decision was taken with the aim of showing the market and society that the company is also committed to its values internally. This example is also presented by the other interviewees.

5.5.2 The Role of Accounting in SMEs

When the Purchase and Logistics Director was asked if he believed that organized accounting would help the company identify financial risks and threats, he promptly replied yes. According to interview 3, *“Having well-organized accounting provides various financial indicators and accounting records of past events. However, this information wasn’t centralized before, and it’s great to have it”*.

Greenvolt Next's Financial Director, when asked how they deal with the constant financial challenges and how accounting helps to overcome adversity, replied that accounting must represent the company operations detailed and should serve as basis to evaluate the financial situation of the company. More than once, the Finance Director mentioned the records as a way of trying to anticipate or ascertain situations.

Greenvolt Next's CEO compares the SMEs, in the specific case of Greenvolt Next, to a *"train that is getting faster and bigger"*, due to their rapid growth that can put behind the investment in planning or accounting. They are still exposed to some risks, such as fraud, for example, as the Finance Director points out.

5.5.3 The Importance of Technology in the Evolution of Planning and Accounting in SMEs

In all the interviews it is mentioned how in the past controls were done manually, based on sheets of paper, or primary excel sheets, a more archaic form than the one we know today, and how this made everything more complicated. Nowadays, according to the Financial Director, there are some apps and some functionalities that Microsoft Office or Google or the companies provide, where it is possible to define the tasks and define a short-, medium- or long-term plan.

According to the Purchase and Logistics Director, when it comes to the influence that technology has had on planning, *"The biggest evolution has had to do with growth and the imperative need to use more robust software such as SAP or CRM, which are new, purely technological tools that allow us to control processes."* Interviewee 3 also explains the importance and praises both pieces of software, CMR for planning and SAP for accounting, respectively: *"It's a type of software used to record every contact made with a customer. We're developing the CRM software, so that we can integrate the process even more, from its beginning to the end"* and *"Now, SAP is what it is, and at the end of the day, it makes our lives easier. It will also enable us to work with data."*

According with all the interviews technology has also played a big role in the evolution of accounting, with the introduction of accounting software that became possible to make certain administrative tasks automatic, reducing the time spent on repetitive tasks and human error. Interviewee 2 gives the example of three pieces of software used to minimize or even nullify these risks: *"in addition to SAP, we are also implementing or fine-tuning Power BI and CRM systems. These three systems are processing the company sought to improve work efficiency."* For the CEO of Greenvolt

Next, "Having the ability to predict cash flow needs, especially in the short to medium term for a company like ours, which is no longer a micro company with 100 employees and a turnover of 50 million euros, would have been unthinkable without the SAP system or equivalent software. "

5.6 Discussion of the Main Findings

5.6.1 The Role of Planning in SMEs

The study meant to analyze the importance and advantages of planning in SME. The opinion presented by Interviewee 1, that emphasizes the importance of planning, is in line with the idea presented by Azeitão and Roberto (2010), who argued that one of a company's main assets is its ability to anticipate events.

Strategic planning is a core responsibility for good business management, as it represents problem-solving and the goals to be achieved (Lee, 2023), influencing the strategic direction of the organization and to coordinate and integrate important decisions (Lo, 2021). The definition of priorities, strategies and necessary measures serves to realize the success of the objectives (Stojanović & Milanović, 2010). These ideas presented in the literature review are corroborated by the Purchase and Logistics Director. Interviewee 3 still supports the literature of Morton (2017) referring that planning leads to better and more responsible work.

The difficulties faced by SMEs, presented by Gamage et. al. (2020) and Hoekman and Taş (2020), where the lack of resources, credit and institutional support are mentioned as difficulties experienced by SMEs are confirmed in this study with the opinions reported in interviews 1 and 2.

Still regarding planning and its influence, according to Carvalho (2013) and Makarenko and Plastun (2017), good planning should take into account both the internal and external levels of a company, referring to the importance of recognizing the market in which the company operates, as well as supply and demand. The example presented by the interviewees and explained by the Finance Director supports the literature exposed. The acquisition of 100% electric vehicles also supports the literature of Makarenko and Plastun (2017) and Morton (2017) opening the door to "Sustainable Development".

5.6.2 The Role of Accounting in SMEs

The idea of the Purchasing and Logistics Director regarding the importance of organized accounting supports the literature of Donald and Way (2016), Montero and Le Blanc (2019) and Wilekes et. al. (2022). Interviewee 3 also verifies the literature of Alves and Ussman (2006), that described the role of accounting in providing information and considered that this concept is a fundamental means for the process of organizational change.

