

**TRACING A STRATEGY MAP FOR A PUBLIC  
INSTITUTION**

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## **ABSTRACT**

In such competitive times, where performance levels determine the survival of companies and where efficiency is key to any business, it is mandatory to bring forward an analysis that enables organizations to accurately construct a solid strategy based on specific objectives.

This applies both to the private sector and to the public sector. Public administration institutions play a very specific role, not only in user satisfaction, but also as guarantee of their services, as legally stated, and within the limits of their budget.

This thesis focuses on the importance and usefulness of tracing a Strategy Map for a Portuguese public institution – the Central Services of the Rectory of the University of Lisbon. Through the analysis of the information provided by the University and the collection of theoretical information, it was possible to frame the importance of strategy for any organization and to determine how, using the Balanced Scorecard, it is possible to best analyze a company and determine a suitable strategy, monitor it, evaluate it and, eventually, reformulate it as an instrument of adaptation to its environment.

Each organization should be analyzed individually, taking into account the multiple factors that influence its existence. Preventive measures should be taken and corrective actions should be applied when necessary. This only works if an organization is aligned at all its levels. The representation of the BSC in a Strategy Map enables the necessary understanding throughout the organization while establishing strategic objectives by which it should be guided.

## **ABSTRACT (PORTUGUESE)**

Numa era tão competitiva, em que os níveis de desempenho determinam a sobrevivência das empresas e em que a eficiência é fundamental para qualquer área de negócio, é essencial construir uma análise que permita às organizações delinear corretamente uma estratégia sólida baseada em objetivos específicos.

Isto é válido, não só para o setor privado, mas também para o setor público. As instituições públicas desempenham um papel muito específico, não só na satisfação dos seus utentes, mas também garantindo a prestação de serviços a que estão obrigadas por lei e observando os limites orçamentais que lhes são impostos.

Esta tese centra-se na importância e na utilidade de traçar um Mapa Estratégico de uma instituição pública – os Serviços Centrais da Reitoria da Universidade de Lisboa. Através

da análise da informação disponível pela Universidade e da recolha de informação teórica, foi possível enquadrar a importância da estratégia de qualquer organização e determinar como, através da utilização do Balanced Scorecard, é possível analisar uma empresa, determinar uma estratégia adequada, monitorizá-la, avaliá-la e, eventualmente, reformulá-la como instrumento de adaptação ao seu ambiente.

Cada organização deve ser analisada individualmente, tendo em conta os vários fatores que influenciam a sua existência. Devem ser tomadas medidas preventivas e devem ser aplicadas, quando necessário, ações corretivas. Isto apenas funciona quando uma organização está alinhada a todos os seus níveis. A representação do BSC num mapa estratégico permite a compreensão necessária em toda a organização ao estabelecer objetivos estratégicos através dos quais esta deve ser guiada.

## **ABREVIATIONS**

BSC – Balanced Scorecard

SC – Serviços Centrais

ULisboa – Universidade de Lisboa

EULisboa – Estádio Universitário de Lisboa

## **KEY – WORDS**

Balanced Scorecard

Efficiency

Effectiveness

Management

Planning

Public Administration

Quality

Strategic Objectives

Strategy

Strategy Map

Organization

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## EXECUTIVE SUMMARY (PORTUGUESE)

A estratégia referia-se inicialmente a um instrumento que pretendia alcançar a vitória no campo de guerra, mas foi mais tarde adaptada aos campos político, económico e de gestão, de modo a assegurar superioridade perante a concorrência. A partir de ações e manobras militares, este conceito evoluiu para uma disciplina do conhecimento de gestão, provida de conteúdos, conceitos e práticas, tanto académicas como de aplicações práticas.

Hoje em dia, as empresas e organizações usam esse conhecimento para alcançar níveis de desempenho cada vez mais elevados de forma a maximizar os seus lucros. A mesma lógica aplica-se ao sector público. Instituições do setor público devem ter em conta os conceitos de eficiência e eficácia da mesma forma, mesmo quando as metas diferem do sector privado – sendo que a maximização dos lucros não é a meta do setor público, mas sim, o cumprimento da sua missão, observando os constrangimentos orçamentais a que estão sujeitos.

Percebendo-se que o sector público e privado desempenham diferentes papéis económicos e que, portanto, têm objetivos diferentes – ainda que possam ser complementares – permite compreender que o pensamento de planeamento estratégico é, assim, dirigido de forma diferente. Tendo uma importância semelhante neste sector – assegurando níveis de desempenho eficientes - existem limites intrínsecos ao conceito de estratégia, definidos de acordo com as características do sector público.

Estabelecida a importância de se ter uma estratégia sustentável, é necessário ter ferramentas que auxiliem a sua realização.

A evolução do conhecimento de gestão permitiu a compreensão de que os sistemas baseados apenas em dados financeiros e contabilísticos eram insuficientes perante uma economia cada vez mais competitiva. Tornou-se claro que os métodos meramente contabilísticos e financeiros teriam de ser articulados com informação de outros subsistemas, ou seja, aqueles que lidam com dados de qualidade e de produção. Isto reflete, ainda, a necessidade de superar a visão de curto prazo e pensar em termos mais amplos.

Esta necessidade de uma maior agregação e inter-relação da informação deu origem ao Balance Scorecard, criado por Kaplan e Norton. Sendo uma técnica de pensamento, planeamento e avaliação de desempenho estratégico, centra-se na integração de várias perspetivas e permite uma visão global da organização e da sua interação com o meio ambiente. À perspetiva financeira anterior são adicionadas as que dizem respeito a clientes, processos internos e a infraestruturas.

O BSC alinha a visão e a missão da organização com os objetivos que se pretende alcançar, dando a perceber as relações de causa e efeito entre os diferentes níveis de autoridade e responsabilidade.

A formulação desta técnica inclui a elaboração de um Mapa Estratégico. Tal representação traduz visualmente os componentes da organização - Missão, Visão, as linhas estratégicas, perspetivas e atores, e as respetivas relações de causa-efeito. Em suma, ajuda na formulação da estratégia e facilita a comunicação.

A aplicação do Balanced Scorecard focava inicialmente organizações com fins lucrativos. No entanto, a sua aplicação ao setor público é altamente justificável pela sua capacidade de aumento dos níveis de desempenho, apesar de ser necessário executar algumas adaptações à sua formulação original, derivadas da orientação dos seus objetivos.

Esta tese tem como objetivo principal refletir a importância e a utilidade de traçar um Mapa Estratégico de uma instituição pública – os Serviços Centrais da Reitoria da Universidade de Lisboa – enquadrado nas vantagens da utilização de ferramentas de análise e de pensamento estratégico.

Através de entrevistas com a Administradora da Universidade de Lisboa, da análise de informação disponível da Universidade e da recolha de informação teórica, foi possível enquadrar a importância da estratégia de qualquer organização e de retratar como, através da utilização do Balanced Scorecard, se pode analisar uma organização, determinar uma estratégia adequada e monitoriza-la, avaliá-la e eventualmente reformulá-la como instrumento de adaptação ao seu ambiente.

A tese apresenta uma primeira secção de enquadramento teórico, na qual se explora o conceito de planeamento e as suas componentes. Em seguida, é apresentado o Balanced Scorecard e a importância da construção do Mapa Estratégico.

Numa terceira secção, introduz-se a Universidade de Lisboa e os Serviços Centrais da Reitoria da Universidade de Lisboa.

A parte final da tese é, então, a formulação do Mapa Estratégico desta instituição e uma proposta de objetivos estratégicos e respetivas componentes.

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## 1. Introduction

Strategy, initially referring to an instrument to achieve victory in war, was later transported to the political, economic and business fields, in order to always ensure superiority on the “battlefield”. From actions and military maneuvers, it has evolved into a discipline of the knowledge of management, provided with content, concepts and practices, both in academia and in business.

Nowadays, corporations and organizations use this knowledge to achieve increasingly higher performance levels in order to maximize profits. The same logic applies to the public sector. Institutions from the public sector should strive for efficiency and effectiveness in the same way, even when their goals differ from the private sector – maximizing profits is not the ultimate goal of the public sector.

Realizing that private and public sectors play different economic roles and, therefore, have different goals to achieve, allows a better understanding of how their strategic planning thinking is not directed in the same way. With similar importance across sectors – to ensure efficient performance levels – there are some intrinsic limits to the concept of strategy, set according to the status of the public sector and by its own definition.

Once the importance of a running and sustainable strategy is established, it is necessary to provide the necessary tools for its completion.

The evolution of this knowledge of management led to the realization that systems solely based on financial and accounting data were insufficient in an increasingly competitive economy. It became clear that these accounting and financial methods had to be articulated with data from other subsystems, namely those dealing with quality and production data. This also reflects a need to overcome short-term views and think in wider terms.

Within this greater need for information stands the Balance Scorecard, created by Kaplan and Norton. As a strategic thinking, planning and performance evaluation technique, it focuses on the integration of several perspectives and allows an overall view of the organization. Other items are added to the previous financial perspective, such as, clients, internal processes and learning plus growth perspectives (with other perspectives also possible).

The Balance Scorecard aligns the vision and the mission of the organization with their objectives, by determining the cause and effect relations between the different authority and responsibility levels.

The formulation of this technique includes the elaboration of a Strategic Map. This representation translates visually the organization components – Mission, Vision, Strategic

Lines, Perspectives, Stakeholders, and the cause-effect relations established between them. As result, it helps formulating the strategy and facilitates communication.

The application of the Balanced Scorecard was initially focused on profit organizations; however, its implementation in the public sector is highly justifiable by the performance enhancing capability of this method, in spite of some adaptations to its original design, derived from the objective orientation.

The main purpose of this thesis is to trace a Strategy Map for a Public Institution, exploring the subject of efficient and effective management. A Portuguese Public Institution – the Central Services of the Rectory of the University of Lisbon (Serviços Centrais da Reitoria da Universidade de Lisboa) – is studied, alongside with the advantages of using tools of analysis and strategic thinking.

After an introduction, in which some theoretical aspects are presented, regarding mainly the structure and goals of the BSC, the Strategy Map and the Public Service to which the Strategy Map refers to, follows a theoretical analysis of the Function of Planning and its relationship with the strategy.

Finally, the Strategy Map is constructed, with the general model of the Balanced Scorecard as background, with the necessary adaptations to the Public Sector reality – that differs from a profit organization – and to the organization it refers to.

## **2. The Function of Planning, Evaluation and Control – the Management Cycle**

Within an organization decisions are made through hierarchical levels. But in this hierarchical structure, and at each level, different responsibilities are assigned to and, likewise, the decisions made by the heads of each level have different characteristics. This means that, while strategy is traced at the top and the decisions derived are strategic, in the remaining levels decisions relate mostly to the operation of this strategy and, therefore, are designated by operational decisions.

But if the strategy is to be implemented successfully, it is necessary to check the alignment of these operational decisions with the strategic decisions. These are taken in a cascade mode.

The planning function allows the collection, selection, handling and dissemination of information in a consistent manner, to ensure that the decision to be made is the most correct, both from strategic and operational standpoints.

Therefore, the planning function covers the strategic decision - strategic planning - and it also facilitates and controls the implementation of the strategy - operational planning. The planning function runs throughout the entire structure of the organization.

The following section addresses issues related to the planning role and the planning process, as well as other concepts - Mission, Vision, Internal and External Environment, Systemic Analysis and Objectives.

### **2.1 Planning**

“Planning is the process that leads to the choice of the guidelines and activities to be developed.” (Jordan, Neves, Rodrigues, 2011)

In an increasingly competitive and ever changing economy, it is important to acquire competitive advantages that allow facing new challenges. Planning is decisive for the success of an organization because it establishes the best way to achieve the settled objectives enabling an organization to operate in a short/medium-term, as well as promoting a sustained and monitored growth perspective.

Planning, be it formalized or not, is universal. It can be applied to most areas, to the public or private sectors, to professional or personal life, etc. It relates to the main idea of achieving results. Improvisation also has its place, but it should merely be seen as a way of overcoming a problem hampering the implementation of the strategy, and it should only be used if it is impossible to foresee or prevent that specific problem from happening.

Figure 1 illustrates the cycle of management, as described by Deming. It includes four management phases: Plan, Do, Check, Act.

It is important to understand that strategy is not eternal. Each strategy has its own expiration date. With the evaluation and control of each strategy one can obtain the necessary data to redefine it and to execute the operational planning.

