UNIVERSIDADE CATÓLICA PORTUGUESA

# Performance Measurement Improvement in Shared Services

## The case of the Nors Group

Ana Catarina Afonso e Correia Mendes D'Oliveira

Católica Porto Business School

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## The case of the Nors Group

Final Work in Organisational Context present to Universidade Católica Portuguesa in order to obtain the master's degree in Management

by

Ana Catarina Afonso e Correia Mendes D'Oliveira

Under the guidance of

Professor Rita Ribeiro, PhD

Católica Porto Business School, Universidade Católica Portuguesa

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The beginning of a new chapter in one's life can be as enthusiastic as daunting. As I venture into this journey, I have come to realize that we, as individuals, are the sole creators of our paths. On that note, I stand by the idea that it is always best to have company along the way, so I would like to thank all of those that have supported me, perhaps with the same amount of insanity as I had when I decided to plunge into this.

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# Resumo

Tendo em conta o conceito de avaliação de performance em contexto organizacional, são inúmeras as aplicações de sistemas de medição e avaliação de performance. Apesar dos benefícios, existe uma necessidade de constante atualização face às mudanças a que as organizações estão sujeitas, internas ou externas, com o objetivo de executar uma avaliação sem falhas e em concordância com as necessidades das organizações. O desenvolvimento de sistemas de medição de desempenho e consequentes indicadores requer particular foco nos objetivos organizacionais e surge associado a um consumo de tempo elevado.

O presente estudo de caso visa uma análise daqueles que são considerados os Indicadores de Performance descritos na área de "*Source to Pay*", um departamento integrante de um centro de serviços partilhados, para entender o nível de adequação à medição do desempenho do departamento, dado que a avaliação dos indicadores não ocorreu num curto período de tempo. Desta forma, foi efetuada uma análise qualitativa dos atuais indicadores do departamento, assim como de diferentes processos que constituem as atividades diárias. A empresa em estudo insere-se no setor industrial, e apresenta um centro de serviços partilhados que oferece suporte às atividades diárias. Assim, foi verificado que a uniformização de processos constitui um veículo de redução de desperdício associado a tempo. Para além disso, nem sempre a implementação de indicadores de performance e medidas de avaliação de desempenho é acompanhada pela evolução do contexto organizacional, o que constitui um risco no que concerne à avaliação adequada de uma organização.

**Palavras-chave:** Sistemas de Medição de Desempenho, Gestão de Performance, Avaliação de Desempenho, Avaliação de Performance, Indicadores de Desempenho

# Abstract

In organisational context, there are several applications of performance measurement systems. In spite its benefits, there is a constant need to update and revise them according to the changes that an organisation may suffer, both internal or external, so as to execute a flawless and aligned with organisational goals analysis. Performance measurement systems development and subsequent performance indicators development require emphasis on organisational goals as well as a high time consumption.

This case-study aims to analyse current performance indicators existing in a specific area called "Source to Pay", which is a department inside the shared services unit, aiming to understand the level of adequacy to current performance measurement targets, given that an extended amount of time had passed between performance indicator development and assessment. In this sense, a qualitative analysis was carried on to indicators and current processes of the department, as well as on the processes that constitute daily work activities. The company belongs in the industrial sector, having a shared service unit to provide support to main daily activities.

In short, it was verified that creating process standards is a way to reduce time associated waste. In addition, the implementation of systems and measurements is not always accompanied by evolution occurring on organisational context, which often leads to risk of misjudging organisational performance.

**Keywords:** Performance Measurement Systems, Performance Measurement, Performance Management, Performance Evaluation, Performance Indicators

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# Acronyms

BSC- Business Scorecard

CBS- Comparative Business Scorecard

CIRS- Current Internal Reporting Sheet

EFQM- European Foundation for Quality Management

HR- Human Resources

IT- Information Technology

KPI- Key Performance Indicator

KRIs- Key Result Indicators

PIs- Performance Indicators

PM- Performance Measurement

PMS- Performance Measurement System

PP- Performance Prism

R&DF- Results and Determinants Framework

S2P- Source to Pay

SAP- Systems, Applications and Products in data processing

SLA- Service Level Agreement

SMART- Strategic Measurement Analysis and Reporting Technique

SSC- Shared Service Centre

# Introduction

Throughout History, Performance Measurement has had different concepts associated to it. Several authors have provided numerous inputs and perspectives on how should Performance Measurement be conducted and seen, ranging from an "Industrial Era" perspective, focused on financial indicators to a stakeholder orientated perspective. The usage of performance indicators is common among organisations, who use them to base their performance evaluation.

In fact, whilst working with the Nors group, the choice to conduct a study orientated towards a specific departments' Key Performance Indicators is influenced by the organisational need to revise them, in order to address Performance Measurement more accurately. While discussing the main needs inside the department, the following question arouses: *"Why are the current KPIs adequate to appraise performance at the moment?"*. As it is verified that a substantial amount of time has passed between first Key Performance Indicator development until the year 2020, secondary questions are identified as in need to be answered during this work:

- How should department indicators be grouped?
- How should KPIs be defined for the department?

Pending on the questions aforementioned, a case study methodology is identified as being the suited to address this type of work, due to its features regarding application to social sciences, order of procedure application, connection to theoretical framework, among others. Moreover, concerning the data collection method, given that the researcher is included in the organisational context, data is predicted to be retrieved through the use of:

- Structured interviews with personnel;
- Dialogue;
- Direct observation;
- Access to archival records and documentation;

Likewise, the following work will be divided into four main chapters concerning respectively: Literature Review; Research Questions and Methodology; Organisational Description and Practical Case. Chapters are constructed based on what is regarded as being the primordial necessities to conduct a case study. Concerning the research questions, it is clear what are the main topics that should be covered in the Literature Review chapter. First, an approach on Performance Measurement background is to provide a basis to understand the evolution of the concept and underlying practices. Following this step, it is relevant to address how can Performance Measurement be related to managerial practices, which will be described through a revision of the concept Performance Management. Moreover, as there are several methods to assess performance, a revision on Performance Measurement Systems is mandatory. As systems often possess indicators integrated in them, a characterization of Key Performance Indicators is crucial to understand their function as evaluation measures. In addition, regarding the object of study, which is meant to be a department inside the group's Shared Service Centre, a Performance Measurement Analysis applied to Shared Services will be conducted.

Moreover, as any other research work would be concerned, an approach on choice of methodology as well as possible implications is required to be made. In that sense, the second chapter will address the fundamentals of performing a case study, its characteristics and potential limitations. In order to obtain a clear portrait of the organisation as a whole and of the Shared Service Centre, the third chapter will exploit the specificities of the organisation and the department where the work will be conducted.

Lastly, inside the fourth chapter a revision concerning the departments' main processes will be performed in order to establish performance related issues, conduct a KPI analysis, and improvement proposal to be considered in the future.

# Chapter 1: Literature Review

The first chapter focuses on a literature review regarding the subjects found to be the most relevant to conduct a proper analysis. Although the organisation presented in this work is inserted in the automotive industry, the department and performance analysis will be conducted on the Shared Service area, namely the Source to Pay (S2P) department. Therefore, mentions to production will not be encountered during this reading, as this report is focused on one single subject. An attempt to revise what has been described regarding Performance, types of evaluation systems, and performance concerning customers and shared services will be the main subjects covered.

## 1.1 Performance Measurement Background

According to U. Bititci et al. (2011), Performance Measurement (PM) presented the same features from the 13th century until the Industrial Revolution, emphasising on mass manufacturing. In the early stages of 1950s, focus shifted towards quality control, maintaining high regard for financial indicators (U. Bititci et al., 2011). During the years that lead to the 1980s, there was an expansion into other dimensions, such as time, flexibility and customer satisfaction, due to demand-driven business shifting (U. Bititci et al., 2011; Srimai et al., 2011), which left behind exclusive focus on shareholder value, based on economic profit, and regardless of stakeholder's influence on performance, and begun to integrate stakeholder interests, which seemed to represent the overall organisation more accurately (A. Neely & Bourne, 2000; Pun & White, 2005; Srimai et al., 2011). The 1990s are defined by customer and strategic control becoming the main centre of operations, due to increase in globalization and competitiveness (U. Bititci et al., 2011; Eccles, 1991; Srimai et al., 2011). Globalisation creates both opportunities

and difficulties for organisations, which are forced to consider new measures and abandon exclusive financial indicators (Waggoner et al., 1999).