Regarding the good accounting practices to achieve financial objectives, addressed by the Finance Director, the authors Rodrigues and Borges (2014) also state that accounting is a technique whose purpose is to describe and record operations that may alter the values and composition, in this case of the company. The Finance Director also points the records as a way of trying to anticipate or ascertain situations, corroborating the ideas of Alves and Ussman, (2006) and Nexhmie and Krasniqi (2017).

Gamage et. al. (2020) and Hoekman and Taş (2020) refer that despite their significance, SMEs have significant difficulties, making public policies that encourage and enable the expansion of SMEs is crucial to fostering robust and just economic systems. This idea is verified by the ideas of interview 1 and 2, that pointed out the difficulties of SMEs.

5.6.3 The Importance of Technology in the Evolution of Planning and Accounting in SMEs

The last research question of this report concerns the impact of technological evolution in the development of planning and accounting. The examples presented support the literature of Huang (2021), Quershi et. al. (2020) and Wolff (2021), who state that one of the goals of technological evolution is to solve humanity's problems and give people a better quality of life. Interview 2 still presents some examples about the importance of technology in planning comes in, the transition from sheets of paper, which according to Attaran (2023) and Troub (1982) were more likely to be lost or damaged over time and it was impossible to share information in real time with several people at the same time.

The quotes from Greenvolt Next CEO mirror the ideas put forward by Bhimani, (2020), Bose et. al. (2023); Sabharwal and Miah (2021), according to whom modern

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accounting software can generate detailed reports, predict results, identify trends, which helps with decision-making and leads to efficient financial management.

CHAPTER 6 –CONCLUSIONS

6.1 Main Contributions

This study investigated the importance of planning and organized accounting in SMEs, as well as the relationship between technological evolution and the evolution of planning and accounting. In this way, the main objective and the specific objectives outlined were achieved and it is possible to present an answer to the established questions.

Based on the internship carried out at Greenvolt Next Portugal, the studies presented in the literature review and the testimonies gathered from the interviews, planning and accounting are key factor in Greenvolt Next's operation, allowing for the optimization of tasks, as well as increased efficiency and control.

Answering the first question, planning is fundamental in any organization, and therefore, in SME. Strategic planning allows the companies to anticipate problems and minimize the risks, allowing them to gain competitive advantage. This study also seeks to alert and encourage SMEs to adopt more developed and sophisticated accounting and planning policies. There is a clear link between organized accounting and increased efficiency, control and productivity. In the case studied, Greenvolt Next, the interviewees who occupy relevant positions in the company's structure believe that without planning and organized accounting, the company would not be in the position it is in and could even have gone bankrupt.

Concerning the second question, the technological evolution was fundamental to the development of planning and accounting has been technological evolution, which allows for more and more tools and software with the aim of facilitating the work, increasing the rigor and detail presented.

At an academic level, this study aims to contribute to a better understanding of the dynamics of SMEs, and above all, to understand the impact and importance of organized accounting and strategic planning in organizations. It is possible to highlight the influence of accounting and planning in the way they promote sustainable growth, providing problems anticipating and minimizing the risk.

In the case of Greenvolt Next, the main recommendation is to continue with the work carried out in terms of accounting organization and strategic planning, since both bring added value to the company. For SMEs in general, this report aims to emphasize the importance of organized accounting and strategic planning, to highlight its importance

in the growth of the company and how the results and growth can be even better and more sustainable if planning and accounting are taken into account from the initial phase of the company. It is also important to clarify that planning and accounting are important factors that can have a positive influence on a company's results and evolution, but they should not and cannot be the only factors considered. Their usefulness and necessity vary depending on the case studied.

6.2 Limitations and Future Research

SMEs are focused on several challenges which leads them to undervalue investment and commitment in capable strategic planning and well-organized accounting.

This report presents some limitations, the main one being that the study was only carried out in one company and there are other variables such as the business area and the professional training of employees, which will influence the company's performance and evolution.

As a result of the study carried out, future research on the subject is suggested. Considering the need to study techniques such as planning and organized accounting that promote sustainable growth, in terms of future research, it might be interesting to carry out a study with a wide range of companies from different sectors of activity and measure each company commitment to each subject, planning and accounting, through a questionnaire with various parameters to better understand planning and accounting impact on the company's performance/evolution. The main objective would be to investigate and clarify whether companies that invest in and value strategic planning and organized accounting have a return in terms of their performance and evolution.

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APPENDIXES

Appendix 1 – Interviews

Interview 1 (Greenvolt Next Finance Director)

José Fernandes: Good morning, my name is José Fernandes and I'm doing this interview as part of my Final Master's Work. I'd like to start by asking if you'd consent to the recording of the interview and the use of the data collected in it for this work.