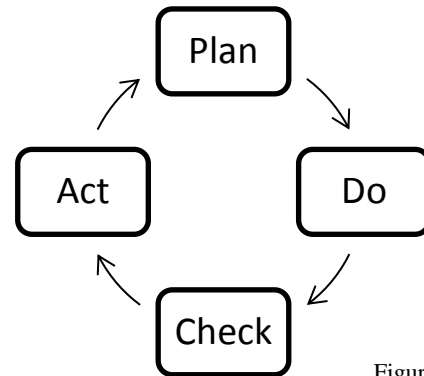


Figure 1

The formulation of a Strategy Map, which is the aim of this thesis, is integrated into the formalization of the Deming management cycle, which integrates the concepts of the function of planning – planning, evaluation and control, as it is explained further on.

### 2.1.1. The need for planning

In a traditional view, the main need for planning is to reduce uncertainty; however, this is not all. The possibility of establishing desired results in a near or distant future requires tracing specific course lines, setting priorities, adapting the organization to changes in social changes and to those that in it hold any interests, motivating workers to achieve common purposes and aligning their performance to the objectives of the organization. But it is also a learning process, not solely a reactive process to the external conditions. It is also about improving the internal capabilities and adjusting them to the need of fulfilling the mission and specific objectives.

The interest of planning for an organization can, according to Bernard Viollier, be summarized in five aspects:

- “Analyze and manage change;
- Trace coherent development pathways;
- Improve the company results;
- Allow the integration of the company;
- Serve as a learning tool. " (Jordan, Neves, Rodrigues, 2011)

But not all of these aspects may be present in each cycle, or, if so, they may have particular meanings. For example, "analyze and manage change" means, as a rule, to collect data from the environment and adapt the organization to its surroundings. It may refer to both a structural change or to small adjustments. But it means,

nonetheless, that during the planning process it is necessary to pay attention to all these variables and collect all the relevant data. The very process of planning must ensure that all the necessary data is taken into account, so it can be transformed into information and ultimately into knowledge.

### **2.1.2. The Planning Process**

According to the ISO Norm 9001-2008, *“For an organization to function effectively, it has to determine and manage numerous linked activities. An activity or set of activities using resources, and managed in order to enable the transformation of inputs into outputs, can be considered as a process. Often the output from one process directly forms the input to the next”*.

“The strategic planning process involves the following phases:

1. Information – leading to the recognition of threats and opportunities in the environment and the strengths and weaknesses of the company in its specific field of business;
2. Formulation of strategic alternatives – identifying alternative strategies to solve problems or seize opportunities.
3. Alternative evaluation – analysis of potential consequences for each alternative.
4. Decision – choosing the alternatives most suitable for the intended purpose. It may possibly be concluded that it is preferable to continue with the current strategy (...).”

(Jordan, Neves, Rodrigues, 2011)

The planning process begins with strategic planning, as it provides the general guidelines for the functioning of the organization and the objectives to be achieved in the medium to long term.

In order for a company to function on a daily basis, operational planning plays a major role. Each department must develop their plan of action to implement the strategy and to quantify the gains – according to the models issued by the planning authority, which centralize sectorial plans and ensure their horizontal and vertical coherence.

The operational plan of each department must contain:

- The aimed objectives, agreed between the head of department and the head of the organization;
- The plans of action needed to implement the strategy, including records of projects and the quantification of current activity, the expected results, the schedule of these actions and the respective person in charge;

- The estimation of resource needs, namely equipment, personnel and financial information;
- The analysis of the proposed plans.

At the end, the entire process must be documented - at least one document for the strategic planning and another for the operational planning. The first includes reflections about the external and internal environments and general guidelines with the description of the strategic objectives and the people responsible for their accomplishment, the targets and form(s) of monitoring, the organizational projects and their records containing mainly all the information pertinent to the understanding of the objectives, the people in charge, the allocated resources and their timing.

Plus, two subsequent moments need to be considered – an intermediate and a final evaluation of the developed work, concerning the duration of the plan and allowing, primarily, to evaluate the work accomplished and, secondly, to adjust it, if needed, in order to meet the objectives.

### **2.1.3. Concepts**

Concepts such as Mission, Objectives, Strategy, External and Internal Environment are fundamental to understand the definition of planning and the construction of its process.

The Mission and Vision translate the reason of being of the organization and how the top management perceives it. “*Planning has long meant conceiving of a desired future as well as the real means required to achieve it*”. In this quote, R. Ackoff (1970) relates planning to the mentioned concepts but also refers to the relationship of the organization with its environment and its internal capacities, enabling it to achieve the desired results.

According to Luís Cardoso (1992), planning should also be related to the concepts of objectives and strategy. “The course of direction of an organization depends on what it intends to achieve (Objectives) and what needs to be done (Strategy). This implies knowing its environment, culture and resources.”

Through the coordination of the short/medium term plan (daily activities) with its long term perspective (Strategy) and their impact on one another, it is possible to distinguish between two main levels – the operational level and the strategic level.

Strategic planning is “the process by which the company studies, formulates and clarifies their strategy. From it often results a written plan for three to five years (sometimes more) and adjusted every year, in such a way that it provides direction and enlightens the future within the same horizon.” (Alain C. Martinet, 1989) In short, it is the “decision process



regarding the organization objectives and the strategies to obtain them.” (Jordan, Neves, Rodrigues, 2011)

On the other hand, while “strategic planning leads to the definition of the general guidelines which will allow the company to ensure competitive advantages, operational planning deals with the tactics of those operations; whose mission is:

- To develop action plans to improve the operation of existing activities;
- To conceive and develop action plans to set the defined strategies into the strategic planning process;
- To quantify the resultant costs and benefits, assuring the consistency of the overall plan.

The translation of the strategic guidelines into detailed actions constitutes a real binding instrument between strategic planning and the organization budget. It is a tool that helps implementing the formulated strategy.” (Jordan, Neves, Rodrigues, 2011)

In short, “strategic planning is the operational definition of strategy. It defines the management policies regarding commercialization, investment, production management, organization and human and financial resources.” (Jordan, Neves, Rodrigues, 2011)

According to Freire (1997), “The purpose of operational planning is to ensure coherence both vertically (between the global objectives set in the strategic plan and the ones defined locally by each center of responsibility) and horizontally (ensuring that among the different centers there are no contradictions in their action plans) between the long and the short terms.”

It is important to mention that the great majority of this process deals with the handling of information and only after its analysis is it possible to act accordingly. If all the components are analyzed methodically, then it is more likely that the subsequent actions are taken in an organized and logical way, permitting a control process at all its stages. – “strategic planning is based on the collection and handling of information about the environment and the company, taking into account the decision-making process through which it adapts, modifies and acts upon the context it operates in.” (Cardoso, 1992)

The following subsections describe in detail the concepts related to strategy analysis.

### **2.1.3.1. System**

Yves Bertrand & Patrick Guillemet (1998) define System, as “a dynamic whole whose elements are connected together through interconnections”.

Systemic analysis allows determining the strategy as part of a more complex system that interconnects with other components, building a whole organization.

### **2.1.3.2. External Environment**

As stated above, it is clear that there is a powerful link between strategic planning and the environment or context of the organization.

The environment is the “(...) set of external factors that influence the company, weather from a general standpoint (economic, social, cultural, demographical, political, technological, legal) or from a more focal standpoint, related to the business itself (consumers, competition, sector).”(Cardoso, 1992)

Given this, it is possible to distinguish between two levels in the analysis of the external environment (Freire, 1997):

1. “The contextual environment, containing:
  - a. Economic context;
  - b. Social/cultural context;
  - c. Political/legal context;
  - d. Technological context.
2. The transactional environment, containing:
  - a. Clients;
  - b. Suppliers;
  - c. Community;
  - d. Competition.”

The external analysis has the purpose of determining the threats and opportunities of the organization.

Still to be considered are some critical factors for the success of a business, in order to assure an accurate adequacy between the requirements of the market and the management skills of the company. “(...) This diagnosis is enriched by the analysis of the explanations of the success or failure of the companies (...).” (Martinet, Petit, 1989)

### **2.1.3.3. Internal Environment**

In order to make a strong analysis of the strengths and weaknesses of the company, the analysis of the internal environment has to “start by identifying the main resources available and evaluate their benefits. In addition, it is important to understand the organization costs in order to determine the level of efficiency of the use of these resources” (Freire, 1997).

The internal environment analysis seeks to determine the strengths and weaknesses of the organization and, therefore, performing this analysis will ensure the follow-up of an appropriate line of action.

#### **2.1.3.4. Mission**

“The mission of an organization translates its character, global orientation and way of being. (...) It involves the definition of what the organization is, what it aims to do, in which business it operates, its objectives, what it wants to achieve through its activities, in determined periods of time and selected variables. (...) it’s the philosophy of the organization which establishes the link between the social functions that it fulfills and its precise objectives.” (Cardoso, 1992).

The mission statement must not only highlight the control skills and translate the global orientations, but also be a unifying element for all the sectors and workers of the company. It must lead the way into the future while granting the framing of the operational management of the company activities.

Nevertheless, it still needs to be a tool of the action itself. Peter Drucker (1990) stresses the importance of defining a mission that works, “(...) *the first thing to talk about is what missions work and what missions do not work, and how to define mission. (...) The ultimate test is the right action. (...) Therefore, the first job of the leader is to think through and define the mission of the institution. (...) A mission statement has to be operational, otherwise it’s just good intentions. A mission statement has to focus on what the institution really tries to do and then do it so that everybody in the organization can say: this is my contribution to the goal.*”

Therefore, defining the mission statement has to be a joint, aligned and perceptible action. Every agent involved has to be made clear of its role and, in the end, each team has to be capable of understanding its real contribution for the fulfillment of the objectives and the accomplishment of the mission.

#### **2.1.3.5. Objectives**

The concept of strategy can be quickly resumed as the process to achieve the set objectives using the means necessary and available even if it requires coercion (which in the corporate or economic competition context takes on a different outline than in the military context). The strategic process begins once a concrete definition of objectives is established at the decision-making level, always with the aim of achieving them.

The main question at this stage is: what is an objective?

Given this, it is possible to understand that there is a starting point – the objective(s) – and an arrival point – the result(s). Between them there is the action which transforms the intended objectives into achieved results.

“The objectives are what the company wants to achieve. They embody the mission and include the values to be obtained as a result of the company activity.” (Cardoso, 1992)

The connection of the mission to the everyday action is related to the clear definition of the objectives at all levels of the organization:

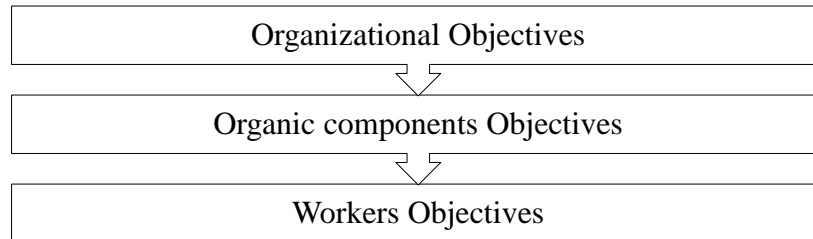


Figure 2

It is the achievement of objectives that allows the successful accomplishment of the mission. The mission will not be achieved if the objectives aren't met.

The objectives also enable the monitoring of such mission accomplishment by measuring the contribution of each sector and individual worker. This is linked to the performance evaluation system.

Therefore, the objectives must be “measurable, prioritized and scheduled, difficult so they require commitment and effort, but achievable in order to not create situations of frustration.” When these criteria aren't met, the so called objectives are nothing but mere intentions. “The objectives can be expressed in value or percentage or in other units, related to quantity and time”. (Cardoso, 1992)

It is common to say that objectives have to be SMART:

- “Specific”
- “Measurable”
- “Achievable”
- “Results Oriented”
- “Time-bound”

This means it is possible to identify specific components when defining an objective:

- a) Description – expressing the expected performance and the desired level of detail, the work that needs to be done and by whom – the individual, the organization or just part of it;
- b) Performance indicator, comprising:

- Measurement indicator – expresses the measurement type to be used; it can be a single unit or a relationship between variables e.g.: Deadline for submission of a job; Production / time, etc.;
  - Calculation formula – enables the assessment of the fulfillment of the objective. E.g.: for the indicator "deadline", the calculation formula may be: Work Presentation Day - the day of the work start;
  - Goal – intended result. E.g.: five days, 3 reports / year, etc.;
  - Data collection frequency and periodicity of the indicator calculation basis: quarterly, semiannual, annual, etc.;
- c) Verification sources – records which allow the verification of the result(s) and the fulfillment or not of the set objectives.

In order for this to happen, the following steps need to be taken during the definition process of the objective(s):

1. Diagnosis;
2. Vision of what needs to be achieved;
3. Description of the Objective(s);
4. Coherence between all levels of objectives across the organization;
5. Identification of a measurement indicator;
6. Establishment of specific target goals;
7. Creation of a statistical tool to measure the objective.