Between the 1990s and the 2000s, several authors (Bourne et al., 2000; Eccles, 1991; Ghalayini & Noble, 1996; Kaplan & Johnson, 1987; Lebas, 1995; A. Neely, 1999; Otley, 1999) have attributed the evolution of PM and Performance Measurement System (PMS)'s to the lack of sufficient information and general dissatisfaction with internal business operations, provided by accounting-based performance analysis. In fact, most measures associated with this method, besides being short-term oriented, tended to lack strategic planning, as well as overall and customer focus, relevancy and flexibility, thus neglecting to provide a clear organisational view (Bourne et al., 2000; Ghalayini & Noble, 1996; Kennerley & Neely, 2002; A. Neely, 1999; Srimai et al., 2011). Past data is useful if it is used to understand potential for success through established causal relations (Lebas, 1995). Financial indicators have been losing their value in PM throughout the last decades, with indicators focusing on how PM can lead to the achievement of intended strategy (A. Neely & Bourne, 2000; Tapinos et al., 2005). In addition, recent revisions on the subject have led to the conclusion that PM is related to organisational behaviour, and is influenced by organisational context (U. Bititci et al., 2011).

In fact, businesses and organisations tend to change over time, due to both external and internal conditions (U. Bititci et al., 2011; Eccles, 1991). Therefore, measure definition changes so as to remain adequate to organisational context and reflect environmental changes (Kennerley & Neely, 2002). As a part of conditions that promote change, A. Neely (1999) identifies:

- Changing work nature;
- Increase in competition;
- Improvement initiatives;
- Awards;
- Changes in organisational roles;

- General external changes;
- Information Technology (IT).

On the other hand, Kennerley & Neely (2002) divide influencers of PM between: drivers of change and barriers to change. Drivers are responsible for triggering a need to change a measurement or metric, and can be internal or external to the organisation. Barriers can occur by a variety of reasons. In addition, U. Bititci et al. (2011) ensure that performance measures alone do not provide the ability to improve, rather provide a learning mechanism for organisations to redefine and reflect upon current performance (Srimai et al., 2011). As triggers for PMS's evolution Srimai et al. (2011) identify the elements of the organisation and their respective relevance, which ultimately will define PM and opportunity to learn. Recent developments on the subject identify, financial performance, such as profitability, as a consequence of achieving certain goals associated to PM activities (Hornungová & Milichovský, 2019).

## 1.2 Performance Measurement and Performance Management

PM has been widely analysed, and considered to be a support for Performance Management, a Management philosophy (Lebas, 1995). PM focuses on assessing performance (Behn, 2003) through the use of performance measures. Performance measures are defined as metrics that quantify action results (Andy Neely et al., 1999, 2005), thus providing information about current organisational status, relevant for decisions concerning future strategy, resource allocation, increase in efficiency and effectiveness (Behn, 2003; Kuzmanovic et al., 2019; Andy Neely et al., 1999; Wholey, 1997; Wholey & Hatry, 1992). Conversely, Lebas (1995) considers that PM aims to acknowledge what needs to be measured and motivation behind the adoption of specific measures, through the analysis of systems, programs and overall operational processes. PM provides insight on if

businesses and organisations are performing as expected, working as an aiding system for future learning (Behn, 2003). In addition, presently, the public demands organisation transparency regarding practices and performance, which are subject to scrutiny (Behn, 2003). Due to the changing nature of businesses and organisations, there is also a need to increase value creation for stakeholders, something that appears possible using performance measures (Yadav et al., 2013). So, organisations may choose to measure performance in order to (Behn, 2003; Sobótka & Platts, 2010; Wholey & Hatry, 1992; Wholey & Newcomer, 1997) :

- Understand aspects underlying organisational reality;
- Identify areas for future improvement and recognize good performance;
- Have a strategic decision-making process that is evidence-based;
- Promote organisational alignment through communication;
- Prove that performance improvements occur based in change, thus promoting inspiration into acting;
- Prioritize based on results and facilitate the process of resource allocation;
- Compare performance across several dimensions.

Nevertheless, it is also stated that all data collected through PM lacks utility if managers are not aware of how to use it. Authors such as Behn (2003) identify that what sets a business to improve is its flexibility to implement what it learns from PM.

Since PM serves as a basis for Performance Management, it is wise to approach the latter concept. According to Umit S Bititci et al. (1997) Performance Management uses information provided by PM, through the deployment of PMSs, to incorporate suited strategies, objectives and monitor their progress, considering business, processes and resources (Umit S Bititci et al., 1997). According to Kuzmanovic et al. (2019) Performance Management is an on-going process that identifies, measures and develops performance, according to organisational strategy. It instigates management proactivity while conducting

performance analysis (Yadav et al., 2013). In its essence, Performance Management develops in a loop (Figure 1).

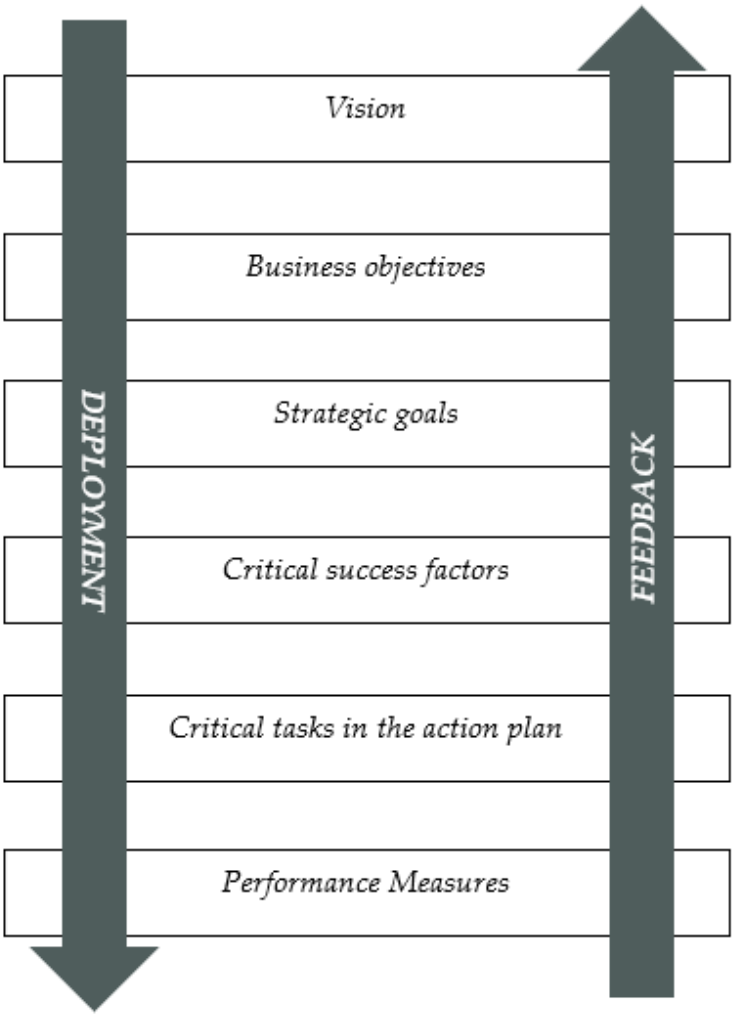


**Figure 1**: Closed Loop and Feedback System (Umit S Bititci et al., 1997)

In fact, when defining a framework aimed at managing organisational performance, questions concerning performance should be designed to be re-formulated at any given time (Otley, 1999). These questions are mainly related to what is value adding for stakeholders, what is the proper order of action, what is the level expected to achieve, how can performance be linked to personnel, and what is the roll of empowerment (Fitzgerald & Moon, 1996). Moreover, the role of Performance Management seems to relate to providing employee autonomy and to create bases for discussion and the decision-making process (Lebas, 1995).

Lastly, the junction between PM and Performance Management can produce benefits for organisations in the areas of strategy, stakeholder communication, and employee motivation (Micheli & Mari, 2014). As of now, current trends dictate that changes are expected to occur in PM and Performance Management, due to the development in the areas of technology, globalisation increase and external environment changes (Nudurupati et al., 2020).

## 1.3 Performance Measurement Systems

To evaluate organisational performance, it should be assessed if it succeeds in meeting its objectives, which can be done through the analysis of quantitative indicators (Otley, 1999; Pun & White, 2005). PMSs are regarded as a set of measures and measurement procedures that serve the purposes of activity monitoring, HR evaluation and involvement, and benchmarking (Toni & Tonchia, 2001). As far as PMS's characteristics go, several authors provide different inputs on the subject (Beamon, 1999; Andy Neely et al., 2005; Otley, 1999; Pun & White, 2005; Srimai et al., 2011):

- PMSs aim to provide feedback about efficacy and effectiveness of actions currently taking place, through the revision of multiple indicators;
- PMSs provide management support to develop sustainable behavioural patterns, promote continuous improvement and innovation;
- Despite their different applications considering types of businesses and organisations, all PMSs possess, to some degree, similarities in their constitution, such as the existence of objectives, goals, and desire to improve;
- PMS utility depends on feedback obtained during measurement and subsequent use as a control system;
- While contemplating a PMS formulation, quantitative measures are preferred as opposed to qualitative measures, due to the latter's tendency for subjectivity;

- Not all aspects that appear crucial to a business are able to be measured, and therefore it is unwise to create a performance measure associated to them;

A concern regarding PMSs is if organisations neglect to disregard old measures and continue using them, even if they have new priorities and new sets of measures (Pun & White, 2005). In fact, Lebas (1995) states that measures should be defined having full knowledge of current processes, since they serve the purpose of defining where the organisation wants to go. Afterwards, having achieved or not the targets during a certain period, it is necessary to perform revision (Lebas, 1995). So, it is possible to conclude that PMS and measurements need periodical assessment to verify of their alignment with current organisational targets or if there is a need for reformulation.