PR: Yes, I do.

José Fernandes (JF): My Final Master's Work is about "The role of Planning and Accounting in Small and Medium-sized Enterprises" and how this can lead to the company's growth and to overcoming difficulties and avoiding obstacles, as well as drawing parallels with your activities and your professional career. We will try to understand how important it is to consider these two areas for a company and in particular for Greenvolt Next.

JF: What is your name, what position do you hold in the company and how many years have you worked in this company and what activity have you carried out so far in other contexts?

PR: My name is Paulo Ribeiro; I'm the Finance Director of Greenvolt Next Portugal and I've been here for about a year and a few months. Previously I worked at Media Capital in the Management Control area for around 2 years and before that, for around 6 years, in Financial Auditing at Deloitte.

JF: Has the experience at Greenvolt been positive and enriching? How would you describe the company's development?

PR: The growth has been brutal. When I joined, turnover was around 30 million euros and now we're over 50 million euros. The company had 40 people and now has 100. So, in this sense, everything that involves procedures, control and organization has been a constant challenge. Every day is a new day with new things to solve or think about and this is the positive side of seeing a company grow to this size.

JF: What has the experience of being Finance Director been like? What method do you use to make decisions and lead the team?

PR: Team management comes from the past and that's something that's most complicated when you're in a management role because not all people are the same. There are various methods of motivating and nurturing people, there are people for whom method A works and method B doesn't work, which means that I have to adapt in order to adjust the motivations and day-to-day needs of the department as much as possible to the motivation and well-being of the team. If the team isn't aligned and we're not all moving in the same direction, things won't work.

JF: How important is planning in a company? Is there strategic planning in the finance department? Have you paid more attention to this over time, or has it always been constant?

PR: It's an easy subject to tackle because when I joined there was no planning at all, there was no Finance Department. Naturally, it's becoming more and more of a cornerstone in the organization of the department, given that the needs are growing and so are the demands. The better we are prepared and the more we anticipate issues or needs, the better we will be prepared and the better our response and its quality

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will be. In the specific case of Greenvolt Next and bearing in mind that the company is growing at such a high rate, it is even more essential to have planning that is increasingly effective and adjusted to reality.

JF: Can you make a distinction between planning in a company like Greenvolt Next, which is still considered a small and medium-sized enterprise, and other companies you've worked for that are of a different size? Does a small or medium-sized company tend to look less at planning? Do you agree with this view? Do you think that more attention should have been paid to planning right from the start? Would the results have been different?

PR: In theory, all companies recognize that planning is fundamental. What happens is that in more mature companies that are more stable in terms of the market, since there are no extraordinary day-to-day needs, they end up investing more in terms of planning and organization. If we had had 100% planning in our history, things would have gone better. The truth is that we're talking about a company that doesn't have enough resources to carry out everything it's supposed to, so sometimes things have to be left behind. There are other, more fundamental day-to-day needs. To answer directly, in other companies it's true that planning was more pronounced, but they were companies that weren't growing 100% a year like we are.

JF: Can you give me an example in your professional life and at Greenvolt Next where planning has had a positive or negative learning impact? Or, for example, that it has been useful in anticipating problems?

PR: Last year's year-end closing. We identified a series of problems together with the company's management and had to plan how to close the accounts and what procedures to use to close the year so that the accounts were in line with reality. We identified that we had a considerable problem in valuing our stocks and we had to stop the company for 2 or 3 weeks. In other words, we were able to react in good time. Without this planning, closing the year would have been more complicated, more serious situations could have arisen, perhaps even the bankruptcy of the company... there is a clear relationship between planning and minimizing risk and anticipating problems.

JF: Given your professional experience over the last few years, do you think that technological developments have had any influence on improving planning and the evolution of planning followed by companies?

PR: Yes, I think I can go back in time and remember that in the beginning I used a rather archaic excel sheet and nowadays there are some apps and some functionalities that Microsoft Office or Google or the companies provide, where we can define our tasks and from here we can define a medium or short or long term plan and in this sense it's something that companies have to move towards because otherwise it will become impossible.

JF: The company is dealing with a number of challenges, some positive, others not so much financial. How do you deal with these problems and how does accounting help to overcome adversity?

PR: We're talking about a company that is very focused on results. The company's operating result, the company's net result, not least because the company that owns us is a listed company and this has a direct influence on the group's Market Cap. However, there always has to be a parallel between what the accounts give us and the results we want to achieve and the truth is that we can check whether we're on the right or wrong track by making sure that the accounts are well done, that any gray areas are well recorded because at the end of the day the accounts have to reflect the company's operations and if at the end of the day we can see that things are going well operationally, then the accounts also have to reflect this and therefore at

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the limit, whenever we want to see if we're achieving our financial objectives, our primary basis is what's recorded in the accounts, to validate if it's done well, if it makes sense and if the results aren't what we expected, then we have to take action.