The importance of the objective definition relates not only to the capacity of guiding the action but it also constitutes a way to monitor the activity of the organization and its components; an evaluation method and a learning procedure. “The objectives are an essential element in strategic management because they clarify the targets and show how the company performance is to be evaluated”. (Cardoso, 1992)

Moreover, this definition must take into account:

- The analysis of the differences between objectives and achieved results;
- The knowledge of the contextual environment;
- The resources of the company and its internal power relations;
- The value system of the management;
- The evaluation by the management of the company evolution.

This definition of objectives has major advantages in company management, namely:

- To determine the position of the company in the environment;

- To help coordinate decisions, guiding the attention of employees and deciders to the intended goals and standards, reducing conflicts in the decision-making process, clarifying the aim;
- Allowing the evaluation of the company performance.” (Cardoso, 1992)

Therefore, the process of setting objectives can be resumed as:

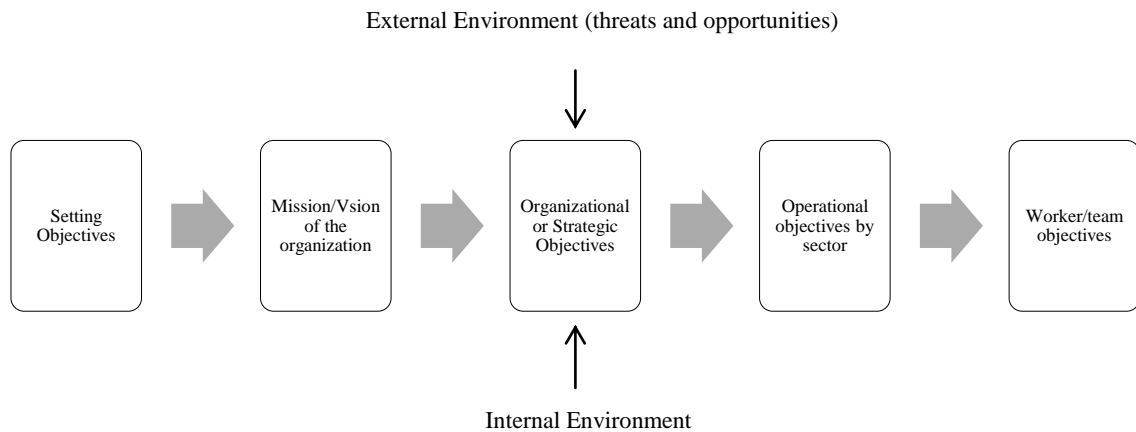


Figure 3

Objectives are commonly divided into:

- Strategical or operational – according to the decision-making level;
- Financial or Non-financial – according to monetary or physical components;
- Or related to:
  - Effectiveness – the relation between intended objectives and achieved results;
  - Efficiency – the relation between the achieved results and the means employed;
  - Quality – the relation between product/service specifications and the customers’ needs or set standards.

#### 2.1.4. Strategy

Strategy is the path chosen to achieve a specific result. As stated above, Strategy is, on the one hand, a component of Strategic Planning and, on the other, a guide to specific operational plans.

In this section, the concept of Strategy is analyzed. This requires understanding the definition of the strategic process and its elements, the components of Strategy and the transposition of the concept to the corporate/organizational scope.

Also in this section, the importance of Strategic Indicators is explored, given their relevance to the construction of the Strategy Map, later on.

#### **2.1.4.1. The concept of Strategy**

Initially meaning the “art of the general”, the word “Strategy” has its origin in the military field. Nowadays, however, the term is used in several life and human knowledge areas, across the most diverse activity sectors, from sports to business.

Along with the evolution of the concept, the strategic theory has also been enriched by the use of analysis techniques from other scientific fields, for instance, the systemic analysis first used in scientific trials in the biology field.

“The concept of strategy not only has evolved in a way that follows its first subject – war - but also, as it often happens, it tends to be applied to several other situations, through the generalization of the concept.” (Couto, 1988)

There are several references to the different definitions of strategy by different authors, as cited by A.C.Couto (1988), which show the continuous evolution of the concept:

1. “Moltke defines strategy as the "Practical adjustment of resources made available to the generals, to achieve the purposes of war." Adding to that, "strategy indicates the best way to lead the battle: it shows where and when to fight, while tactics show how to fight. ”
2. Admiral Castex states that: “Strategy is none other than the general conducting of operations, the supreme art of the leaders of a certain hierarchical elevation. ”
3. Major-general Maurice defines strategy as "The art of using the national potential to achieve the purposes of war".
4. According to Marseli: “Any military leading a platoon applies or should apply its strategy, proportionately to the operation to be performed.”(...) Following that train of thought, Laurent says: "Strategy can be understood by all that relates to the design and the general conduct of operations, and tactics by everything related to its implementation”.
5. Liddel Hart defines strategy (grand strategy) as “the art of coordinating and directing all the resources of nation or group of nations to achieve the political objective endorsed by war, and that is defined by politics”, while the pure (or military) strategy “is the art of distributing and applying military means to achieve

politic purposes”; and adds “Just as tactics is the implementation of the strategy on a lower level, the military strategy is the application of a grand strategy in a specialized field which is subordinate to it.”

6. General Beaufre defines the total strategy as the “Art of employing force or coercion to achieve the purposes set by politics”. And adds: “This definition has the disadvantage of covering the whole of the military art. Traditionally, it is divided into strategy, tactic and logistics. (...). The essence of strategy lays in the abstract game that results from the opposition of two wills. (...)”. Concluding: “strategy is therefore the art of the dialect of wills, using force to resolve their conflict”.
7. For Leo Hamon, strategy “is the deliberate conduct of an action in a dialect of duality in which war provides the original model”. And adds: “The characteristic of the strategic operation is not only the use of certain means at the service of certain ends; it is also the existence of an opposition that needs to be won: the opposition of wills and the dialect of the other are essential to the strategy. There is no strategy, except for misuse of the term, against an epidemic or against the housing crisis (...). But it is possible to refer to the strategy of a political party when it seeks a long-term objective, because its action opposes other parties”.
8. For Schelling, strategy “deals not only with the usage of force, in the most efficient way, but mainly with the exploitation of potential strength.”
9. General Gambiez defines strategy as the “art, in peacetime as well as in wartime, of harmonizing the specific space-time of each category of the means put into action and of creating an advantageous tactical situation that, potentially or in fact, enables the satisfaction of the defined policy needs at the lowest cost”.
10. According to the Admiral Wylie, “strategy is an action plan to reach an end: it is a purpose together with a system of measures to achieve it.”
11. For Rosinsky, “strategy is the art of the global steering of power to control areas and situations, seeking the achievement of objectives”.
12. The official American doctrine establishes the following definition of “national strategy”: “The art and science of developing and using the political, economic and psychological power of a nation, along with its armed forces during peace and war, to ensure the achievement of national objectives.”



From these definitions, it is possible to perceive that nearly all of them point to the achievement of results as a final goal of strategy. And this is the first characteristic of strategy.

Leo Hamon, among other theorists, points to another characteristic: the dialectic – the opposition of wills. Hamon actually states that this is essential to strategy, referring that without it strategy does not exist. (Rascão, 2001)

A.C. Couto (1988) follows the same line of thought in understanding that strategy only exists if there is in it a specific element – coercion, otherwise it is only possible to talk about guided planning.

The same is referred by António Silva Ribeiro (2009), “It is coercion that distinguishes strategy from guided planning (...).”

Some of the previous definitions relate strategy to art, while others to science. The first case usually connotes it to the concept of leading and the second case relates to its analysis and formulation. But it is also important to keep in mind the concept of efficiency, as referred by Schelling.

#### **2.1.4.1.1. Components of the Concept of Strategy**

António Silva Ribeiro (2009) states that the concept of strategy comprises the following components:

- “Science and Art

Many of the definitions mentioned above refer to art as a component of strategy, intending to show the importance of being skilled at leading or finding the opponent’s weak spots, or in other words, to enhance the capacities of the conductor of the strategy.

But strategy is also a science. It is based on a theoretical framework that resorts to research and factual analysis.

- Build, arrange and employ

Strategy generates and creates means (resources), composes, organizes and articulates the disposable means and uses them. This component requires the design and development of action plans.

- Coercion means, environment and timing

Means of coercion – Strategy conceptualizes and evaluates the conductor’s own resources and the opponents’ resources as a way to support the political perspectives.<sup>1</sup>

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<sup>1</sup> This political perspective may be understood as the achievement of the intended objectives.

Environment – strategy is a process which takes into account the interactions of the surrounding context with elements such as geography, history, nature of the political regime, economy and technology, among others.

Timing – It ensures that the strategy takes into consideration the moment, the duration and the rhythm of action. The moment translates the global framework of the political, economic, psychosocial and military reality. The duration defines the period of time. The rhythm characterizes the variation of intensity and speed.

- Objectives set by politics

Strategy materializes, resorting to the national power, the nation's objectives which arise from the State's mission, given that these may be in contradiction with the objectives of other States.

It also means that strategy submits itself to politics and not the other way around. The national goals, the building and employment of means, the environment and the timing (“what to do”) are set in the political field, but it is the role of strategy to materialize it (“how to do it”).

This is a dialectic relation because if it is true that politics guides strategy, it also conditions it, making it clear the risks of the established objectives and its unenforceability.

The objectives are set in cascade, that is to say, in levels. Therefore, national targets have other level of objectives – basic strategic objectives.

- To overcome problems and explore possibilities

The power is employed in order to circumvent obstacles and to win confrontation, so that the settled objectives are achieved and that, when facing threats and opportunities, the situation may evolve into the desirable direction.<sup>2</sup>

- Environment of disagreement

This conceptual component ensures the need for an opposition, provided with will and capacity. These can be understood as strategic entities.”

#### **2.1.4.2. The Process of Strategy**

Following the definition of the processes described above, strategy can be considered as a process. A process of intellectual work, using physical, material, financial and informational resources in all its several stages, and that transforms inputs – of information or

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<sup>2</sup> This can be transposed to the economic field knowing that there are some limitations set by legislation, values and so on.

of any other nature – into outputs – organization, decisions or results, according to the capacities and settled objectives of the organization.

António da Silva Ribeiro (2009) states that the materialization of strategy is a process "whose structure results from the synthesis of the objectives and the procedures (...), it aims the achievement of these objectives, but also seeks maximum profitability when employing the national power in order to do so (...)".

#### **2.1.4.2.1. Elements of the Process of Strategy**

According to António Silva Ribeiro (2009), the essential elements of the strategic process are:

- Mode of action

Aiming to answer some fundamental questions:

- What? – objectives to be achieved
- How? – how the objectives will be achieved
- When? – time frame
- Where? – indicates the appropriate location for the action
- With what forces? – relates strategy to the means available or necessary for success

In this element, it is necessary to consider not only the actions to be taken but also the actions of the other contender(s), its specific time frame, space and set of means, on a dialectic process.

- Decision factors

These are, on the one hand, constraints of the decision and, on the other, its own substance.

The following are considered as decision factors:

- The objective set by politics;
- The means;
- The coercion means;
- Timing;
- The opponent.

- Levels of decision and execution

These reflect the organizational complexity of the contenders and the several hierarchical levels it comprises, and through which it may be possible to determine, among other issues, the speed of the decision and, therefore, the decision factor “timing”.

- Principles and rules

This is a controversial point in the study of strategy, given that some authors defend the existence and utility of principles and rules, while others advocate their non-utility and even the non-existence of principles and rules. Concurring with the points of view of António Silva Ribeiro (2009), we assume their existence in this thesis, as stated in Table 1, which represents the relation between decision factors, principles and rules:

Decision Factors	Principles	Rules
Objective	A. Importance of the objective	<ul style="list-style-type: none"> <li>a. Balance</li> <li>b. Commonality</li> <li>c. Selectivity</li> <li>d. Flexibility</li> <li>e. Worth</li> <li>f. Compatibility</li> </ul>
Means	B. Economy of effort	<ul style="list-style-type: none"> <li>a. Coordination</li> <li>b. Concentration</li> <li>c. Orchestration</li> <li>d. Clarity</li> <li>e. Surprise</li> </ul>
Opponent Mean Time	C. Freedom of action	<ul style="list-style-type: none"> <li>a. Initiative</li> <li>b. Security</li> <li>c. Convenient Point</li> <li>d. Time Management</li> </ul>

Table 1 (Ribeiro, 2009)

António Silva Ribeiro (2009) defines the principles of strategy as “primary precepts that express a fundamental and universal idea not bound by historical time, nor influenced by technology, extended to all areas of action - political, economic, psychosocial and military – in which the preferred field of application is the strategic formulation (...) They serve especially for general guidance”.