Additionally, U. Bititci et al. (2011) state that considering aspects such as R&D, innovation and knowledge, it is hard to establish appropriate measures, which in some cases may cause PM to be counterproductive.

Current information technologies' approach on PM is significantly short-term orientated, so PM should consider globalization while adapting and creating new measures U. Bititci et al. (2011). On the other hand, Srimai et al. (2011) advise managers to deal with short-term solutions, while at the same time preparing for any possible opportunities or issues that may arise in the future, stating that PM should neither focus on short or long-term separately, but instead balance both.

As far as PMS implementation is concerned Bourne et al. (2000) postulate the existence of three stages:

- **Design of performance measures**, which essentially focus on identifying key objectives and the appropriateness of measures designed;
- **Implementation of measures**, where data collection, analysis and distribution of measures is performed;
- **Usage of measures**, which is the final stage where measurement is performed, reviewed, and reflected, thus leading to action.

It must be considered that obstacles may be found during the process of implementation. These obstacles relate to (Bourne et al., 2000; A. Neely & Bourne, 2000):

- Resistance to PMS implementation;
- Technological issues during implementation;
- Lack of top management focus during the design and implementation phase, ultimately leading to communication failure and misalignment with overall strategy and objectives.
- Data manipulation associated with target achievement;
- Lack of organisational structure;
- Inadequate development of PMS due to loss of focus over time.

It is suggested that to obliviate and distract from these issues, the time frame given to the PMS implementation process should be shorten, so as not to be overcome by other organisational events and to allow people to understand that there are benefits from implementing such a system (Bourne et al., 2000). In addition, the usage of a PMS can actually influence organisational behaviour and culture through the adoption of new management practices (Umit S. Bititci et al., 2006). Moreover, systems included in this chapter are: Balanced Scorecard (BSC), Performance Prism (PP), among others. In fact, throughout this revision, many other systems and adaptations were encountered. However, as they seem not to be of particular use, an extended analysis will not be performed on them. Instead, they will be covered in "***Table 1:*** *Types of Performance Measurement Systems*" regarding PMS's models and features.

### 1.3.1 Balanced Scorecard (BSC)

The BSC (***Figure 2***) is frequently used in PM. It aims to connect strategy to performance measures, by including focus areas associated not only to financial business aspects, but also to customers, internal business and

innovation/learning (Kaplan & Norton, 1992, 1996; Otley, 1999; Pun & White, 2005). Therefore, it replaces traditional manufacturing vision on performance evaluation, based on accounting, for a wider system where managers can analyse both operational and financial measures (Kaplan & Norton, 1992), while at the same time allowing for the organisation to focus on long-term objectives (Figge et al., 2002; Kaplan & Norton, 1996).

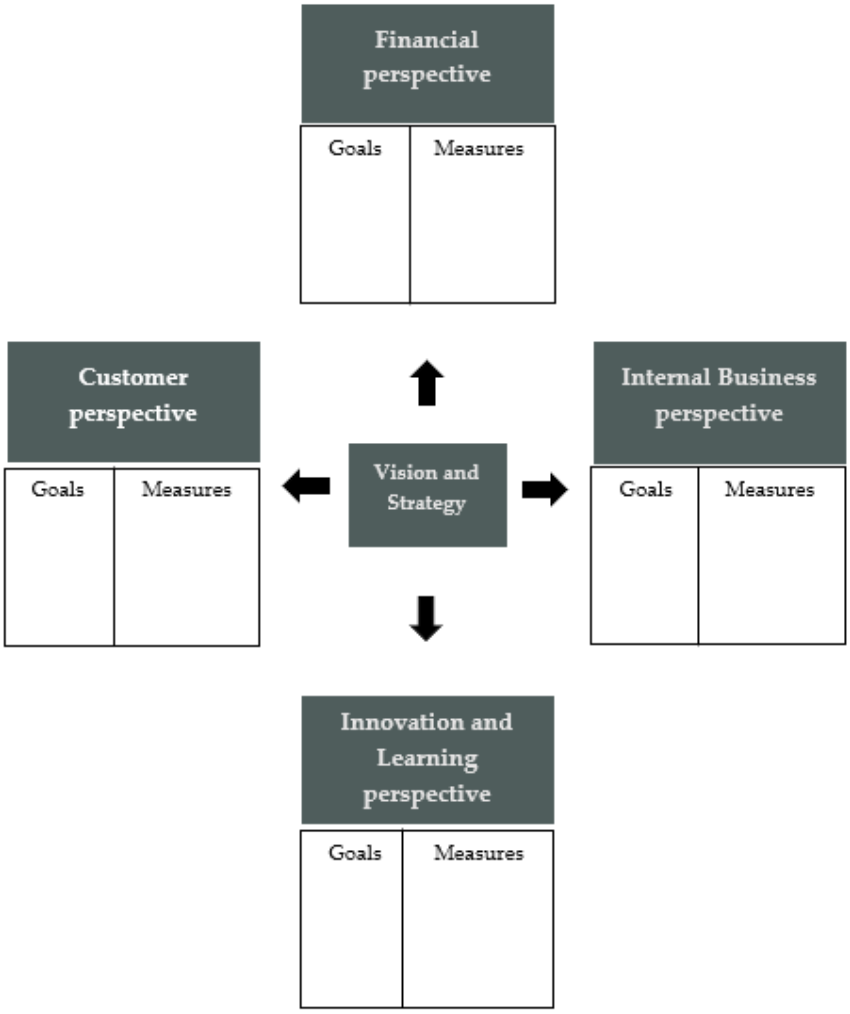


**Figure 2:** Balanced Scorecard (Kaplan & Norton, 1996, pp. 72)

The BSC can be split into four main dimensions:

- **Customer perspective:** analyses how customers of a particular organisation see it (Ghalayini & Noble, 1996). According to Kaplan & Norton

(1992) customers base their perspectives on four specific categories: quality, time, performance and service;

- **Financial perspective:** associated to accounting has a different meaning in Kaplan & Norton's (1992) approach. Results from financial measures are seen as a consequence of operations' success or failure, since not all long-term strategies are actually proven to be profitable;
- **Internal business perspective:** searches for the main activities that allow organisations to deliver maximum customer satisfaction. Main authors on the subject (Kaplan & Norton, 1992) state that companies need to be able to identify what are their core competences, which will enable them to gain or maintain competitive advantage. So, it is concluded that within this chart it must be understood where value creation lays for the customer, to be able to optimize activities while at the same time providing for customer satisfaction;
- **Innovation and learning perspective:** allows gaining competitive advantage (Srimai et al., 2011), which tends to disappear over time (Grant, 2016). The main reason relates to innovation in order to gain competitive advantage. So, it is suited to include in a BSC a chart devoted to innovation and learning, focused on the introduction of new products or services, and implications occurring alongside these new introductions (Kaplan & Norton, 1992).

However, Ghalayini & Noble (1996) state that a major inconvenience associated to using the BSC is the fact that it is mainly designed to provide senior management with an overview of the organisation, which can be difficult to understand by people working daily in operations. Finally, Otley (1999) highlights the fact that to develop a proper BSC, an organisation must first understand the underlying processes occurring.

### 1.3.2 Performance Prism (PP)

The Performance Prism (**Figure 3**) constitutes an assistance for measurement selection (Andy Neely et al., 2001). Its three-dimensional configuration, made up of five facets, allows to establish relations between components (Andy Neely et al., 2001). It presents both similarities and differences with the BSC. However, the PP adopts a stakeholder-centric view, centring its approach on every possible stakeholder and acknowledging their respective importance regarding organisational performance (Andy Neely, 2007). The five facets definition focuses on (Grant, 2016; Andy Neely, 2007; Andy Neely et al., 2001):

- **Stakeholder Satisfaction** identifies all possible stakeholders, not only customers and shareholders, making it broader than traditional views;
- **Strategies** are seen as an organisational response to provide stakeholder value. It is only possible to define strategy if knowledge about possible stakeholders is presented;
- **Processes** are identified as enablers to strategy placement. They can range from a variety of areas. In each process, depending on the area, measures should be identified in order to allow management analysis and intervention;
- **Capabilities** differ from resources. Organisational resources, such as human resources (HR), procedures, technology and infrastructures are not productive on their own. The ability to deploy resources is translated into a capability, which ultimately may be a source of competitive advantage;
- **Stakeholder Contribution** is regarded as a specific facet of the prism, since organisational focus is on providing stakeholder value. Nevertheless, it is recognized that some stakeholders can be value adding for organisations, as mutual exchange may occur between them and the organisation. Employees working on business processes have practical knowledge and may further business development with their contribution, for instance.