JF: What are the main financial indicators that the company monitors and how do these influence the department's decisions and consequent reporting to management?

PR: The main financial indicator at the moment is EBITA. However, we pay attention to the average terms of receipts, average terms of payments, we pay attention to the debt ratio taking EBITA into account. In addition, we are also concerned about financial liquidity, given all the investment that has been made, naturally with support from the group or from banks, and it is important to be aware that all the investment that is being made we will be able to repay or generate added value with that money.

The main indicator we monitor is EBITDA, which basically assesses the net profit for the year, not only to evaluate the financial results of the operation, but also to distribute dividends to shareholders. Other indicators or ratios are also taken into account, such as the average collection period, the average payment period, the company's financial liquidity and the EBITDA ratio, taking into account the existing debt. It's something that concerns us, given the heavy investment that has been made, to be aware that this investment is going to have a higher return on the investment and make the company profitable.

JF: How do these indicators influence the department's decisions?

PR: The indicators naturally influence us, firstly to see if we're on the right track and if we're doing things well, and if so, to continue, and if not, to change what we think needs to be improved. There is a constant concern to comply with the annual budget, which we know was quite ambitious and in this sense, taking into account our installation capacities, our operating capacity versus the results they are generating and versus all the investment made, these are naturally the 3 points that we constantly have to analyze and monitor, to check that they are within expectations so that at the end of the year we are all satisfied.

JF: Do you believe that organized accounting helps companies identify financial risks and threats? What examples can you give?

PR: Organized accounting is a fundamental pillar for companies when they reach a considerable size. Everything that has to do with the company's results is based on what is recorded in the accounts. This means that any risk of fraud, which is the main risk in all companies, is minimized as much as possible, for example if we have the bank reconciliations well done, and that's already a good basis for the risk of fraud not being too high. However, there are other situations, other ways of committing fraud and accounting ends up being a fundamental pillar for trying to anticipate or investigate situations that we consider strange or difficult to justify.

JF: And what parallels can be drawn between technological evolution and the evolution of the company's accounting?

PR: The system we use turns out to be a much more complete system than merely entering accounting records. In that sense, we are moving towards more robust and more complete systems and, by knowing how to work with the system, we have all the information we need about what is happening in the company. Technology is undoubtedly a great ally.

JF: Have errors that occurred in the past, such as duplicate payments or duplicate costs, ceased to exist with the accounting organization and the use of the SAP system? Or at least it's much less likely?

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PR: Yes. That's a good example. If you have a thorough knowledge of how to work with the system, which requires a set of concrete steps, you can avoid mistakes. With a 100% fine-tuned system, things end up running smoothly and the risk ends up being very residual.

JF: One last question, since Greenvolt Next is a company in the renewable energy sector and the finance department is involved in important company decisions, how do the policies you follow align with issues related to social responsibility?

PR: For example, we recently made a decision to purchase 100% electric vehicles. Naturally, there was an analysis of the return on the investment made and whether it would be too heavy, but the choice to make part of the fleet 100% electric was to show the market and society that, as we are working in the area of renewable energies, we also had to invest internally in the energy transition. Another issue was the construction of our own power station as part of the office's self-consumption.

JF: Nothing more to add. Thank you very much for taking part in this interview.

Interview 2 (Greenvolt Next CEO)

José Fernandes (JF): Hello, good morning, Mr. Engineer. My name is José Fernandes and I'm conducting this interview as part of my final master's work. I would like to ask you about some data and also ask you if you would allow me to record this interview and use the data for my work.

PLC: Hello, José, of course. Go ahead.

JF: First of all, I'd like to give you some context on the subject of my final master's work. I want to assess the role of planning and accounting in small and medium-sized enterprises, and of course, mention the case of Greenvolt Next. First of all, I'd like to ask you what position you hold in the company and how many years you've held it.

PLC: My name is Pedro Miguel Lavareda de Carvalho, as you rightly said. I'm one of the company's CEOs. The company was created by me and Pedro Ramalhosa 7 years ago, in September 2016. We started strongly from an operational point of view in 2017. I've held the same position ever since. Now we have more help because we belong to the Greenvolt Group, but we still own the company.

JF: As a director of the group, can you detail the history of Greenvolt Next, formerly Profit Energy, as well as the acquisition of 70% of the company by the Greenvolt Group? When did the acquisition become official? When did the matter start to be discussed and how was the company structured?