On the other hand, these principles “serve as basis for secondary precepts - the rules - in greater number, more concrete and of practical interest (...)”. (Ribeiro, 2009)

- A. Principle of the importance of the objective – Ensures the guidance of the strategic action towards the achievement of objectives and targets;
  - a. Rule of equilibrium – ensures the adequacy between objectives and the available resources;
  - b. Rule of commonality – determines that the actions, information and support are common to all stakeholders, so that they are able to take individual action and ensure a successful conclusion;

- c. Rule of selectivity – ensures the selection of information and stakeholders needed for the decision process;
  - d. Rule of flexibility – allows a quick and effective adaptation to any change of scenery;
  - e. Rule of value – ensures that the objective should aim and accomplish the imbalance of the contender, both in its formulation and afterwards in its achievement;
  - f. Rule of compatibility – ensures, throughout the various levels of the strategic action, the adequate fitting of the objective to its specific action.
- B. Principle of the economy of effort – It is a principle of effectiveness, meaning that the aim is to obtain results by using all available means;
- a. Rule of coordination – represents the need for coordination and direction of the use of means in pursuit of specific goals;
  - b. Rule of concentration – ensures the concentration of resources in the appropriate time and site to achieve the objectives;
  - c. Rule of orchestration – intends to express the importance of having the necessary ability to move and dispose the means in order to exploit the weaknesses of the contender;
  - d. Rule of clarity – ensures that the maneuvers to be performed are absolutely understandable for those who have to implement it;
  - e. Rule of surprise – means the possibility of choosing the least predictable action ensuring superiority when materializing the goal.
- C. Principle of the freedom of action – intends to develop the action without constraints and refrain the reaction of the opponent;
- a. Rule of initiative – the timing, the way and the place of action are chosen by the leader of the strategy;
  - b. Rule of security – seeks to minimize the risk of outside interference in the actions to be undertaken;
  - c. Rule of the convenient point – the strategic action is taken in such a way that the environmental conditions ensure that the objective is achieved effectively;
  - d. Rule of time management – the strategic action takes place within the correct timing and at the appropriate pace.
- Centre of gravity

This concept is also not consensual in the theory of strategy. There are two main conceptions: one based on effects – the original one with its origin in Clausewitz; the other, based on means and prevailing nowadays. There are two formulations of this latter conception. The first defines a myriad of centers of gravity, according to all critical points, whether strategic or operational, that can be attacked; the second, with only one center of gravity, related to the site, feature or capability that ensures the achievement of the settled objective. For Clausewitz, there may be multiple centers of gravity, but the battle is the center of gravity in war. In truth, this was where the forces were highly concentrated and, therefore, a victory in battle would bring down the opponent.

- Strategic advantage

It signifies the intention of obtaining any gains which will provide a better situation than that of the opponent. Hence, the mode of action must seek to attain that advantage.

- Strategy proofs

It grants the success of any strategy. In order to do so, the mode of action must ensure the suitability, feasibility and acceptability of the strategy.

### 2.1.4.3. Corporate/Organizational Strategy

Adriano Freire (1997) states that the ultimate goal of Strategy in business is the “creation of a sustainable and competitive advantage”. The author compares military and corporate strategies:

	<b>Corporate environment</b>	<b>Military Environment</b>
<b>Objective</b>	Market Acquisition and Control	Conquest and Control of Territories
<b>Analysis</b>	Market Research Industry Structure Strengths and Weaknesses Organization and Leadership	Weather Conditions Land Conditions Distribution of Forces Structure of Command
<b>Results</b>	Corporate Strategy Strategic Plan	Military Strategy Campaign Plan

Table 2 (Freire, 1997)

In business strategy, it is possible to distinguish between three phases: analysis or diagnosis, strategic formulation and strategic implementation.

#### 1. Strategic Analysis

This phase involves two levels of analysis, the surrounding external environment and the organization.

In the first level, Adriano Freire (1997) distinguishes between two types of surroundings, the surrounding contextual environment, common to all companies (technological context, political and legal context, socio-cultural and economic context); and the transactional environment, specific to each industrial sector (customers, competitors, suppliers, community).

For each of these items, the analysis resorts to its own methods, often related to statistics. The analysis of the company is performed according to the resources available, the products it manufactures or the services it provides and its situation before the competition and markets, aiming to identify their strengths and weaknesses.

## **2. Strategic Formulation**

After the diagnosis, it is necessary to formulate the actual strategy.

The first step is the definition of vision. The vision should express how the strategic decision-making body sees the future of the company, its market position, its ambitions and values, in an abstract but motivating and inspiring way for the employees of the company.

Based on the vision, the mission of the company is established and it translates the overall guidance for the company, the markets it operates in, its position in a specific industry or service, and in such way that it is possible to define both its strategic objectives and, in cascade, its operational objectives.

The mission and vision statements are not immutable. One may influence the other as time goes by. In fact, the vision of how a business must be conducted may influence the mission statement and vice-versa.

## **3. Organization and implementation of the strategy**

The third phase has to do with the implementation of the strategy. It is a phase of diffusion of the strategy by the company, when the organization is adapting and structuring itself according to the needs of the actions, providing every element of the structure specific objectives and the required resources and skills to achieve them.

In this phase, it is paramount to have a strong leadership and strong communication skills.

#### 2.1.4.4. Methods of Strategic Analysis

The most well-known method of strategic analysis is the SWOT analysis. It enables the study of the Internal Environment – Strengths and Weaknesses – and the External Environment – Opportunities and Threats; and where one of the most commonly used methods is the PESTLE analysis.

##### 2.1.4.4.1. SWOT Analysis

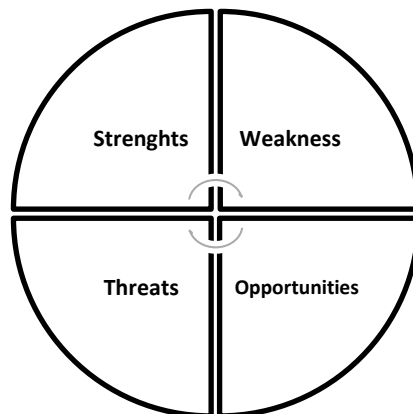


Figure 4

Created by Kenneth Andrews and Roland Christensen, two professors from Harvard Business School, the SWOT analysis studies the organization according to four variables: Strengths, Weaknesses, Opportunities and Threats.

With this methodology, it is possible to make the inventory of strengths and weaknesses of the company, the opportunities and threats of the environment, and the degree of fit between them. When the strengths of an organization are in accordance with the critical success factors, the organization is at an optimal point.



In order to study the internal environment, there must be a focus on the Mission and take into account the financial, human and technical resources of the organization. Are they the right ones? Are they enough? These are the questions that have to be answered.

A well-known analysis method for studying the external environment follows next – The PESTLE Analysis.

#### **2.1.4.4.1.1. PESTLE Analysis**

The PESTLE analysis - political, economic, socio-cultural, technological, legal and environmental factors - is used for the analysis of the external environment surrounding the organization.

In each of these factors some variables must be analyzed:

- Political and legal variables:
  - Position of the organization;
  - Applicable law; etc.
- Economic variables:
  - Employment Market
  - Cost (and availability) of other factors;
  - Inflation rate
  - State Budget, etc.
- Socio-cultural variables;
  - New Skills, etc.
- Technological variables:
  - Focus on technological effort;
  - Speed of technology transfer;
  - Increased productivity (automation); etc.
- Legal variables:
  - Legislation, etc.
- Environmental variables:
  - Weather and climatic factors
  - Geography

- Impact of environmental factors in the organization and vice-versa; etc.

#### **2.1.4.5. Strategic Indicators**

This section approaches the concept of Indicator, its usefulness and application. It also explores its relation to the different levels of information, the modeling technique and the trends method.

##### **2.1.4.5.1. The Usefulness of the Indicator Method**

This method allows for an effective control along all the phases of the strategy by monitoring its success step by step, from the stage of diagnosis until the strategic action. But by allowing this it also allows for the detection and correction of errors or for overcoming new and unexpected barriers in the strategic process.

##### **2.1.4.5.2. The Concept of Indicator**

An indicator, just as the name suggests, is something that indicates, that helps to understand a situation, a path or a trend.

It is, therefore, a measuring instrument and can represent the number of a variable (e.g. the GDP of a country) or a relation between variables (e.g. GDP per capita – translates the value of GDP and the population of the country).

According to Steven Alter (Rascão, 2001), indicators are part of the information system – “the combination of components, information, working methods, people, information and communication technologies, organized in order to achieve organizational goals” – and so they must be chosen according to the settled objectives.

An indicator is composed by:

- Measure indicator – indicates the metric system to be used and it can be a single unit or a relation of variables.
  - Example: Gross domestic product of the Country (GDP); Production/hour (productivity), etc.
- Calculation formula – in case of relation of variables
- Unit of measure – euro; dollar; tons.

- Data collection frequency and calculation of the indicator of periodicity, if it is quarterly, semiannual, annual, etc.

The indicator setting process must be, then, composed by the following steps:

1. Set of targets to be achieved;
2. Assessment of the needs of the information system in relation to the objectives;
3. Identification of an indicator of measure;
4. Assessment of measurement consistency with top-level indicators;
5. Designing the statistical system and creating the sources of information.

#### **2.1.4.5.3. The Application of Indicators in Strategy**

The establishment of objectives and their measurability is the main way of evaluating the ongoing strategy and, eventually, to correct it.

#### **2.1.4.5.4 The decision levels and the levels of information – The Cascade Method**

Just like the entities involved, their tasks and responsibilities, information also has different hierarchical levels. The higher levels of decision are usually more interested in aggregated information and, consequently, the lowest levels work with less aggregated information. The distribution of information is, then, cascaded.

This is usually the rule, but, sometimes, the highest level may be interested in less aggregated information and vice-versa. On the other hand, the objectives are diffused through the levels of the organization (from top to bottom) in an increasingly less aggregated way as they travel down the hierarchical levels.

#### **2.1.4.5.5. The Models in Strategy and the volume of Information**

Modeling is a technique developed to represent real phenomena and it is used in all science fields. It is also a way of learning without any of the consequences of error in real life. But even here it is necessary to learn from mistakes, since, in fact, the model is supposed to represent real life.

Nevertheless, a well-developed model allows a good assessment of what and how much information is needed for it to work properly. The model must be effective - represent reality - and efficient - use only the necessary resources.

#### **2.1.4.5.6. The Trends**

One of the methods used in the analysis of phenomena - whatever its nature - is the method of trends. Two main approaches can be used here:

1. The historical method, based on historical statistics series (e.g. the annual GDP growth). In this first case, the method of indicators to assess trends is also used.
2. And the use of experts in various fields that can build trends due to their scientific or empirical knowledge.

#### **2.2. Evaluation**

The evaluation is, as previously mentioned, an important part of the planning process. It is truly the moment for the analysis of the deviations between the settled objectives and the obtained results.

Everything that went well and everything that went wrong is highlighted. And if this is the moment to decide who is rewarded, it is primarily the moment when the learning process expands. All analysis, all studies converge to improve the production process.

However, it is not sufficient to only confirm the existence of deviations. It is essential to understand the reason of their existence and to find appropriate solutions.

This is a point of great relevance in the public service and subject to legal norms.

#### **2.3. Control**

A traditional definition of control can be summarized as “the process that verifies if the desired results are being achieved.” (Jordan, Neves, Rodrigues, 2011)

Other approaches exist, especially after the problems verified in some multinational companies which declared bankruptcy due to serious deviations in their accounting.

Nowadays, it is essential to ensure that this control is not merely the final moment of the planning process, but an ongoing process that ensures the fulfillment of the settled objectives. It must be initiated at the same time of the setting of the objectives, and specific control activities to minimize the risk of not attaining them must be implemented.

### 3. Balance Scorecard

In this section, the Balanced Scorecard is presented. It embodies all the concepts mentioned so far, since it serves as a tool for strategic management, performance evaluation, monitoring, organizational communication and strategic learning.

#### 3.1. Introduction

*“The balanced scorecard provides a framework for managing the implementation of strategy while also allowing the strategy itself to evolve in response to changes in the company’s competitive, market, and technological environments.”* (Kaplan, Norton, 1996)

The depletion of the information systems based solely on financial and accounting data originated a reflection on the rational articulation of accounting and financial data with data from other subsystems, namely those dealing with quality and production data. This also reflects a need to overcome the short-term view and to think in wider terms.

The Post-War reality, especially after the 50’s, and the implementation of the Marshall Plan, brought greater complexity to the management of companies. Side by side with a growing internationalization, they started to structure themselves into business groups.

The information needs increased but the existing techniques did not allow the integration of information into coherent information systems and defined objectives.

In the last decade of the 20th century, some attempts to overcome the insufficient measure of financial indicators appeared.

This is how the Balanced Scorecard was born. This method allows the integration of multiple perspectives through which it is possible to perceive the organization, according to the various stakeholders, and how to satisfy their claims and placing them as an objective to be achieved.