**Figure 3:** Five Facets adapted from Andy Neely et al., (2001)

### 1.3.3 Other types of Performance Measurement Systems

Throughout this literature review on the subject of PMS, many types and designations were found. Although there are several types of PMSs, not all are suited to fill different purposes. In fact, many variations of PMSs were encountered, depending on different contexts and organisational needs. It is necessary to understand what is expected to accomplish by using a PMS in order to apply any pre-existing concepts or create variations. Therefore, other types of PMSs are described in this section (***Table 1***), as a complementary analysis of the aforementioned methods to perform PM.

| PMS designation | Features | Authors |
|---|---|---|
| Performance Measurement Questionnaire (PQM) | Assesses opportunity for potential improvement within the organisation and what performance measures should be used. Major inconvenience is the difficulty on connecting areas relevant for PM; | Ghalayini & Noble (1996) |
| Results and Determinants Framework (R&DF) | Provides two PM dimensions: results (consequences of past performance) and determinants (what provides the ability to produce results) | Andy Neely et al. (2000) |
| Performance Measurement Matrix | Similar to the BSC, excludes the links between dimensions proving to be less effective | Andy Neely et al. (2000) |
| Comparative Business Scorecard (CBS) | Identified as a variant of the BSC, focuses its strategy mainly on customer satisfaction, learning processes, excellence in processes and stakeholder value | Pun & White, (2005) |
| Input-process-output-outcome model | Stresses the internal aspect of the organisation to provide assessment. A major inconvenience in this PMS is lack of regard for external company environment and its implication on PM, similar | Brignall et al. (1991) Yadav et al. (2013) |

| | | |
|---|---|---|
| | to the results produced by the European Foundation for Quality Management framework (EFQM) | |
| Cambridge Performance Measurement Process | Divides the PMS into stages such as: performance measure design, measure implementation, usage of performance measures. Useful to assess what needs to be done at each stage. | Yadav et al. (2013) |
| Consistent Performance Measurement System | A three-step method, focused on defining PIs and establishing targets for them | Pun & White, (2005) |
| Dynamic Performance Measurement Systems | Major difference from the other PMS due to the inclusion of Information Technologies (IT) and review of three types of systems in the organisation (internal, external and review) | U.S. Bititci et al. (2000). |
| SMART Method | It is not a PMS. However, the method has been used by organisations to define PMSs based on variations of the original method definition, such as the Strategic Measurement Analysis and Reporting Technique. Systems based on this method tend to lack awareness over KPIs regarding time, quality, cost and delivery. | Selvik et al. (2021) Ghalayini & Noble (1996) |

**Table 1:** Types of Performance Measurement Systems

## 1.4 Key Performance Indicators

To develop a PMS, establishing targets and measures is mandatory (Bird et al., 2005). In fact, Parmenter (2007) distinguishes between the existence of three types of measures, stating that it is important for organisations to understand if they are dealing with: Key Result Indicators (KRIs), ideal to provide the board a perspective on what has been accomplished during an extended period of time, Performance Indicators (PIs), which provide instructions on what to do or provide control mechanism, or KPIs, which aim to increase performance

significantly. Misunderstanding measure concepts could lead an organisation to implement inadequate measures (Parmenter, 2007). As a PMS aim to address PM, it is necessary to understand the implications that KPIs, as measures, have on setting means to execute the PM process. KPIs are a set of measures that allow to monitor system progress within a limited time frame, usually short Kuzmanovic et al. (2019) & Roubtsova & Michell (2014). In addition, Hornungová & Milichovský (2019) address KPIs as a tool to quantify objectives that allow to portray service/process performance.

Indicators have features that allow them to accomplish the measurement process. Some essential rules need to be followed when defining performance indicators, and to ensure their effectiveness (Behn, 2003; Bird et al., 2005):

a) Indicator precision and lack of ambiguity;

b) Adequate set of measures. To many measures may lead to data distortion and confusion;

c) Adequacy to the activity being measured. Data retrieved from surveys on customer satisfaction should be similar to ease comparison between departments or institutions;

d) Organisations should have a PM protocol. Information contained in it should include the need to alter an indicator and the expected impact for overall performance.

e) Indicators should remain consistent over time. Although, depending on circumstances, they may need to be altered before expected period. In this sense the expected duration of the indicator must be documented as well. Documenting indicator revision is helpful for managers to understand what has changed;

f) Indicators should follow standards when they are built (e.g., national applicable laws);

g) Indicators should specify the unit of study, data collection method(s), how should data be analysed, possible adjustments to indicators, how results are set

to be presented, what measures will be considered when dealing with uncertainty and variability, to prevent distortion in interpretation.

In addition, while defining indicators the SMART criteria is also considered to be a useful method, since it consists in an acronym for specificity, measurability, achievability, relevancy and timeliness, that aims to allow indicators to achieve higher quality standards and reflect organisational targets (Selvik et al., 2021).

On the other hand, Parmenter (2007) specifies that only KPIs possess the following features:

1. KPIs are nonfinancial measures, meaning that they era not expressed via currency;
2. In order to be a KPI, the measurement must occur frequently, ideally on a daily basis;
3. KPIs are revised by the senior management team;
4. Measures and eventual corrective actions must be understood by all the team upon communication;
5. Responsibility attribution, collective or individual, is easily identified;
6. Impact on performance is significant;
7. Only positive impact is identified, either by KPI implementation or correlation to other measures.

For Kaplan & Norton (1997 apud Figge et al., 2002) there are two types of indicators: *Lagging* and *Leading* indicators. The first are related to each business units' strategic options. The latter relate to an organisation's specific situation. In this sense leading indicators portray how lagging indicators should be achieved (Figge et al., 2002), and all should be presented in each dimension. On the other hand, Parmenter (2007) proposes the abandonment of lagging and leading, by using KRIs, aimed at outcomes, PIs, and KPIs, aimed at past, current and future performance, stating that these can be simpler to classify than the previous ones. In addition, a "*Past/Current/Future Performance Measures Analysis Worksheet*" is

proposed by Parmenter (2007) where measure/time classification is presented as follows:

| Past Measures | Current Measures | Future Measures |
|---|---|---|
| Last week/Two weeks/month/quarter | Continuous or daily | Next day, week, month/quarter |

**Table 2:** Performance Measures Analysis Worksheet (Parmenter, 2007)

The number of indicators is also relevant when designing a system. In fact, Parmenter (2007) claims that when considering indicator implementation, one must regard the organisation as a whole, and suggests the *"10/80/10"* rule as a guidance tool. In this case, an organisation should have up to 10 KRIs, 80 PIs, and 10 KPIs. However, Parmenter (2007) considers that the numbers may vary upon revision of all departments' indicators, and consequent application of indicator standardization. However, it is also considered that whenever an organisation is constituted by different business segments, perhaps the exclusion of indicators by using the standardization method will not constitute a viable method. Therefore, besides strategy it is relevant to assess the different segments embedded in an organisation, as well as strategy, to understand what are the implications that it can have on indicator's design.

## 1.5 Performance Measurement in Shared Services

PM may acquire different features, depending on the environment in which it is inserted. Therefore, it is relevant to consider what are the implications that a field holds on defining PM measures and systems to assess performance. In that sense, the following chapter addresses the subject of PM regarding the shared service area.

### 1.5.1 Shared Services characterization

Shared Services may be seen as an attempt to concentrate back-office tasks and departments, into one functional unit, so as to promote efficiency, save costs and maintain or improve value delivery to the organisation's customers, while acting as a centralized service (Bergeron, 2003; Fulton & Parchure, 2018). In fact, Paagman et al. (2015) attribute the implementation of shared services in many companies due to the increase pressure to improve cost effectiveness while maintaining service quality. Shared services also aim to reduce task duplication, since different departments may duplicate non-recurrent tasks, thus increasing organisational costs (Richter & Brühl, 2020). Then again, A. Miles & Mezzich (2011) and Paagman et al. (2015) classify shared services as separate organisational units, that have some degree of autonomy, while belonging to an organisation, in order to act as service providers for internal customers. As the concept has been evolving, many names have been attributed to shared service units, one of them being Shared Service Centre (SSC). SSCs are seen as units that comprehend multiple business support activities, aimed at bundling organisational resources (Richter & Brühl, 2020). According to Joha & Janssen (2014) and Paagman et al. (2015) the main areas that can be found concentrated in a SSC are:

- Accounting and finances;
- IT services;
- HR;
- Customer services;
- Procurement;
- Asset management.

However, implementing concepts such as shared services and SSCs does not ensure that an organisation will have a higher degree of success. In fact, Richter

& Brühl (2020) maintain that implementation success associated to shared services is translated into improvement of the organisational and operational performance. This is achieved through the use of the organisation's capabilities to deploy its resources. Implementing shared services implies change and capability to alter the previous resource allocations (Richter & Brühl, 2020).