PLC: Well... there are a lot of questions, let's see if I can answer them. So, the company, as I said, began operating in 2017 in the development of projects. Renewable energy projects and LED lighting, started with me and Ramalhosa, so with my partner, in the middle of 2017. Ricardo, my brother, came in to manage the LED part. We had an interesting year, where we developed some projects and sold them. We didn't build. We had a turnover of around 400,000 in the first year. And in 2018 we grew very much on the basis of our work and that of some trainees. In 2018 we bought a small acquisition in the investment fund with oxy capital. This acquisition amounted to EUR 100,000 and allowed us to take a leap and enter the EPC business. From then on, we gained this capacity and at the end of 2018 we did our first major project. In 2020 we reached a turnover of 5.5 million euros. Since the company was set up, our growth has always been very strong. In March 2021 I received a call from a Greenvolt director saying he wanted to talk to us.

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Something that came to fruition in a deal to sell 70% of the company. We continued with the Profit Energy brand and until then we had 12 to 13 people in the company, so it was a very operational company. The commercial side was handled by myself and Ramalhosa. Most of it still is today, but we already have a sales team. We also had 2 or 3 people in engineering and 3 or 4 in operations. The restructuring came about with the entry of the Greenvolt Group. Since September 2021, we've been in a constant process of readjusting hiring processes and procedures to try to respond to our growth. In 2021 we had a turnover of 11 million euros and in 2022 we had a turnover of 34 million euros. This year we expect to make close to 60 million euros. The challenge is huge from an organizational point of view. In any case, we have a much more structured company. We have a board of directors, of which the two of us are members, and we have other members, Dr. João Manso Neto, Engineer Carlos Coelho and Dr. Luís Castelo Branco, who are part of the company's board and who are the members of Greenvolt Corporate. We have a finance department, a purchasing and logistics department, a marketing department, a sales department, an engineering department, an operations and maintenance department, an operations department and a quality department. That's almost 100 people. I think I've answered all your questions.

JF: Yes, that's all. I'd like to ask you about the company's values, mission and vision, and whether these have remained constant over time or whether there have been any changes?

PLC: Our values have always been professionalism, rigor and a pleasant internal environment. We have always had the spirit and values of having a profit energy family, which is now the Greenvolt Next Portugal family. And we believe that this spirit and these values are still here. Our vision has always been to be a company of excellence. In fact, our mission has always been to be a company of excellence whose vision was to be one of the leading companies in Portugal in these two business areas: renewables and lighting.

JF: How would you describe your experience with Greenvolt Next Portugal? And how would you describe the company's growth, the lightning exponential growth?

PLC: The growth has indeed been incredible. But there are always moments of disorganization and sometimes it's a bit difficult because you don't have time to stop and think. I often use the expression of a train that is getting faster and bigger. Many decisions have to be made on the spot, often in the heat of the moment. And that's the big challenge that we, as administrators, have and that our teams also have nowadays: it's very difficult for us to have time to think. But we always want to make decisions based on figures and facts, but it's been an extremely challenging journey.

JF: Regarding people and their motivation, I believe that values, mission, vision and the Greenvolt Next family also have a positive impact? Don't you think so?

PLC: I hope so and I believe so. We always try. Of course, within our means, we strive to create good conditions for people, such as salary conditions and other benefits, and flexible working hours. But when we grow and go from 20 to 100 people, there are always some things that fall by the wayside. I'm not saying that the culture is lost in its entirety, because that will never be lost, but it is more difficult.

JF: How important is planning at Greenvolt Next? Is there strategic planning?

PLC: We know where we are, and we know where we want to be and the way to get there. The truth is that things change, but we have always brought complexity to the business. There are constant changes to what the path is, changes on the point of view, not of the business, but of the breadth of it. We're considering closing a deal to buy a company that installs photovoltaic projects, a company with 30-something people

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in Spain and Portugal. We're going to buy 75% of that company, the deal is already done. We entered Poland a year ago. This year we're already entering France and Romania and we're looking at other countries, particularly Africa.

JF: I also believe that the rapid growth has forced you to pay more attention to planning and small details, such as which strategy to use to achieve our goals?

PLC: Unfortunately, we haven't been able to pay much attention to detail. We can't, largely because of our growth. A lot of our time, unfortunately, isn't spent planning. We're always in operation. The company has been growing by 200% for 2 or 3 years in a row. But there is planning. There is a set of objectives that are defined and it's very important to have this plan. There's a 5-year business plan and we try to follow it, otherwise we'd be screwed.

JF: Can you give any positive or negative examples, any decisions you've made based on planning, strategic planning, and which have worked out well, or from a negative perspective which haven't helped?