*“(…) the scorecard addresses a serious deficiency in traditional management systems: their inability to link a company’s long-term strategy with its short-term actions.*

*Most companies’ operational and management control systems are built around financial measures and targets, which bear little relation to the company’s progress in achieving long-term strategic objectives. Thus the emphasis most companies place on short-term financial measures leaves a gap between the development of a strategy and its implementation.”* (Kaplan, Norton, 1996)

The recognition of mutual influences - cause and effect relations - between the various levels and perspectives of the organization, the need for alignment in the pursuit of the

strategy and the establishment of organizational objectives to which the various levels can contribute (cascade of objectives) are some other features of this model.

In fact, effectiveness is the goal of organizations. In both the private and public sectors, effectiveness is measured by the achievement of objectives, whether they are the maximization of profit, increasing market shares or the accomplishment of the mission.

Thus, the BSC (Balanced Scorecard) serves as a tool for strategic management, performance evaluation, monitoring, organizational communication and strategic learning.

The main components of the Balanced Scorecard are:

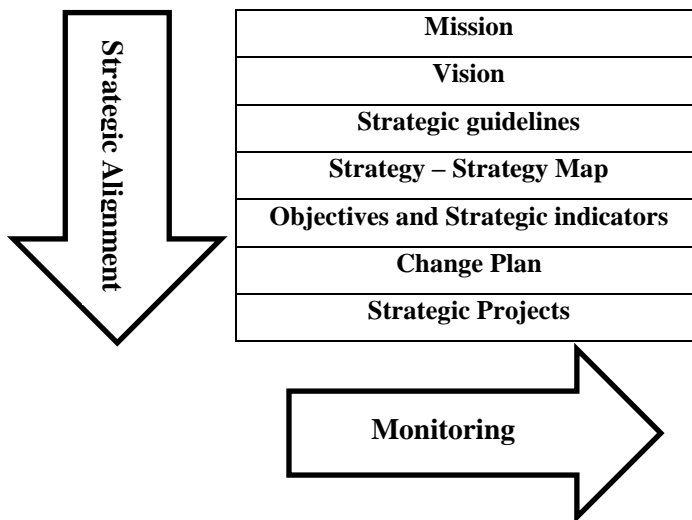


Figure 5

*“Once the strategy is defined and the drivers are identified, the scorecard influences managers to concentrate on improving or reengineering those processes most critical to the organization’s strategic success. That is how the scorecard most clearly links and aligns action with strategy.”* (Kaplan, Norton, 1996)

### 3. 2. Implementation

The implementation of the Balanced Scorecard can be done by levels:

- Global Map;
- Business Units Map;
- Departamental Maps;
- Individual Maps.

And it should be executed in stages, such as:

- Selection of the organizational unit and identification of constraints and opportunities;
- Definition of the Mission and Vision;

- Organizational diagnosis (SWOT analysis);
- Identification of the entities involved and the perspectives;
- Strategy definition;
- Definition of strategic objectives, their interrelationships and respective targets;
- Setting the change plan and strategic projects within it;
- Monitoring;
- Feedback - learning from mistakes and correcting strategies.

*“None of the more than 100 organizations that we have studied or with which we have worked implemented their first balanced scorecard with the intention of developing a new strategic management system. But in each one, the senior executives discovered that the scorecard supplied a framework and thus a focus for many critical management processes: departmental and individual goal setting, business planning, capital allocations, strategic initiatives, and feedback and learning. Previously, those processes were uncoordinated and often directed at short-term operational goals. By building the scorecard, the senior executives started a process of change that has gone well beyond the original idea of simply broadening the company’s performance measures.”(Kaplan, Norton, 1996)*

### **3.3. The Model**

The Balanced Scorecard is, as mentioned above, a strategic planning and performance evaluation technique that not only facilitates the strategic thinking process but also allows the monitoring of the entire process of strategic change by establishing indicators and targets. It is also important to the definition of the internal organization and the respective organizational structure. It is a management model that helps organizations to transform strategy into operational objectives.

This methodology allows the strategic alignment of all parts of a system. This makes it particularly suitable for complex systems that have to be monitored centrally.

On the other hand, the BSC provides clarification regarding the strategy because the methodology is based on a set of questions - always the same - to help in the perception of the strategic phenomena.

*“The balanced scorecard signals to everyone what the organization is trying to achieve for shareholders and customers alike. But to align employees’ individual performances with the overall strategy, scorecard users generally engage in three activities:*

*communicating and educating, setting goals, and linking rewards to performance measures.”* (Kaplan, Norton, 1996)

It can be built as a mere description of the "status quo" of an organization, thus serving as a starting point for the analysis and strategy formulation, or simply describing the levels of strategic restructuring, (e.g. processes that can leverage a new positioning in the organization operating context).

*“The process of building a balanced scorecard—clarifying the strategic objectives and then identifying the few critical drivers—also creates a framework for managing an organization’s various change programs.”* (Kaplan, Norton, 1996)

It is also possible to elaborate a Balanced Scorecard for all levels of the organization, from the workstation to the department or the entire organization, or even for a process or set of processes.

*“The balanced scorecard, as the embodiment of business unit strategy, should also be communicated upward in the organization—to corporate headquarters and to the corporate board of directors. With the scorecard, business units can quantify and communicate their long-term strategies to senior executives using a comprehensive set of linked financial and nonfinancial measures.”* (Kaplan, Norton, 1996)

The performance level of any organization must be measured by effectiveness, efficiency and quality in the pursuit of fulfilling its mission. As a rule, in the public sector, contrary to the private sector, the maximization of financial results is not set as an objective.

In the public sector, the success of the strategy must be measured by the accomplishment of the mission. The art of the leader is to accomplish its mission in the most efficient way possible. The funds available are limited and must be seen as a constraint, demanding the effectiveness of the action with maximum efficiency. Otherwise, it is not possible to ensure the accomplishment of the mission.

The first steps of this methodology have to do with the definition of the mission of the organization (or the functional content of the workstation ...), the vision, strategic guidelines and values.

Next, it is necessary to define the perspectives of the model. These can include, for instance the financial, shareholder, customer and internal processes, potential learning and growth perspectives, etc. These perspectives must be addressed and defined in accordance with the stakeholders of the organization work process and the environment in which they operate. Finally, the work processes or activities of the organization must be included and pondered.



### 3.4. The Perspectives

The initial model includes four perspectives:

- The financial perspective;
- The customers perspective;
- The internal processes perspective;
- The learning and growth perspective.

The operating mode of this model must facilitate the decision-making process. Therefore, in each perspective, the answer to a question that will guide all strategic thinking and its formalization must be present:

- Financial perspective (assuming the existence of a shareholder structure): “How to create value for the shareholders?”
- Customer perspective: “How to satisfy our customers in such a way that generates value for the shareholders?”
- Internal processes perspective: “In what processes must the organization be excellent at in order to satisfy our customers and generate value for the shareholders?”
- Learning and growth perspective: “Which individual/team/skills and infrastructure must the organization ensure excellence when conducting and executing the strategic processes?”

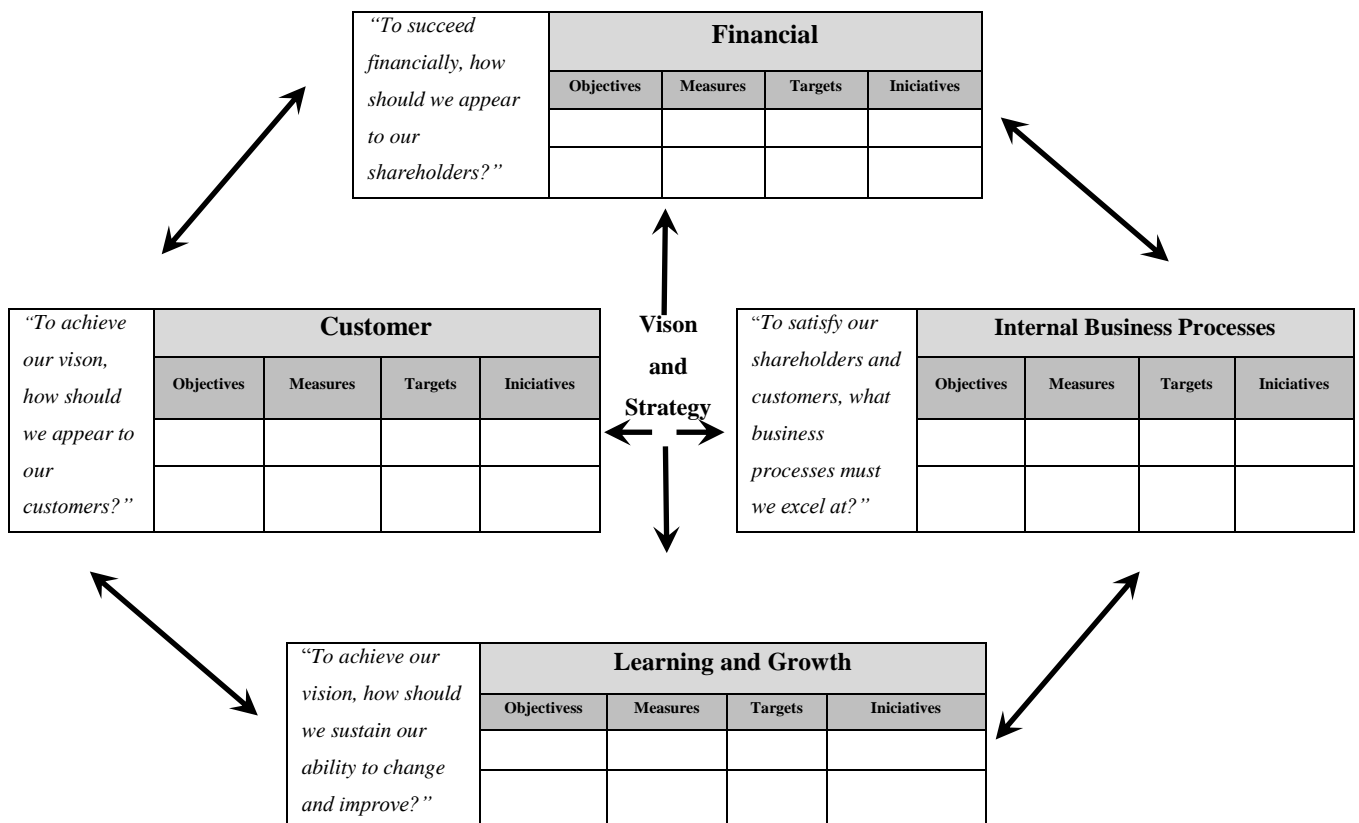


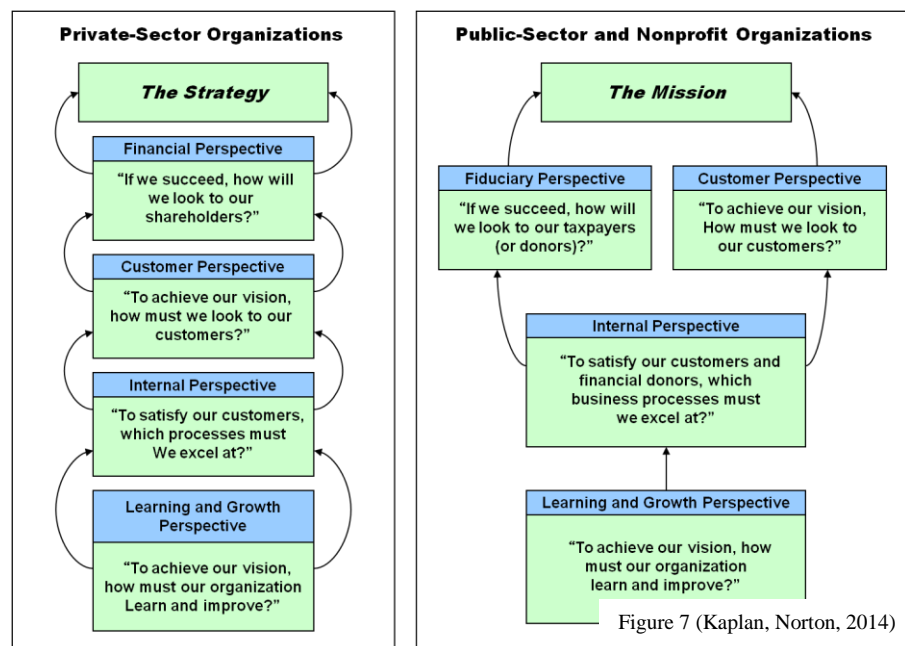
Figure 6 (Kaplan & Norton, 1996)

“(…) It therefore enabled companies to track financial results while simultaneously monitoring progress in building the capabilities and acquiring the intangible assets they would need for future growth. The scorecard wasn’t a replacement for financial measures; it was their complement.” (Kaplan, Norton, 1996)

Moreover, the flexibility of the model allows the substitution or addition of new perspectives, depending on the stakeholders (e.g. the State, suppliers, etc).