Moreover, Joha & Janssen (2014) claim that in order to be classified as a shared service, the unit must provide similar services to its internal customers. However, Ramphal (2013) points out the fact that even though a set of services is being offered to internal customers, each customer may possess different levels of service agreement with shared services. So, it is relevant to consider that while shared services may have a heterogeneous offer, each internal customer is likely to have different requirements and specificities associated to them, which will ultimately influence service agreements and service providing.

### 1.5.2 Customer value in Shared Services

As service agreements inside shared services tend to be different according to customer specificities and requirements, it is also relevant to address how can an organization deliver value to its customers through its services. In fact, Vargo and Lusch (2004) apud Tai & Ho (2010) refer that service value results from the direct use of that service, since value is co-created by both parties. Moreover, considering service quality Johnston (1995) describes it as the customer's perspective of the service being provided. Therefore, organisations and services only provide value propositions to customers, as the actual value is perceived during use. Despite having underlying reasons that promote the implementation of shared services, customer value is the focus of the shared service unit, the SSC (Godse, 2012). Value is obtained when satisfaction regarding the use of the service is verified. Therefore, organisations may measure customer satisfaction through the use of surveys, focus groups, interviews and customer-focused

information (Godse, 2012). In this sense, through this measuring process, customer value can be determined. In fact, Godse (2012) states that shared services need to be explained properly to internal customers in order to achieve the intended purpose. This includes mainly educating internal customers on what is the concept of the SSC, service offer, portfolio, honouring of the Service Level Agreement (SLA) and SSC maturity level.

On the other hand, Tai & Ho (2010) argue that due to its different features, all customers may have different perceptions of the service based on the information-sharing process, as well as tend to be more invested in the business relation while there is an information flow. It is also noticeable that the process of sharing information with internal customers is accompanied by costs, such as investment in IT infrastructures, administrative costs, risk of information leakage and risk of mishandling information, partner non-compliance (Petkovic & Lazarevic, 2012; Tai & Ho, 2010). In fact, Fulton & Parchure (2018) advise that prior to implementing shared services, there are some considerations that need to be taken into account while defining strategy. Therefore, auditing is seen as a reliable method to provide insight on current organisational status, processes and address the phases for implementing a shared service (Fulton & Parchure, 2018).

### 1.5.3 Shared Service Design and performance

According to Richter & Brühl (2020) task features will determine what type of design will be more effective, while implementing shared services potential models. In addition, shared services must consider what are the business functions, type of IT platform and HR decisions that provide alignment with the overall goals (Fulton & Parchure, 2018). Moreover, shared services design is relevant to achieve process standardization and consistency, build quality standards transversal to the organisation and customers, as well as facilitate

process integration after merger or acquisition (Fulton & Parchure, 2018). In fact, compared to traditional organisational patterns, SSCs are arranged using workflows, where a process may be performed by multiple individuals, and not just by one (Petkovic & Lazarevic, 2012). It is also recognized that the design provided by shared services is able to foster better customer service, through the deployment of current personnel. In fact, Mogaramedi et al. (2020) considers employees as a source of innovation since they are the ones performing daily tasks, and retain practical knowledge. In this sense organisations benefit with using a shared service design as they utilise in-house expertise. The adoption of a shared services model also provides a change in organisational relations. The SSC acts as a process owner, whereas the partners become users and/or participants of the business process (Petkovic & Lazarevic, 2012).

However, as previously seen, adopting shared services inside the organisation is not synonymous to better performance. Implementing a shared service model and SSC requires further evaluation, to assess if implementation is proving to be successful. As far as evaluation of shared services is concerned, Fulton & Parchure (2018) propose performing continuous monitoring. This can be done through:

- Review of the IT platform(s) to assess appropriate access and segregation of duties;
- Identify the occurrence of abnormalities using the adequate analytic tools;
- Establish regulations according to location and or industry type;
- Review reports to understand if performance is meeting expectation;
- Assess if policies and procedures are being implemented accordingly;
- Produce reports based on KPI to understand data accuracy and need for new data, which can be done through a scorecard.

## 1.6 Key points on Chapter I

In fact, it has been observed that PM is constantly evolving. There are several reasons why change occurs. It has also been seen that PM is in fact a support for a Management philosophy entitled Performance Management, since it uses metrics to assess performance and thus provide top-management with a view on organisational status. Top-management has different reasons to assess performance. PM uses performance metrics grouped together. These groups are called PMSs. PMSs need to be carefully selected and studied before implementation. Many variations of PMS definition are used to consider each organisations' specificities. Organisations need to update their metrics to provide adequate response to the changing nature of businesses. PIs constitute a way to establish targets and measures within the PMS and thus adapt to constant change. PIs must obey certain premisses while being constructed in order to provide adequate information. Not all PIs are KPIs. PIs can be distinguished based on their goals of measurement. Organisations need to carefully choose their PIs in order to avoid excess flow of information and not to risk harming the PM process.

Moreover, depending on the environment in which PM is being done, features may vary. Shared services are seen as a concentration of back-office tasks into one functional unit, the SSC. Their main function is to provide services to internal customers and increase customer value, while reducing task duplication and promoting bonding within different organisational departments. SSCs usually provide homogeneous services to different customers. However, each customer is different and that can cause variation inside the unit and service providing process. Despite their concept, shared service units may have different features and design, depending on what organisations consider as priorities.

# Chapter 2: Research Questions and Methodology

## 2.1 Research questions

PMSs use measures to assess performance. KPIs are seen as measurements related to strategic goals. So, it is relevant to understand the level of intervention performed on the department's KPIs. In that sense, the main question that arouses is *"Why are the current KPIs adequate to appraise performance at the moment?"*. However, as KPIs are considered especially relevant to perform PM, secondary research questions have also been identified:

- How should department indicators be grouped?
- How should KPIs be defined for the department?

The choice to perform a case study is largely related to the typology of research questions presented (Yin, 2018). Case studies are adequate when an in-depth revision is required, typically involving questions such as *"Why is the phenomenon being observed"* or *"How does a phenomenon occur?"* (Yin, 2018; Zainal, 2007), similar to the ones aforementioned.

## 2.2 Choice of methodology

When considering types of methodologies, Yin (2018) advises searching among the research methodologies available, their differences or similarities compared to a particular case, in order to be able to choose properly. When performing a case study, there are other considerations that need to be taken into account upon choosing to perform a case study, namely (Baxter & Jack, 2008; Tellis, 1997; Yin, 2018; Zainal, 2007):

- Data collection can only be retrieved from the subject using this methodology;
- Adequacy considering the research question(s);
- Correct order in procedure application;
- The premises conveyed by social sciences are followed;
- Inability to manipulate the behaviour under scrutiny;
- Existence of a chain of evidence registered by the researcher as the source of data;
- Lack of clear link between phenomenon and context;
- Direct connection to a particular theoretical framework.

The case study methodology exists, partially, due to the limitations associated to performing quantitative studies regarding social sciences (Zainal, 2007). Case studies are considered especially useful to further the complete observation of a particular phenomenon, through the inclusion of multiple types of data and specificities, that are not only quantitative (Tellis, 1997). In fact, due to their features it is common to identify case studies when dealing with social phenomena, in fields such as Psychology, Sociology, Anthropology, Health, Community Planning, Management and Business, Education, Political Science and Law (Yin, 2018; Zainal, 2007). This case study focuses on Management inside the Shared Service area.

Case studies require a prior determination of the *"unit of analysis"*, that is the subject identification (Baxter & Jack, 2008). On this matter, the process of defining KPIs will be considered as the unit of analysis, since the primary focus will be on this matter. Moreover, according to Baxter & Jack (2008) an error often associated to case studies is in attempting to answer several questions at once, which ultimately harms and defeats the purpose of the case study. So, boundary definition is advised. Accordingly, Creswell (1998); Miles & Huberman (1994); Stake (1995) apud (Baxter & Jack, 2008) provide insight on placing boundaries related to time, location, activity, definition and context, so as to maintain the

case study within its scope. It is then wise to foreclose that, despite KPIs being the main focus, processes and department dynamics will also be subjected to analysis and intervention, so as to have a clear view of the departments' current functioning.

Characterizing a case study also involves determining whether it is a *"single"* or *"multiple"* case study. The main difference concerns the number of samples and case presentation. Single-case studies are harder to generalize due to the lack of sufficient cases and conclusions being withdrawn (Tellis, 1997; Yin, 2018). On the other hand, multiple-case studies provide an opportunity to replicate data observed, which will strengthen relation between cause-effect as more data is collected and results are observed (Zainal, 2007).

Furthermore, case studies can have different categorizations depending on their goals (Yin, 2018; Zainal, 2007):

- **Exploratory** case studies use data as a starter-point for the researcher to begin understanding the phenomenon;
- **Descriptive** case studies essentially provide a view over a particular theme, considering the pre-existing data generated by a phenomenon. The main goal of this typology is to provide a narrative regarding the subject;
- **Explanatory** case studies aim to analyse data as it is presented and lately investigate deeper in order to explain the phenomena.