PLC: From a positive point of view, and this was in our basic plan from the beginning, it was to have a capable engineering team and to carry out projects with rigor. And I would say that this planning and we believe that this is still decisive today. The proof is that we are creating the department to reinforce the engineering department to support other companies in the group. That was one of the important points. Another important negative point, but one that also taught us, was that we wanted to internalize everything that was construction. Having in-house installation teams didn't go down well. We realized that the constraints they caused, both in terms of the operation, in terms of the installations themselves, and also in terms of the logistics warehouse, were a real nightmare. And we shouldn't have done it as abruptly as we did. We had to take two or three steps back and plan the operations. The end of 2021 and 2022 were difficult years, with stock-outs due to the availability of materials, transportation or frightening prices. There was always a lack of manpower, but there wasn't much we could do about it. And at a certain point, in order not to stop operations, we decided to buy a very large amount of equipment. But the truth is that the dollar appreciated immensely, and we were buying in dollars, so we took a brutal hit from an exchange rate point of view.

JF: In other words, today you can also look to the past and plan better, right?

PLC: We should learn from those who do well. The lessons we learn from mistakes are much more effective and much more immediate. It's important to look back and realize where we went wrong and what we could have done differently. We have learned a lot from our mistakes, and we are already reflecting this in the decisions we are currently making.

JF: I'd like to ask you how Greenvolt Next has dealt with extraordinary challenges, such as the COVID-19 pandemic, the war between Ukraine and Russia and globalization itself. How do your planning and strategy contribute to anticipating problems? And then to solve them.

PLC: You know, it's hard to anticipate events that are completely abnormal and extraordinary, isn't it? I mean, I don't think we or any company... I mean, who would have thought we'd have a pandemic? Who, after a pandemic, would have thought that there would be a dispute or a bloody war in Ukraine with Russia? Nobody. This appreciation of the dollar was an extraordinary thing, the appreciation of the dollar and the consequent devaluation of the euro... the euro hadn't been at parity with the dollar for years, for decades. So, what companies really did was, based on these circumstances, try to adapt as best they could.

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JF: Do you think that technology has played an important role in the company's growth and how does technology also influence the company's planning and strategy?

PLC: In terms of control processes, yes. So, technology is mainly through software. In terms of planning, SAP, CRM, etc. This is all technology that naturally didn't exist before and we had to do these controls all via Excel or manual work, based on sheets, which was complicated. And in that sense, of course. From the point of view of planning and control technology, nowadays at Greenvolt we have everything we need at our disposal, not least because we are a listed company, but, on the other hand, there is also the complexity of having to implement it.

JF: The company also deals with various challenges, especially in terms of finances. How do you face these challenges, and how does accounting help overcome the adversities?

PLC: Well, cash flow is clearly our biggest challenge. Cash flow management, because we are a project-based company with a negative cash flow, between the time we receive and have to pay. Having the ability to predict cash flow needs, especially in the short to medium term for a company like ours, which is no longer a micro company with 100 employees and a turnover of 50 million euros, would have been unthinkable without the SAP system or equivalent software.

JF: What are the main financial and accounting indicators that the company monitors?

PLC: Well, we always pay close attention to two key indicators: revenue and EBITDA. Revenue represents the realization of project execution and, therefore, where the margin comes from. In fact, Revenue, EBITDA, and margin are all interconnected. The ability to execute gives us revenue, and it's important to execute with a margin to generate EBITDA.

JF: Very well. Do you believe that organized accounting helps in identifying financial risks and threats? Do you have an example, such as avoiding duplicate payments?

PLC: I agree. We are not yet at an excellent level in terms of control, but without our accounting and management software (SAP), we would be in a much worse situation. For example, I believe we no longer have duplicate payments, but I'm sure we still have duplicate accounting costs. However, when comparing our current situation to a year ago, we notice a significant difference. This is primarily due to financial and accounting control of our projects. We can have over 100 ongoing projects at any given time, and that complexity is immense. Without thorough, quick control, we would be in a complicated and delicate situation right now.

JF: Besides the mentioned accounting system (SAP), can you provide another example of how technology influences accounting?

PLC: Yes, in addition to SAP, we are also implementing or fine-tuning Power BI and CRM systems. These three systems are processing the company sought to improve work efficiency. Power BI is clearly another tool for us to view the results of SAP and CRM. SAP is the most advanced, but we are also working on CRM, though there is still a long way to go.

JF: What is CRM, and what is its purpose?

PLC: CRM is an operational control tool, essential from a commercial perspective, for tracking the entire sales process, from the initial phase to the final one. It provides all relevant information about a particular client or project. CRM will be fundamental in simplifying and facilitating our work.