Initially, the application of the Balanced Scorecard targeted profit organizations; nevertheless, its implementation in the public sector is just as useful, despite some adaptations to its original design derived from the objective scope. Since, in the public sector, the main objective is the accomplishment of the mission, the perspectives on which the model is based have to be adapted.

In Figure 7, the financial perspective is adapted into a fiduciary perspective, in which the question becomes: “If we succeed, how will we look to our taxpayers (or donors)?” (Kaplan, Norton, 2004)



### 3.5. Strategy Maps

“A strategy map is a visual representation of the strategy. It provides a single-page view of how objectives in the four BSC perspectives integrate and combine to describe the strategy. Each company must customize the strategy map to its particular set of strategic objectives.” (Kaplan, Norton, 2004)

A strategy map is a visual representation that condenses the entire strategy of the organization and contains the mission, vision, strategic lines, perspectives and the entities involved, as well as the cause-effect relations established between them. It facilitates the formulation of the strategy and is a fundamental working tool in the global work method; it helps to embody the strategy while facilitating communication.

Still according to Kaplan & Norton (2004), these maps “provide a uniform and consistent way to describe the strategy while providing the missing link between strategy formulation and strategy execution. They are based on certain principles:

- Strategy balances contradictory forces;
  - The aim of strategy is to balance and articulate the short-term financial goals (which usually include the reduction of costs while enhancing productivity) with the long-term goals (profit maximization).
- Strategy is based on a differentiated customer value proposition;
  - Strategy requires the definition of customer segments and the respective value proposition in order to ensure full customer satisfaction.
- Value is created through internal business processes;
  - While the financial and customer perspectives describe results, the internal processes and the learning and growth perspectives define how the strategy will be implemented, thus determining how to create value. These processes can be classified as:
    - Operations management – production and delivery of products/services to customers;
    - Customer management – establishment and maintenance of relations with clients;
    - Innovation – new product/service/processes and relations development;
    - Regulatory and social – conformity with legal and social expectations.
- Strategic alignment determines the value of intangible assets
  - The learning and growth perspective deals with the intangible assets of an organization and their role in the strategy. They can be classified as:
    - Human capital – skills, talent and employee know-how;
    - Information capital – information systems and technological infrastructure;
    - Organization capital – Culture, leadership, corporate alignment, work team and knowledge management.”

*“Whereas all organizations attempt to develop their people, technology, and culture, most do not align these intangible assets with their strategies. The key to creating this alignment is granularity—that is, to move beyond generalities such as “develop our people” or “live our core values” and focus on specific capabilities and attributes required by the critical internal processes of the strategy. The balanced scorecard strategy map enables*

*executives to pinpoint the specific human, information, and organization capital required by the strategy (...)*". (Kaplan, Norton, 2004)

*"The strategy map describes the logic of the strategy, clearly showing the objectives for the critical internal processes that create value and the intangible assets required to support them. The balanced scorecard translates the strategy map objectives into measures and targets."* (Kaplan, Norton, 2004)

The objectives and targets described in the strategy map require identification but also action measures. The undertaking of action programs (strategic initiatives) will enable the achievement of the identified targets. The strategic initiatives require some organizational resources provided by the action plans, and must be set for each measure on the balanced scorecard, thus creating results. *"The execution of strategy is managed through the execution of initiatives."* (Kaplan, Norton, 2004) Also, these action plans can be aligned into strategic themes providing an aggregated understanding of the information.

#### **4. The Central Services of the Rectory of the University of Lisbon – Execution of the Strategy Map**

In this section, the aforementioned concepts are applied in order to build a Strategy Map for a Portuguese Public Institution – the Central Services of the Rectory of the University of Lisbon (Serviços Centrais da Reitoria da Universidade de Lisboa), the ultimate goal of this thesis.

##### **4.1. Context – The University of Lisbon**

The new University of Lisbon (Universidade de Lisboa/ULisboa) was founded in July 2013 from the merge of the former Technical University of Lisbon (Universidade Técnica de Lisboa /UTL) with the old University of Lisbon (Universidade de Lisboa /UL), both founded in the early 1990's. The ULisboa carries on the legacy of a great historical heritage of more than seven centuries – since the times of the establishment of the Higher Education in Portugal – and it arose from the will to join into the same institution the various areas of knowledge, allowing a constant pursuit in the development of science, technology, arts and humanities.

The first Portuguese University was instituted in Lisbon in 1288 and later transferred to Coimbra. In the eighteenth century, Higher Education was restored to the capital through several courses, schools and institutes which were then gathered into the University of Lisbon and the Technical University of Lisbon, in 1911 and 1930, respectively.

Recognizing both scientific and cultural traditions, it is seen as a “privileged space of science and knowledge” and as “one of the major institutions of higher education in Europe and one of the leading Universities in the country”. (ULisboa)

It works alongside the development of the city of Lisbon, as it promotes several activities in the city in which the academic community and society are involved.

The University of Lisbon has as its mission to be “an institution of education and science, based on the creation and transmission of economic and social knowledge, and on culture valuing, committed to the progress of society”. (ULisboa)

As the result of the strategic guidelines for 2014-17, it aims to “reinforce the internal cohesion of the University in order to integrate the several and complementary types of knowledge, which constitute its 18 schools” (ULisboa).

It intends to promote:

- Education;
- Research;

- Portuguese language and culture;
- Community service provision;
- Public understanding of the arts, culture and knowledge;
- The quality of life and work of students;
- Sustainability;
- Personal and professional realization of its employees;
- Internationalization;
- Relationship with the alumni;
- To deepen the relationship with the city.

The strategic lines of the University include:

- Its continuity to “intervene in relevant international networks of strategic importance to the University and the country, in a balanced and sustainable manner, in new contexts that enhance the international projection of their schools, teaching and research;
- Strengthening the internationalization with Brazil and China;
- Actions within the CPLP (Portuguese Language Speaking Countries) community.

But nowadays the University faces some challenges while still holding to its values of sustainability, intellectual freedom, ethics, people, innovation, the development of society and the balance between the autonomy of the Schools and the cohesion of the institution. The existing global crisis has many financial, economic, social, cultural and political consequences, which are currently reflected in the higher education area. And while the demographic decline of the population persists, teaching in Portugal must, according to the European Union Objectives for 2020, continue to increase the education offer, while ensuring its access by at least 40% of the population between the ages of 30-34.

The University actions are conditioned mainly in two ways. Not only does it have to act according to a specific budget – which, in the current economic reality, has suffered many restrictions, namely on the recruitment of personnel – but it must also guarantee the fulfillment of its mission in such a way that it ensures:

- The promotion of quality in the development of scientific work at the University, through new challenges of organizational efficiency in articulation to its international consortia, while including a greater participation of companies. (Europa 2020);
- The renewal of its faculty, teachers, researchers, technical and administrative staff; and the internal reorganization of the educational offer in the 2nd and 3rd cycles;

- The best conditions for those who want to study and work, improving infrastructures, overcoming the limitations in some operational areas and reorganizing its resources;
- The discussion and proposal of public policies.

The University finds, however, some opportunities in this crisis environment. More and more, the Portuguese universities become destination points for foreign students. The International Student Statue provides a way to attract international alumni, especially from Portuguese speaking countries and Europe. The participation in the European Framework Program for Scientific Research will enhance the integration of the University among the map of centers of excellence in the European Union. The Erasmus program provides the integration of research on competitive international networks.

The University of Lisbon identifies as its strategic objectives:

- A. To promote the cohesion and spirit of the University;
- B. To attract top students;
- C. To promote the interaction of the University with the productive sector and public authorities;
- D. To promote the renewal, training and mobility of human resources;
- E. To strengthen the capacity to intervene and influence in international strategic contexts;
- F. To ensure the consolidation of a Quality Management System;
- G. To create cultural offers in the University and for the city of Lisbon;
- H. To improve the infrastructures available to the academic community;
- I. To promote social responsibility and sports activities, health and wellness at the University.

These objectives obey specific axes, as it can be seen in the Table 3:

- Educational offer;
- Science, Research and Innovation;
- Image, culture and projection;
- Human, material and financial resources.

Strategic Objectives	Axes			
	Educational offer	Science, Research and Innovation	Image, culture and projection	Human, material and financial resources
A. To promote the cohesion and spirit of the University of Lisbon				
B. To attract top students				
C. To promote the interaction between the University with the productive sector and public authorities				
D. To promote the renewal, training and mobility of human resources				
E. To strengthen the capacity to intervene and influence in international strategic contexts				
F. To ensure the consolidation of a Quality Management System				
G. To create cultural offer in the University and for the city of Lisbon				
H. To improve the infrastructures available to the academic community				
I. To promote social responsibility and sports activities, health and wellness at the University				

Table 3 (ULisboa)



#### **4.2. The Central Services of the Rectory of the University of Lisbon**

The Central Services of the Rectory of the University of Lisbon are autonomous Services and Specialized Units which provide support to the central governance and schools of the University and to the academic community.

They comprise the Services of the Rectory, which include the Stadium of the University of Lisbon (Estádio da Universidade de Lisboa/EULisboa) and the Shared Services, and the Specialized Units.

The mission of this institution is “to coordinate, organize and support all entities that are part of the University of Lisbon, in the various areas of activity, and support the Rector's team, without prejudice to the governing bodies of the Schools”, thus aiming to improve the efficiency of the Services of the Rectory, the Stadium, the Shared Services and the Specialized Units.

In 2013, the previously existing universities went through a merger process. The reorganization of the Central Services (Serviços Centrais/SC) of the University was one of the priorities of the new top management, mainly to avoid compromising the normal operation of the University while facing the preparation of the budget for 2014 with the approach of a new school year.

The merge was due mainly to the disparate structure of the Universities, with some deficiencies and redundancies that were hampering the efficiency of the services. Based on the joint use of equipment, skills and powers, the Central Services of the Rectory of the University of Lisbon became an aggregated structure of the services previously provided by both Universities.

The services from these two universities had, until the date of the merge, 815 employees spread across two distinct organizational structures. It was decided to adopt an independent structure, the SC, headed by the Rector and his/her Team. This new structure should support the central governance of the University, the schools and the academic community providing general services.

The following chart explains the SC organization:

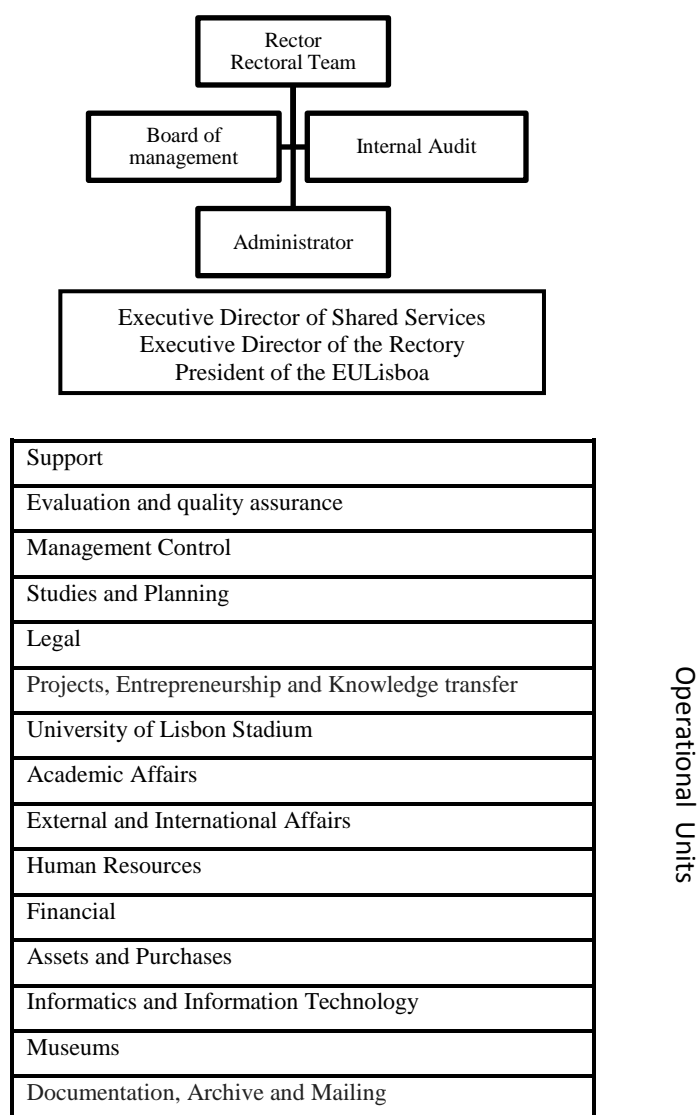


Figure 8 (ULisboa)

The Rector is the maximum leader of the SC and is assisted by the Vice-Rectors and the Pro-Rectors. Their main responsibility is to approve the statutes or regulations of the Rectory Services, autonomous services and specialized units.