Considering the categories presented, this is an exploratory single case study. The reason behind the category concerns data initially provided, approach on field and data collection methods which will serve the purpose of analysis and intervention.

### 2.2.1 Approach on data collection

The length of the internship inside the organisation was six months. All the time was spent inside the S2P department, which is a Shared Service area. The

first two months were spent working in the field, inside the organisation's facilities. However, due to SARS-CoV-2 pandemic, restrictions were imposed on task performance, so the last four months were spent working from home. All the devices used and platforms were commuted to the household to allow the same access and simulate organisational environment.

Main data collection methods to retrieve and document information were:

- Structured interviews with department members, and managers;
- Dialogue with team members and management;
- Direct observation of department processes and interactions;
- Access to archival records and department documentation.

## 2.3 Case Study Limitations

One of the most notorious defaults identified in a case study research is the limited sample size, that portrays limited number of events and conditions, which difficult the process of generalizing case study findings (Tellis, 1997; Yin, 2018). In this particular context, the case study findings are only applicable to one department inside the whole group, which is contained in one industry segment. Nevertheless, the main goal is not to apply these findings to many other contexts, due to their different features, rather to provide an analysis of current phenomena taking place. Case studies can be vague due to high number of variables presented and lack of boundary definition to maintain researcher focus (Harrison et al., 2017). So, boundaries needed to be defined when performing the analysis, so as to limit risk of digressing from the main research questions.

On the other hand, there was no prior knowledge regarding the company, so the first encounter was concurrent to the beginning of the internship, which difficulted the process of identifying key features of processes taking place. As mentioned before, during this case study, the researcher was also inserted into the environment being analysed, which required further attention when dealing

with data collected so as to avoid distortion or direct intervention in the phenomenon being studied. Moreover, due to the limited time spent inside the organisation, to implement and assess any intervention would not be feasible. So, as opposed to perform evaluation *per se*, a proposal for evaluation methods and future actions will be considered.

Finally, case studies must be planned in advance as far as implementation is concerned (Harrison et al., 2017; Yin, 2018). However, it is also noted that circumstances may prove to be a hazard. In fact, the current pandemic associated to the SARS-CoV-2 difficulted the direct observation of the department, while conducting the case-study, forcing the implementation of contingency measures.

# Chapter 3: Nors Group

## 3.1 Nors Group Description

The Nors group is mainly known for the work developed inside the automotive industry. Having its roots in Northern Europe, namely in Sweden, it has begun its expansion into the Portuguese market in 1933. Currently it has a global presence in three continents (Europe, Africa and America), having facilities and operations based on 17 countries. Its methodology is based on perfectionism, and excellence in ability to deliver. In fact, it recognizes that Portugal's distinctive features have been key elements on allowing to focus on the automotive sector. The company's market approach is evidence of their motto, focused on solving all potential challenges that they may encounter [1] The ability to innovate sets the company apart from its competitors.

In addition, the Nors group serves multiple purposes. being divided into (NORS, 2020a): **Nors Mobility** (Auto Sueco, Auto Sueco Automóveis, Galius, Kinai); **Nors Off-Road** (Strongco, Auto-Maquinaria, Agronew, Ascendum); **Nors Aftermarket** (Civiparts, AS Parts, Onedrive, Vitrum); **Nors Ventures** (Amplitude Seguros, Stokon).

According to the group their core values are: ambition, trust and talent. It is claimed that these values are the source to build loyal and valuable relationships, both with customers, suppliers, workers and shareholders, which in turn are expected to fulfil their vision of global leadership in transport and construction solutions [2]. According to publicly displayed information, in 2019 the group has reported an overall increase in results, having a larger number of sales, higher EBIDTA, higher equity and overall assets (NORS, 2020b)

[1] Information retrieved during the Group's presentation
[2] Information retrieved during the Group's presentation

## 3.2 Norshare

Norshare is inserted into the main group, acting as focus area for shared services. It is divided into the following departments: Source to Pay (S2P); Treasury; Accounts Receivables; Accounting; Taxes; Personnel Management; Project Management and Continuous Improvement; and Digital Transformation. All departments have their own assigned teams. However, it was observed that despite having different teams and work places, all departments are encouraged by team leaders to share information between them, in order to have a clear picture of the current company situation and achieve strategy alignment.(NORS, 2014)

Aside from the department structure, it was also analysed the categorization of services performed. In fact, there are four categories of services that can be provided by the departments that integrate Norshare, which are: Finances and Accounting, Taxes, Non-Business Purchases and People Management.

As of 2020, Norshare holds thirty-three internal clients and performs activities in several continents. For the purposes of this report, the department subject to analysis was S2P.

### 3.2.1 Source to Pay Department

The S2P department provides alignment between company strategy and operations, by performing several different processes. It centralizes information negotiates contracts with suppliers, not dealing with the acquisition *per se*. The department divides itself into: Non-business Purchases (S2P Iberia and Ventures), Accounts Payable (Iberia and Ventures, Angola and Africa), Control and Analysis and Register Management. The main objectives are:

- Maximizing efficiency regarding the purchasing process, focusing on centralizing processes so as to reap the benefits of economies of scale;

- Meeting of company standards regarding excellence in quality and need satisfaction;
- Perform sustainable purchases, considering both relevant market pricing and forecasts and proper authorizations;
- Implementing reliable Key Performance Indicators (KPIs) to effectively control and improve the purchasing operations;
- Developing value adding partnerships with different suppliers, based on ethics, conduct and legislation.

The department handles mainly secondary processes, not related to the selling vehicles business. Daily tasks include providing support for internal customers of the group so as to promote customer satisfaction and to ease their daily activities. The areas monitored inside the Non-business Purchases area are:

- **Insurance-** Concerns contracts for car, personnel, building and damage, among others insurance;
- **Fleet-** Contracts related with providing service vehicles for workers, according to the internal customer's needs, vehicle maintenance, contract renewal/cessation, and payments associated with vehicle taxation;
- **Information systems-** Provides aid for creating profiles and support systems for workers inside the department and workers from other departments of the Norshare division, as well as connects internal customers with Norshare;
- **Communication-** Deals with contracts related to devices for internal customers (e.g., telephones and smartphones and respective monthly allowances) as well as contracts regarding the entire group communication system;
- **Building maintenance-** Integrates everything that aims to turn the physical space into an operating space. Ranging from cleaning services to outside and inside building maintenance, such as repairs or regular check-ups (e.g., elevator repair);

- **Graphic materials-** Links internal customers to suppliers, whenever the customer desires to acquire some form of graphic material (e.g., printed materials such as customized bottles);
- **Advertising and office supplying-** Similar to graphic materials, suppliers provide the required materials that are used in daily company activities;
- **Safety and hygiene material-** The department responsible for this area requires specific items to provide their services (e.g., supplier of essentials such as hand sanitizer);
- **Event planning and travelling costs-** Internal customers and representatives of the group may require housing while travelling under company purposes. There are specific catalogues containing different suppliers (e.g., hotels). The customer may present its need and the team will provide them a number of options in catalogue and aligned with their need. After that the customer may choose and inform the team of its decision so that the booking process may be completed.(NORS, 2014)

In fact, for each of the aforementioned areas, a Stage of the Purchasing Process Diagram is applied (***Table 3***), in which the following aspects are considered and must be insured, by the order presented in the following table:

| Need Identification | Market Research | Negotiation | Order, Reception and Confirmation | Billing Management |
|---|---|---|---|---|
| The client, which in this case is internal, must identify and specify the degree of need for product or service; | To guarantee that the suited supplier is identified, the company must obtain, at least, three different propositions from three different suppliers (if there are as many). This process is done through market research (e.g., procurement of several suppliers according to services provided) or through the listening of customer requirements (e.g., customer demands a specific service supplier); | Once the proper supplier is chosen, the Purchasing department is responsible for negotiating contract terms, also identified as SLA. During contract, both client and supplier must oblige to previously established metrics. Not honouring the agreement carries penalties concerning the party that fails to meet its obligation(s); | Monthly, the department must gather and process information regarding which orders have been delivered and which ones are still pending delivery, ensuring that needs are satisfied and contract terms are being met; | At the end of the purchasing cycle, each region must verify if the necessary control was performed, and if bills are registered accordingly. Billing occurs on a monthly basis, and at the same time a report is made to understand what is being done. |

Stage of the Purchasing Process

**Table 3:** S2P Stages of the Purchasing Process

Furthermore, the purchasing process identifies three types of purchase:

- One off purchase - These are the least predictable ones, and less common to be found (e.g., any type of repairing or unexpected event);
- Recurrent purchases - Encompassing every type of product or service, that need is constantly following consumption (e.g., office supplies such as pens and paper);
- Service contracts - Deals mainly with service contracts, signed for a given period of time, described alongside contract terms (e.g., cleaning services are hired for a given time and then ceased or renewed).