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JF: Being Greenvolt Next, a renewable energy company, with a mission to contribute to a more sustainable future, how do your policies align with social responsibility?

PLC: I'll be completely transparent here. We didn't have a sustainability policy. We've always shown concern, considering that we operate in a market where we install renewable energy solutions, and from the beginning of Profit Energy, we've supported social welfare institutions, planted trees, sponsored sports events, and children's sports teams. However, we've always done this naturally, without an established sustainability policy. But with our entry into the Greenvolt Group, things have changed because, as a publicly traded group, there is a strong emphasis on environmental and social sustainability, with various goals to achieve. In reality, we continue to do what we've been doing, not with an associated policy, but naturally.

JF: Without further ado, thank you very much for participating in this interview.

Interview 3 (Greenvolt Next Purchase and Logistics Director)

Jose Fernandes (JF): Good morning, Ricardo. I'm conducting this interview as part of my Master's Final Project. May I ask if you allow the recording of this interview and the use of the data for my project?

RC: Of course, it's a pleasure.

JF: How long have you been with the company? What's your professional background, and what position do you currently hold?

RC: I will have been with the company for seven years in February. I started as responsible for the LED lighting projects. In the beginning, there were only three of us, including the two administrators, Pedro Carvalho and Pedro Ramalhosa. They handled photovoltaics, and I was in charge of LED. I progressed, and now I'm in charge of procurement, logistics, and warehouse for about two years. My background is in engineering and consulting, then I moved into the commercial side of energy and LED lighting.

JF: Greenvolt Next, formerly Profit Energy, was officially created in 2017, with the idea starting in 2016, correct?

RC: The company was officially created in 2017, but "the Pedros" started working on the project in 2016, and we began generating revenue in early 2017.

JF: How would you describe the growth of Profit over the years until it became Greenvolt Next, with 70% of Profit being acquired by the Greenvolt Group?

RC: Until that point, things evolved progressively, and we can't say it was slow. We started with just three people. We grew at a double-digit rate each year, but when you're starting, growing at that rate isn't as difficult. We never bit off more than we could chew, and perhaps that's why we got where we are. Greenvolt looked at us and made an offer to acquire 70% of the company.

JF: Just a question about your current role. Are you currently the Director of Procurement and Logistics, and for how long?

RC: Yes, I've been in this role for two years, since 2021.

JF: What are the main challenges of working for a company that started as a startup and then experienced such rapid and exponential growth? It must have been quite challenging in a short time frame, right?

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RC: It's more challenging and complicated, but I prefer to see it as challenging. We began with a small office that we later connected to another, creating an open space. The first challenge was space, followed by human resources. Usually, the business volume surged, and we found ourselves underwater again, lacking personnel. The lack of procedures was a major issue. We had to create everything. At some point, we realized that we needed procedures and reports. It was a very empirical learning process and evolution. The Finance Department was established much later. We were very focused on operations. The Finance Department brought to light problems we weren't aware of.

JF: Does this place a significant emphasis on planning? Can some mistakes be avoided? In other words, how important is planning, both at Greenvolt Next and in your other professional experiences?

RC: Yes, absolutely. Planning didn't exist before. It was all about getting more business and that was it. Now we understand that planning needs to be much more detailed. We are creating procedures, and one of the biggest challenges, as you know, is getting our more operationally focused colleagues to understand the importance of planning. With planning, when a project is completed, we can identify what went wrong and anticipate problems. It enables much better, quicker, and more efficient decision-making. We need to plan both the project and purchases, increasingly planning all actions. Creating an execution plan and getting it approved by the client is something we now do, and it makes perfect sense. Any changes without proper planning caused problems and additional costs. We had situations where the budget was created, but the people who executed the project had little knowledge of the budget. We're not where we want to be yet, but we're on the right path. Planning will lead to much better work.

JF: What was the importance of planning in the procurement department? What are the planning steps you follow?

RC: This year has been a year of transformation. In the past, planning was close to zero. The first procurement plan we made was at the end of 2022. We used to function very reactively, meaning if our operational colleagues requested something, whether for the warehouse or procurement, we would purchase it without much control. The goal was to keep the projects running.

The issue is that we used to develop projects and then sell them to others to build. The financial closing of the 2022 fiscal year was dramatic. The Finance Department helped us understand the importance of planning, and for the first time, we conducted a proper inventory. We realized that what we had in the system didn't match the actual inventory, which prompted our change, creating procedures for nearly everything within the department. Now, each person knows exactly what they need to do. If things don't arrive as defined, they won't proceed. An operational problem can't be turned into a financial problem.