The Administrator coordinates and heads the operational units. He/she reports hierarchically to the Rector and is assisted in his/her duties by the Executive Directors of the Rectory and Shared Services, and by the President of the Stadium/EULisboa. Their duties include:

- The overall coordination of the University administration;
- To ensure the daily management of the University;
- To implement the resolutions of the Board of Management of the University;

- Legal and internal responsibilities (the latter assigned by the Rector) in the areas of human resources, budget and asset management.

The Board of Management is responsible for conducting the administrative, assets, human resources and financial management of all the SC services, providing a standardization of procedures, better coordination and management control. It is appointed and chaired by the Rector and consists of a maximum of five members, including a Vice-Rector and the Administrator.

The SC is organized into operational units, which are headed by Directors or Coordinators and supervised by the Rector and his/her Team and by the Administrator. They can be integrated into Core Units and comprise the following offices, departments and areas:

- Support
- Evaluation and Quality Assurance
- Management Control
- Studies and Planning
- Legal
- Projects, Entrepreneurship and Knowledge Transfer
- Academic Affairs
- External and International affairs
- Human Resources
- Financial
- Assets and Purchases
- Informatics and Information Technology
- Museums
- Documentation, Archive and Mailing
- The Stadium of the University of Lisbon

The mission of the Stadium is to “promote Sport, Physical Activity, Health and Wellness in the academic community”. It comprises core units that report to their President:

- The Sports Center
  - Design, planning, implementation and evaluation of sports and physical activity programs, University extension programs and activities promoting university sports.
- Health and Wellness
  - Management of services related to medical and psychological support.

- Facilities and General Services
  - Management and maintenance of sports and support facilities.
  - Ensuring daily administrative tasks.

The Support Office provides support services to the Rector and his/her Team and to the Administration. It is headed by a Chief of Staff appointed by the Rector.

The Internal Audit Office supports management and helps to improve performance levels in order to achieve an effective monitoring system, while aiming at the promotion of quality. It monitors the organization and the operation of services.

The Evaluation and Quality Assurance Office monitors the evaluation of the University activities, according to the accreditation process of the study cycles promoted by the University. It also provides technical and administrative support to the activities of the Board of this office. It is headed by an Office Coordinator and comprises the following core units:

- Evaluation
  - Development, promotion and dissemination of procedures for the evaluation and quality assurance of the University activities;
- Accreditation
  - Development of tasks associated with institutional accreditation processes or with University activities.

The Studies and Planning Office is responsible for the necessary research in order to aid decision-making and support the improvement of quality and effectiveness of strategic and operational planning in the University.

The Projects, Entrepreneurship and Knowledge Transfer Office ensures the administrative and financial management of projects and supports the people in charge of these projects with the negotiation, opening, execution and preparation of financial reports. Also, in collaboration with the schools, it supports scientific research and the technological development activities of the University, the transfer of knowledge and the economic, management, intellectual and property valuation, streamlining business relations and national and international entrepreneurship.

The Management Control Office is responsible for the ongoing analysis of the implementation of plans and budgets under their responsibility, providing periodic information to enable their control.

The Legal Office provides the legal and litigation support services.

The Department of Academic Affairs monitors technical and administrative areas, namely the ones related to academic context, the school system, academic tests and the recruitment of teaching and research staff, thus supporting the bodies of the University and Schools. It comprises the:

- The Area of Academic Tests and Contests – manages all processes and procedures related to academic examinations and to the recruitment of teaching and research staff;
- The Students and Academic Certification Area – manages all processes related to the student academic life. It comprises:
  - The Academic Examinations Center
  - The Teaching and Research Staff Recruitment Center
  - The Lifelong Education Center

The Department of External and International Relations manages the institutional image of ULisboa and supports the internationalization activities of the University. It comprises:

- The Communication Center – ensures communication and content distribution ;
- The Cultural and Society Center – responsible for ensuring the external relations and tasks related to the academic protocol. It also supports and executes cultural and promotion activities;
- The Mobility Centre – supports mobility processes at national and international levels;
- The International Relations Center – promotes and supports the institutional processes of ULisboa.

The Human Resources Department manages processes and activities related to the employees of the University, regardless of the type of bond and career. It comprises:

- The Non-Teaching and Non-Research Staff Training and Assessment Center
- The Center for Employment and Wages.

The Financial Department is responsible for all the financial processes necessary to the activity of the University, ensuring the preparation and management of budgets, the fulfillment of payment and collection processes, consolidation, monitoring and accountability, and other tax liabilities. It comprises:

- The Budget Area – responsible for the classification and record of expenses, and the development of the University budget proposal
- The Accounting Department – responsible for the record of revenue and expenditure and the implementation of cost accounting. It includes:
  - The Accounting Area

- The Treasury Area
- The Consolidation Control and Accountability Area – Consolidation of accounts, control and verification of accounting and other tax liabilities.

The Assets and Purchases department handles the construction, rehabilitation and maintenance of the University facilities and equipment, planning and developing contract projects, ensuring the procurement process of goods and services, management and monitoring of contracts, assets and environmental management, and aiming for standard procedures. It comprises:

- The Maintenance and Facilities Management Area – responsible for managing the use of infrastructure and equipment, and the implementation and control of their maintenance;
- The Sustainability Area – studies and implements measures aiming to improve the environmental performance and optimize the operation of infrastructure and equipment in a way that it complies with the sustainability criteria;
- The Building & Construction Area – responsible for managing the activities related to the planning, design and construction of buildings and physical structures.
- The Purchasing and Storage Area – responsible for ensuring the procurement process of goods and services, the management and monitoring of contracts and assets, ensuring uniform procedures.

The Department of Informatics and Information Technology manages the policy of information and communication technologies at the University. It comprises:

- The Area of Applications and Information Systems – handles the maintenance, integration and development of applications which are part of the information systems. It comprises:
  - The Center for Management of Information Systems;
  - The Software Development Center.
- The Computer Support Area is responsible for the university computer centers and user support, and the development of common policies and procedures, including the purchasing of equipment, software and general purpose services.

The Documentation, Archive and Mailing Department is responsible for collecting and providing the necessary documentation to the management of the University, and for the preservation, technical handling, evaluation and dissemination of bibliographic and documentary patrimony; and also for the mailing management, the development and updating

of files, the establishment and application of criteria and general document management. It comprises:

- The Documentation Center;
- The Archive and Mailing Centre.

The Museums Area coordinates the staff of the Museums of the University of Lisbon and the National Museum of Natural History and Science, in conjunction with their respective Board of directors.

### 4.3. Strategy Map

The aim of this thesis is to build a Strategy Map of a Public Institution. The institution chosen was the Central Services of the Rectory of the University of Lisbon, presented in the previous section. Through access to the Management Documents of the University and two interviews with the Administrator – Dr. Ana Maduro, it was possible to create the Strategy Map presented in the next page.

The University has some documents available to the public – the statutes of both the University and the SC, the activities report of 2013 and the strategic guidelines for 2014-2017. Given that there was no Strategy Map available for consulting, and that there was limited access to information, those documents were analyzed to create most of the components of the Map. The Mission was stated in the documents but all other components were created merely for the purpose of this thesis.

The interviews were carried with the aim of clarifying some of the information contained in the documents and with the intent of having as much information as possible. Therefore, it focused on some questions related with:

- The integration of the SC within the structure of the University and how both missions were connected;
- The values of the SC;
- The Strategic Objectives of the SC;
- SWOT analysis of the SC;
- The users and recipients of the SC;
- The internal critical processes of the SC;
- And, the required skills and knowledge for the accomplishment of the mission of the SC.

These issues led to the following conclusions:

- The vision of the SC focuses on organizing all the fundamental administrative processes to ensure the efficient and well organized functioning of the University and support its position, nationally and internationally;
- There is an interlink between the SC values. Effectiveness, efficiency and quality are the core values that led to cooperation and inter-organizational integration. This leads to recognition and to an increasingly higher level of effort in research. All of these values then lead to the focus on the user/recipient;



- The strategic objectives of the SC are correlated with the strategic objectives of the University, previously shown;
- The SWOT Analysis allowed to understand the environment of the SC:
  - Internally, the strengths and weaknesses analysis focus on one positive issue that reveals a small contradiction. If on one hand, the SC is a joint organization, allowing for better coordination and efficiency, on the other hand this is not translated legally, as each part has its own legal framework;
  - Externally, it is possible to find opportunities in the growing globalization. The Internationalization of the University takes the central role in its Strategy and Positioning. There is also a greater awareness to the importance of higher education. These aspects allow to face the constant budget restrictions and the decrease of the target-audience, either in number or from the economic reality of the country (threats);
- The recipients/users/customers of the SC are students, teachers, non-teaching staff, researchers and the general public (potential students);
- The core skills are related to the Physical Assets Management, Technical Skills and to the Management of Information;
- The main processes have to do with procedural standardization, the ability to obtain financing for projects, Sport, Physical Activity, Health and Wellness and Cultural activities, Physical Assets Management and Internationalization.

All components of the Map were created in a Cascade Method, starting from the Mission and having it as the core of the embodied strategy.

Next, follows the Strategy Map for the Central Services of the Rectory of the University of Lisbon.

### Strategy Map

#### Central Services of the Rectory of the University of Lisbon

Mission: "To coordinate, organize and support all entities that are part of the University of Lisbon (ULisboa), in the various areas of activity and to support to the Rector's team, without prejudice to the governing bodies of the Schools"

Vision: To be a reference in efficiency and effectiveness and in procedural quality aiming for excellence while providing general services and ensuring the national and international positioning, which guaranties the fulfillment of the University objectives through an aggregated common structure that embodies the joint use of equipment, skills and powers.

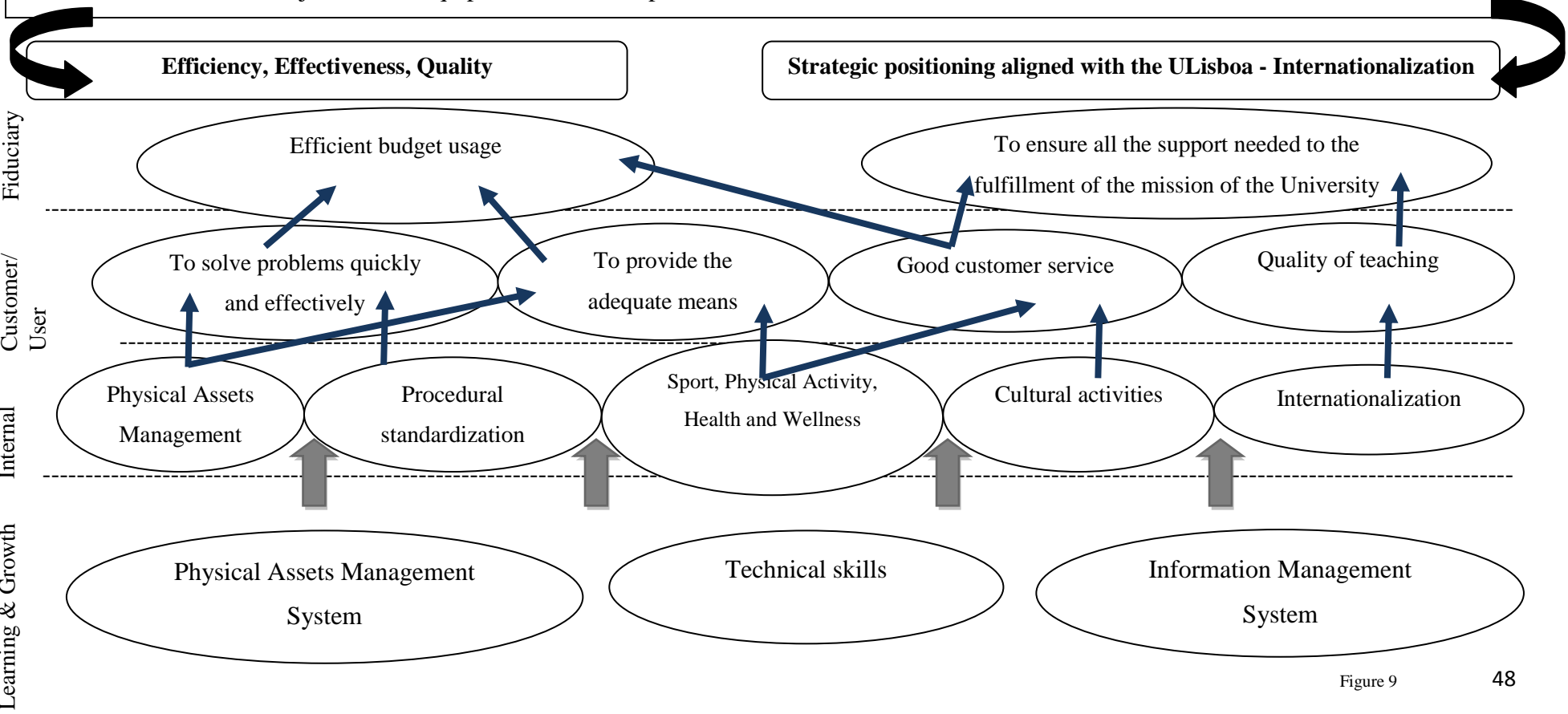


Figure 9

The main strategy identified focused on the internationalization of the University. The SC embodies a new joint structure that serves the University in order to solidify its mission, its positioning and its strategy. The Strategy Map was built taking this into consideration. Through the Mission and the Vision, it was possible to determine two main strategic themes – Efficiency, Effectiveness and Quality, being the core inner values of the University; and the alignment of the strategic positioning within the University, focusing on the Internationalization of the institution, as previously mentioned.