In addition, to appraise the post purchasing process phase, a survey is performed on two separate occasions each year, to understand where current supplier-internal customer relationship stands, what are future recommendations regarding the purchasing stage and to possibly identify other needs.(NORS, 2014)

Also, the department has a payment policy based on Key Performance Indicators, which means that it is understood that payments contemplate variations that may occur after both performance and Key Performance Indicators are assessed. As a way to understand how much time and funds departments spend on each client, and in Norshare projects, a timesheet is developed in SAP (Systems, Applications and Products in data processing) through rigorous methodology, in order to ensure that the data presented to top management is accurate enough to allow both comparative and stand-alone analysis.

# Chapter 4: The case of the Nors Group

Considering that this dissertation addresses a case study, it is required that a department analysis is conducted. The main objective during this chapter will be to provide an overall view of the work developed through an extensive analysis on processes, current KPIs, improvement measures and PM methods. Therefore, Chapter 4 will be structured into three sequential phases, that address, respectively: S2P process analysis, KPI analysis, and improvement proposal. Similar to other case studies, both data retrieval and analysis will happen in parallel. It is also relevant to inform that due to confidentiality reasons, some data will be excluded from description during this chapter.

## 4.1 First Phase: S2P process analysis

In order to obtain an accurate view, the main processes occurring in the S2P department were analysed. As aforementioned in Chapter 3 (33), the S2P department handles a significant number of processes, executed by different team members. At the time this case study was conducted, there were 6 people being coordinated to perform tasks relative to each dimension, and that reported to the S2P manager. The S2P department hierarchy is portrayed in "**Figure 4:** Team chart for the S2P department".


**Figure 4:** Team chart for the S2P department

Each team member is in charge of specific subjects (*Appendix I: Process register inside the S2P department*, 73). The distribution is also based on the contracts established between suppliers and group, that lay under each person's responsibility, to facilitate knowing specificities associated to suppliers or underlying processes. Nevertheless, there are several common activities (e.g., internal reporting) required to be performed by several people.

In fact, a first approach during the internship consisted in gathering process knowledge inside the department, while simultaneously accompanying each member, separately, so as to understand what processes they performed, why they did it, and how much time it consumed, in order to identify possible improvements. In addition, considering activities common to all team members, each member was accompanied during process execution in order to compare each way a specific process was done, who was apparently faster and their level of efficiency, to understand what standards should be considered when defining possible KPIs and task standardization. When considering creating process standards, it was contemplated the definition of "*Standard Work*". In fact,

(Boettcher et al., 2019; Feng & Ballard, 2008; Pereira et al., 2016) state that standard work is focused on providing the most adequate methods and sequences to perform processes, while reducing waste. Its main goal is to promote continuous improvement through the stabilization of processes (Pereira et al., 2016). Like many others, this is a Lean approach[3], able to determine reference points for PM, promote continuous improvement, reduce variability and increase quality (Pereira et al., 2016).

Moreover, upon analysis, it was observed that during the absence of the worker in charge of a specific process, the remaining team members were not able to replace him, unless they had previous knowledge or had been in charge of the same process. In addition, most processes were not formally documented/updated, and available to be accessed by everyone. Instead, team members tend to communicate among each other and other departments if they need to obtain a specific information.

Therefore, as this analysis carries on, a process documentation, concerning specific processes will be displayed, through the use of process flow diagrams, in order to understand activity flow and specificities, what improvements were carried out and motivation to perform them. In fact, fifty-nine recurrent processes were accounted during time spent inside the S2P department (*Appendix I: Process register inside the S2P department*, pp.73). Five processes were intervened and improved. For each process, the expected gains were considered comparing to the amount of work necessary to invest in order to implement any changes. The processes will be presented according to the following order:

1. Fleet spending analysis;
2. Vehicle consumption analysis;
3. Digital Storage Unit optimization;
4. Response to non-recurrent customer requests;

[3] Lean stimulates organisations to improve based on removing non-value adding activities or waste, thus enhancing end customer-value (Dorval et al., 2019)

5. Extraction and building of daily activity report;

### 4.1.1 Fleet spending analysis

Spending related to fleet vehicles encompasses multiple companies associated to the group, as well as multiple types of spending, namely: monthly rent, renegotiations, fuel, toll, insurance, reconditioning, repairs and penalties. Yearly, a report is produced with all the spending by type, month and license plate. The main goal is to identify significant changes, and determine any existing needs related to the fleet. Accordingly, the process was performed as such (***Figure 5***):

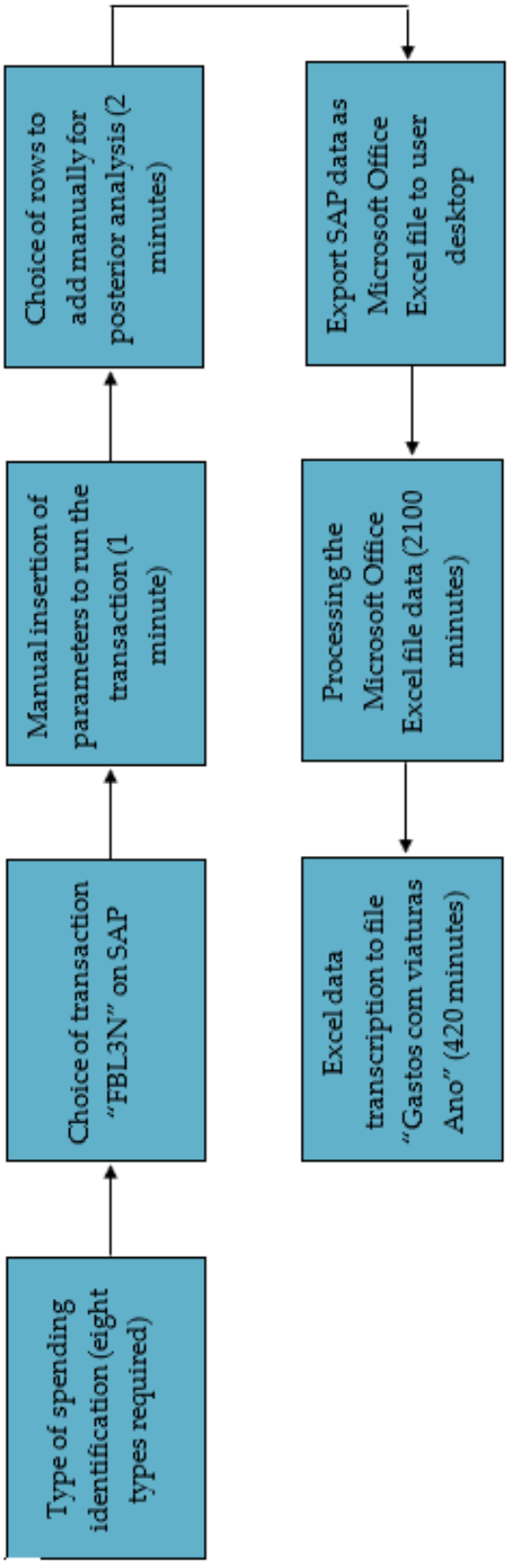


**Figure 5:** Fleet spending analysis diagram flow (previous)

After revision, improvements for standard creation were identified in the step of data collection from the Systems, Applications and Products in data processing (SAP) platform. Data collected through extraction was done manually, adding the necessary filters, every time a company and type of spending was being analysed.

However, the process consumed a total of time spent in extraction of one hundred and sixty-eight minutes (three minutes x seven companies x eight types of spending) nearly forty-three percent (42,85%) of working day. This extraction is not performed in sequence, which can actually increase time spent. After reviewing the SAP platform, it was found that it is possible to create variables, as well as layouts associated to data extraction, which will permanently record the information that is meant to be extracted. Instead of manually adding the variables and filters inside the layout, the person is able to pre-select the desired layout for data extraction. Time gained was a total of one hundred and twelve minutes. Any person can create the designed variables and layouts, since it has system permission, so while redesigning the process, a standard regarding data extraction through variables and layout adding was created so as to allow team members to perform the same or similar tasks using the same method.

When extracting data from SAP platform, it was observed that records regarding vehicles were being done without criteria, meaning that some license plates were not visible during extraction, since they are dependent on another person's register. This issue alone implies that associating vehicle costs is significantly harder for the person performing the analysis, since it had to search manually in SAP, through multiple transactions or movements associated to spending, in order to understand what could be the vehicle associated to the spending. This step consumed 5 working days. The creation of a standard associated to vehicle register, reduces this process up to zero minutes, since the person responsible for registering is already going to have to insert data, the only change would be the row in which data would be inserted. So, total time spent

by the person processing the file and inserting information on the presentation file would decrease up to 1 workday. Therefore, a standard was created and promoted among different teams.