In terms of processes and procedures, currently, no purchases are made without at least two levels of deliberation. Everything that is requested has to be identified. This process was quite complex because many colleagues didn't understand the advantages. But this year, everything is different; we will have a very different year-end. We're in control.

JF: Throughout the growth and history of Greenvolt Next, there was always a great need for adaptability. Looking back, I believe you wouldn't change it because the path was very challenging, but would you have invested more in activity planning?

RC: It's obvious that if we had to start Profit from scratch, from the moment of its creation, in the same time frame, we would be much better off than we are now. I have no doubt about that. We all learned from

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it, and we recognize the importance of planning and control. We would have anticipated some critical moments of the company, and there are situations and errors that we wouldn't repeat.

JF: If you had had organized planning, do you think the growth would have been exponential?

RC: It could have been exponential because there was business, but it might have been more sustainable. However, some things only come with experience. We should have had someone to guide us. Today, if any of us had to start a new project, we would definitely prioritize strategic planning as number one.

JF: Going through a series of difficulties, such as the COVID-19 pandemic and the war in Ukraine, did you manage to anticipate some problems and events, and was this due to planning?

RC: It's true that we went through the COVID pandemic and the war. We had two crises, almost back-to-back, due to supply chain disruptions. First with the solar panels and then with the inverters. Despite these adversities, other sectors of the economy and the market suffered much more from both COVID and the war. The short-term surge in energy costs significantly increased demand for energy production solutions and even autonomy from the electric grid. Our sector managed the situation quite well, and planning would have helped.

JF: So, we can conclude that there is a relationship between planning and risk minimization and problem anticipation. How have you experienced technological evolution from 2017 to 2023, and how has technology influenced planning?

RC: In terms of technology, the company is very recent, and there haven't been major technological evolutions. The biggest evolution has had to do with growth and the imperative need to use more robust software such as SAP or CRM, which are new, purely technological tools that enable control processes.

JF: Is there a plan in place now for better control with the help of technology?

RC: Yes, we use technology for that purpose.

JF: Technology facilitates work and planning. The company didn't have an accounting system before, right?

RC: That's correct. We used to outsource accounting. We only started handling our own accounting when Greenvolt entered the picture in July 2021. From then on, accounting has been managed with SAP support, and now it's our SAP system.

JF: And what about the CRM?

RC: CRM stands for Customer Relationship Management. It's a type of software used to record every contact made with a customer. We're developing the CRM software, so that we can integrate the process even more, from its beginning to the end. The goal is to ensure that any commercial contact, from the moment it starts, is created in CRM with a range of information about that customer. All interactions and feedback obtained are recorded, and in the future, we hope to be able to upload proposals and quotes that can then be migrated to SAP along with that customer's information for that process. This allows us to have a more comprehensive view of the process.

JF: Technology at work for control, efficiency, and planning. Over the years, the company must have faced various financial issues, such as duplicate payments. How did accounting help overcome these adversities?

RC: There are some issues that I don't remember well anymore. We didn't notice many adversities because we didn't have the kind of monitoring, planning, and control we have now. Sometimes I'm pleased

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when I see a member of my team interacting with a supplier, saying there's an extra two euros on a €40,000 or €50,000 invoice. This hadn't happened before. We didn't have mechanisms, procedures, planning, or anything that would allow us to catch that. Today, I find it impossible to have a duplicate payment. If I think it happened last year, I'll confirm it. I'm sure.

JF: So, you believe that organized accounting helps the company in identifying financial risks and threats?

RC: Yes, absolutely.

JF: What are the main financial indicators monitored in the procurement and logistics department, and how do these indicators influence the decision to work with one supplier or another?

RC: Having well-organized accounting provides various financial indicators and accounting records of past events. However, this information wasn't centralized before, and it's great to have it now. In decision-making, it doesn't have that much influence. We analyze proposals in terms of value, delivery times, and payment terms. The market isn't very sensitive to that. Even if the group tells me I can only make purchases with a 60-day payment term, sometimes I can't because it would halt certain areas of the company. Some suppliers don't work over a 60-day period. We analyze the data, but there isn't direct accounting oversight. In this role, our function is to inform the accounting department of treasury needs.

JF: Technology has also significantly influenced both accounting and the procurement and logistics department?

RC: Yes, indeed. We didn't have control before. Now, SAP is what it is, and at the end of the day, it makes our lives easier. It will also enable us to work with data.

JF: As Greenvolt Next is a renewable energy company, I wonder what the company's values, mission, and vision are, from the beginning to the present. How are the policies followed aligned with social responsibility?

RC: Sometimes we make decisions and pay little attention to these issues. However, ethical considerations and the dimensions of social responsibility should always be on the priority list of any department.