Since it is a public institution, the fiduciary perspective translates the needs of the main shareholder, the State, which can be summarized by the fulfillment of the mission – the reason why the SC were created – within a certain budget.

The other perspective has to do with the demands of the customers, who, in the case of a public institution, are the users. From the analysis of the information collected, the users of the SC are the students, the teaching and non-teaching staff, the researchers and the general public. The different departments of the SC handle each of these users categories and their expectations and needs, which can be summed into solving problems quickly and effectively, providing good customer service and the necessary means and conditions to the studies, research or work.

The Internal perspective translates which processes are critical to the performance of the SC. These were identified through the analysis of the University strategic objectives and each department of the SC, as it is shown in Table 4, next page.

The Support, Internal Audit, Management Control, Legal, Human Resources, Financial, Informatics, and Documentation, Archive and Mailing departments are not included because they provide support services to all the business units.

Also, the Administration action and the activities of Management and Control are reflected across all the units.

In addition, in this Strategy Map some of the processes were also aggregated, for instance, the Quality of Teaching and Internationalization which embody the Accreditation Processes, Evaluation and Quality Management; and the Marketing, Image Management PR, Academic Mobility, supporting R&D and HR Management.

Central Services								Main Processes
Strategic Objectives of the University	Evaluation and Quality Assurance	Studies and Planning	Projects, Entrepreneurship and Knowledge transfer	Stadium of the University of Lisbon	Academic Affairs	External and International Affairs	Assets and Purchases	
<b>Promote the cohesion and the spirit of ULisboa</b>	Development, promotion and dissemination of procedures for the evaluation and quality assurance				Support to the bodies of the University	Institutional image of ULisboa; Promotion and support of institutional processes; communication and content distribution		Evaluation and quality management; marketing, image management and PR.
<b>Attract top students</b>	Developing tasks associated with institutional accreditation and positioning of the University		Scientific research and technological development; transfer of knowledge economic, management, intellectual property valuation	Design, planning, implementation and evaluation of sports and physical activity programs, of extension programs and sport activities	Monitors technical and administrative areas related to academic context and school system; academic tests	Support to mobility processes at national and international levels		Accreditation processes; supporting R&D; technical support to the sports; academic mobility.

Central Services								Main Processes
Strategic Objectives of the University	Evaluation and Quality Assurance	Studies and Planning	Projects, Entrepreneurship and Knowledge transfer	Stadium of the University of Lisbon	Academic Affairs	External and International Affairs	Assets and Purchases	
Promote the interaction of the ULisboa with the productive sector and the public authorities			Support to the administrative and financial management of projects			External relations and academic protocol related tasks		Marketing, image management and PR.
Promote the renewal, training and mobility of human resources					Technical and administrative monitoring, related to the recruitment of teaching and research staff			HR Management

Central Services								Main Processes
Strategic Objectives of the University	Evaluation and Quality Assurance	Studies and Planning	Projects, Entrepreneurship and Knowledge transfer	Stadium of the University of Lisbon	Academic Affairs	External and International Affairs	Assets and Purchases	
Strengthen the capacity to intervene and influence in international strategic contexts		Research for decision-making processes; improvement of quality and effectiveness of the strategic operational planning	Streamlining business relations and national and international entrepreneurship			Supports the University internationalization activities		Supports the University internationalization activities
Ensure the consolidation of a Quality Management System	Monitoring of the University activities, according to the accreditation process of study cycles							Accreditation processes

Central Services								Main Processes
Strategic Objectives of the University	Evaluation and Quality Assurance	Studies and Planning	Projects, Entrepreneurship and Knowledge transfer	Stadium of the University of Lisbon	Academic Affairs	External and International Affairs	Assets and Purchases	
Create cultural offer in the University and for the city of Lisbon						Supporting and executing cultural promotion activities		Supporting cultural activities
Promote social responsibility and sports activities, health and wellness at the University				Promotion of Sport, Physical Activity, Health and Wellness in the academic community				Promotion of the Sport, Physical Activity, Health and Wellness

Table 4

For each perspective, there were strategic objectives traced. They are displayed in the Strategy Map, but in order for them to become real objectives, this analysis needs to be complemented with the respective indicators, the formulas through which they can be measured, the periodicity of their analysis and the target goal, as mentioned before.

The table displayed in the next pages shows all the determined strategic objectives, along with these components. However, due to the fact that it was not possible to access all the information needed and that these objectives were only traced for the purpose of this thesis, all these components are set as an example of how they can be translated into reality.



<b>Strategic Objectives</b>					
	<b>Objective</b>	<b>Indicator</b>	<b>Formula</b>	<b>Periodicity</b>	<b>Target</b>
<b>Fiduciary Perspective</b>	Efficient budget usage	Deviation between expenditure and budget	Expenditure – Budget	Quarterly (board meetings)	$\leq 0$
	Ensure all support to the fulfillment of the mission of the University	Number of complaints received	Complaint Count	Quarterly	$= 0$
<b>Customer/User Perspective</b>	Quick and effective problem solving	Satisfaction Index	Survey (number of satisfied users /number of users) *100	Quarterly	$\geq 99\%$
	Provide adequate means	Satisfaction Index	Survey (number of satisfied users /number of users) *100	Quarterly	$\geq 99\%$
	Excellent customer service	Satisfaction Index	Survey (number of satisfied users /number of users) *100	Quarterly	$\geq 99\%$
<b>Internal Perspective</b>	Quality of teaching	Satisfaction Index	Survey (number of satisfied users /number of users) *100	Quarterly	$\geq 99\%$

<b>Strategic Objectives</b>					
<b>Objective</b>	<b>Indicator</b>	<b>Formula</b>	<b>Periodicity</b>	<b>Target</b>	
<b>Internal Perspective (cont.)</b>	Procedural standardization	Number of Standardized Processes	Count	$\geq 10$	
		Standardization progress indicator	(number of standardized processes/ number of processes to be standardized) *100	$\geq 20\%$	
		Successful standardization index	Complaints Count	0	
	Internationalization	Percentage of revenues from foreign students	(revenues from foreign students/total revenues)*100	Quarterly	$\geq 20\%$
		Percentage of accredited courses	(number of accredited courses/total of courses)*100		$\geq 50\%$
		Number of students supported by the Erasmus program	Count		$\geq 40$

<b>Strategic Objectives</b>				
<b>Objective</b>	<b>Indicator</b>	<b>Formula</b>	<b>Periodicity</b>	<b>Target</b>
<b>Internal Perspective (cont.)</b>	Physical Assets Management	Satisfaction Index	Survey (number of satisfied users /number of users) *100	Quarterly ≥99%
	Cultural activities	Satisfaction Index	Survey (number of satisfied users /number of users) *100	Quarterly ≥99%
	Sport, Physical Activity, Health and Wellness	Satisfaction Index	Survey (number of satisfied users /number of users) *100	Quarterly ≥99%
<b>Learning &amp; Growth</b>	Technical skills	Knowledge update	(number of certified employees/total number of employees)*100	Quarterly ≥60%
		Percentage of trainees who apply the knowledge acquired	Survey addressed to the Top Management	

<b>Strategic Objectives</b>				
<b>Objective</b>	<b>Indicator</b>	<b>Formula</b>	<b>Periodicity</b>	<b>Target</b>
<b>Learning &amp; Growth (cont.)</b>	Information Management System	Percentage of processes under the Information Management System	Quarterly	≥90%
		Percentage of employees with access to the Information Management System		
	Physical Assets management System	Percentage of maintenance workers with access to the Physical Assets Management System	Quarterly	≥90%

Table 5

## 5. Conclusion

The ultimate goal of this thesis is to trace a Strategy Map for a public institution. The Strategy Map is a visual representation of the Balance Scorecard, a management framework created by Kaplan and Norton in order to contradict the excessive dependence of performance evaluation systems to the financial factors. Therefore, other components were highlighted, in the form of perspectives – Financial, Customer, Internal Processes and Learning and Growth – that enable a company to understand the organization of economic value creation within a longer period of time and enabling a more efficient performance level. This analysis permits to determine the strategy as part of a more complex system interconnected with other components, building a whole organization – the strategic alignment of the total parts of a system.

This strategic planning and performance evaluation technique facilitates the strategic thinking process but also allows the monitoring of the entire process of strategic change by establishing indicators and targets. It helps organizations transform strategy into operational objectives by clarifying the link between strategic planning and the environment or context of the organization.

The achievement of results is the finality of strategy.

The performance level of any organization should be measured by the effectiveness, efficiency and quality achieved in the pursuit of fulfilling its mission. As a rule, in the public sector, and contrary to the private sector, the maximization of financial results is not the main objective. Thus, unlike companies that seek profit as their main goal, public institutions have a more complex goal – the accomplishment of its mission within a certain budget.

*“(...) a mission statement has to focus on what the institution really tries to do and then do it so that everybody in the organization can say: this is my contribution to the goal.”*  
(Peter Drucker, 1990)

To accommodate the idea that in the public sector the success of the strategy must be measured by the accomplishment of the mission, the original financial perspective in the BSC is adapted to a fiduciary perspective that translates the satisfaction of its main stakeholder – the State.

The institution represented in this thesis is the Central Services of the Rectory of the University of Lisbon – autonomous services and specialized units who provide support

services to the central governance of the University of Lisbon, its schools and the academic community.

The University of Lisbon , “an institution of education and science, based on the creation and transmission of economic and social knowledge and culture valuing, committed to the progress of society”, embodies the SC – a new joint structure that serves the University to solidify its mission, its positioning and its strategy: “To coordinate, organize and support all entities that are part of the University of Lisbon in the various areas of activity and to support to the Rector's team, without prejudice to the governing bodies of the Schools”.

The process of constructing a Strategy Map begins with the statements of the Mission and the Vision, followed by the observation of the environment to define the main stakeholders and their value proposition, by answering a series of key questions as mentioned in the content of this thesis, and that will be translated in the form of perspectives. The next step is the application of a well-structured organization by processes to determine the key ones. Last but not least, it is essential to determine what is needed the most to be able to answer the previous questions and drive the chosen strategy to success.

The Strategy Map was done taking into consideration that this is a public institution and that the BSC model had to be adapted to its reality.

For this purpose, a series of interviews with the University Administrator were carried as well as a comprehensive analysis of the management documents available to the public.

As a result of this study it was possible to determine the following:

- The main strategic guidelines that occurred from the recent restructuring of the University are focused on the alignment of the SC with the Internationalization of the University while assuring efficiency, effectiveness and quality in the provision of services; these are reflected across all perspectives in the BSC;
- Since the SC is mainly a support department for the University and its faculties, its strategic objectives are directly linked to the strategic objectives of the University. Through this analysis it is possible to identify the critical internal processes;
- Given the socio-economic character of this institution, the indicators are mostly based on the satisfaction of its users.

The strategic themes that were identified are fundamental to the construction of the Strategy Map and focus mainly on the cohesion, effectiveness, internal efficiency and Internationalization as way to achieve sustainability and accomplish its mission.

The Strategy Map is a fundamental work instrument as it functions as an action guideline; the key indicators map is an important tool to measure actions, evaluate the achievement of the objectives and monitor the board meetings.

The main constraints to the making of this thesis are translated into all the elements of the BSC, which constitute merely a proposal since there was no indicator system provided and no official Strategy Map available.

Regarding future work developments, it could be interesting to interlink the BSC with the accounting methods – ABB, ABM and ABC – in order to create a unique information system to allow the facilitation of strategic analysis by connecting all the information obtained from the various organization activities.

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