Main interventions concerning the process of Vehicle Spending analysis allowed to decrease time consumed by decreasing number of tasks. Current Diagram Flow of Process is the following (***Figure 6***):

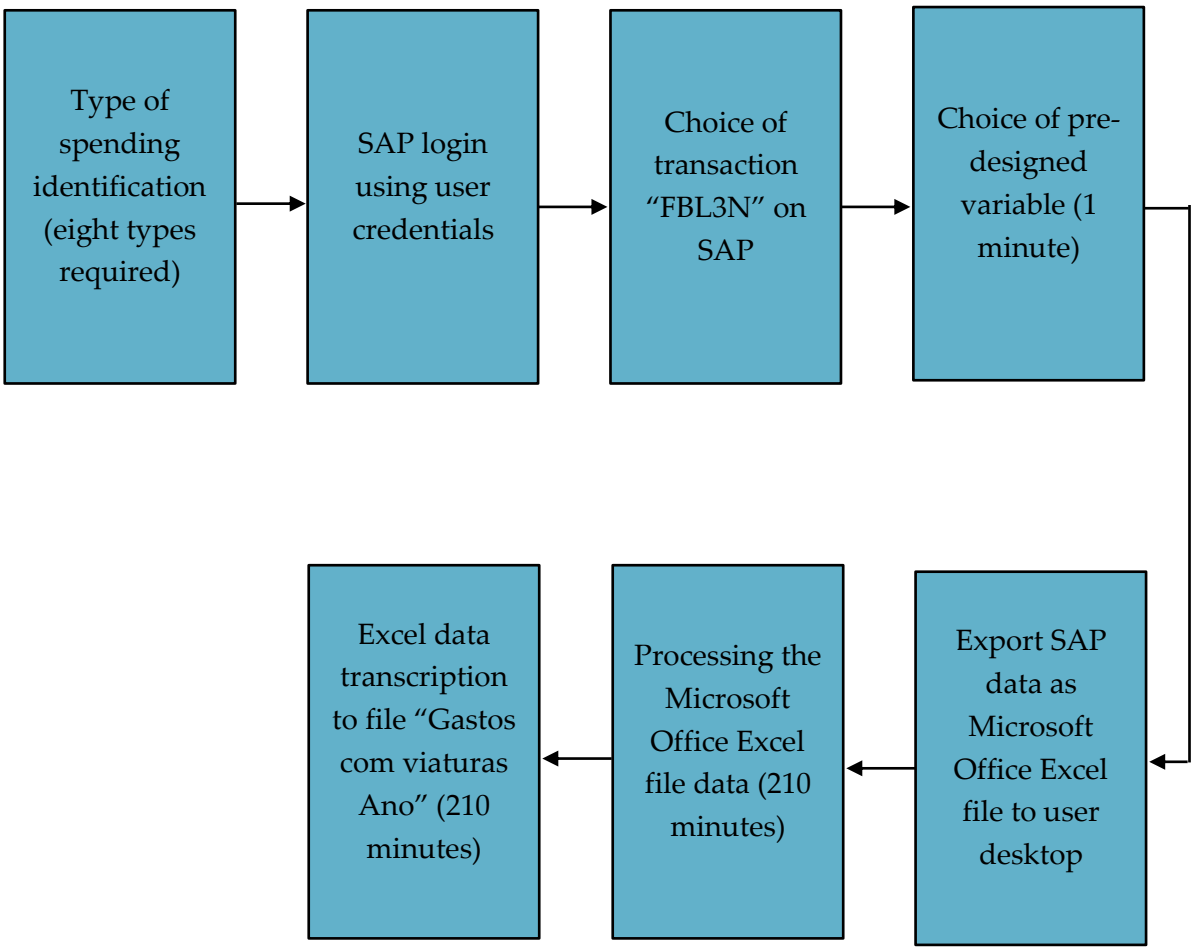


**Figure 6:** Fleet spending analysis diagram flow (current)

### 4.1.2 Vehicle consumption analysis

This process is performed in the S2P department to provide reliable information about tonnes of fuel consumed throughout the year to the department in charge of Safety and Environment. Data relevant for this process is the identification of the fuel card, to determine what cards have registered

consumption, the data regarding card attribution (individual or cost centre cards), and the tonnes consumed per year. All data is retrieved via SAP platform.

Ideally, information transcripts should be automatically updated onto the file for the report. However, due to the large volumes of existing data, currently it is not possible to carry on task automatization. Nevertheless, as it is unclear whether any automatization will be performed, to facilitate current and future analysis, a process revision was performed.

In fact, one of the major issues reported was the lack of updated information presented in the current analysis file. Fuel cards may be cancelled for a variety of reasons, including vehicle dismiss, job position changes, theft and expiration, which may lead to lack of updated information, if the person in charge of the cancelling process neglects to insert the new card number, or erase the vehicle for the analysis purposes. The process of matching numbers trough Microsoft Excel tools proved to be ineffective in this case, and therefore the process was meant to be done manually. The Diagram Flow of Process is showcased below *(**Figure 7**)*

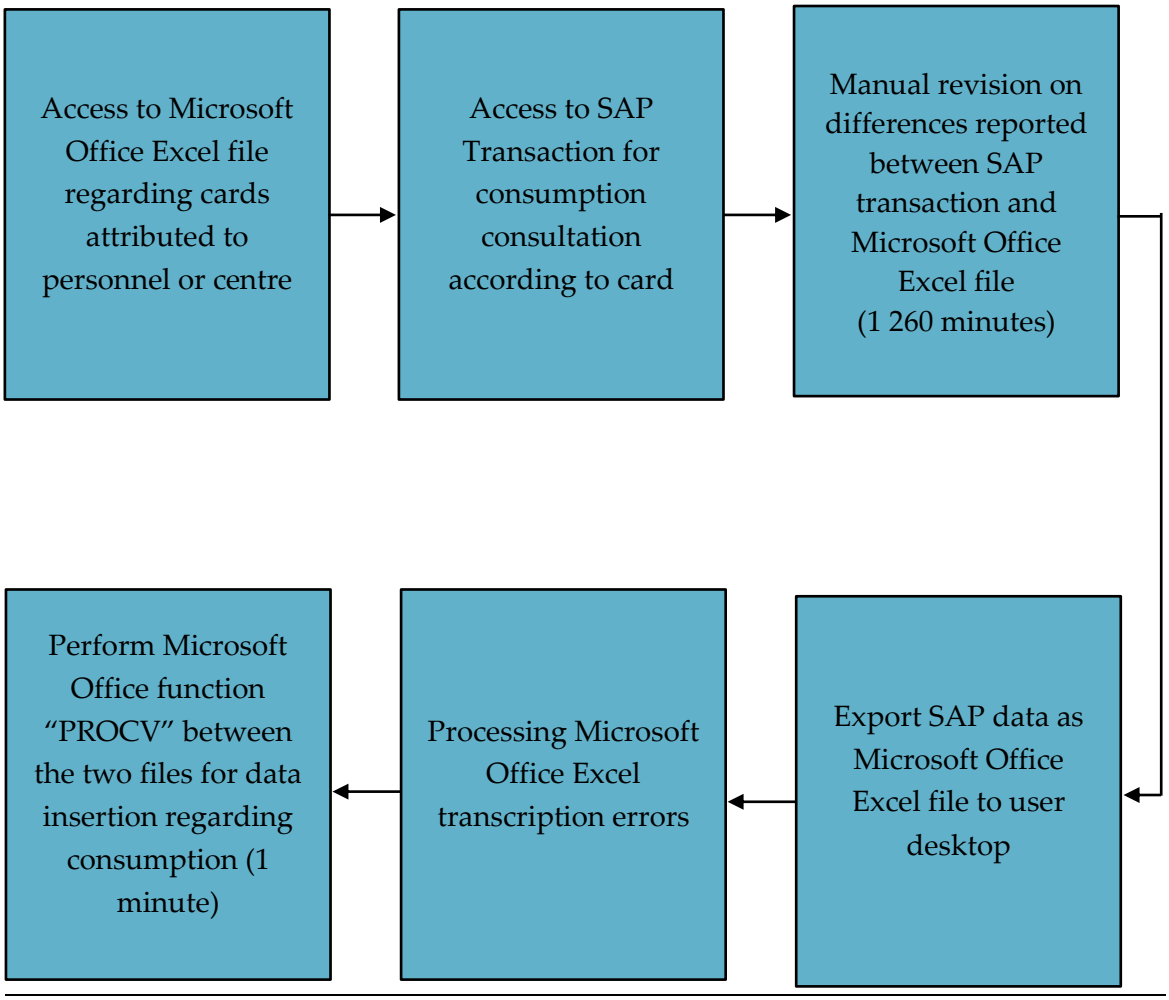


**Figure 7:** Vehicle Consumption Analysis diagram flow (previous)

The manual process, implies the revision of hundreds of separate data. In order to facilitate the process, a new report was created, having the same filters, however containing updated information, to use Microsoft Excel tools to perform an exact match between SAP platform without having to verify each one manually. In addition, to avoid any future lack of update, at the time each fuel card is classified as obsolete it must be rectified in the report file (***Figure 8***). Prior analysis has evidenced that total time consumption associated to the process decreased from three working days to two hours of a work day.

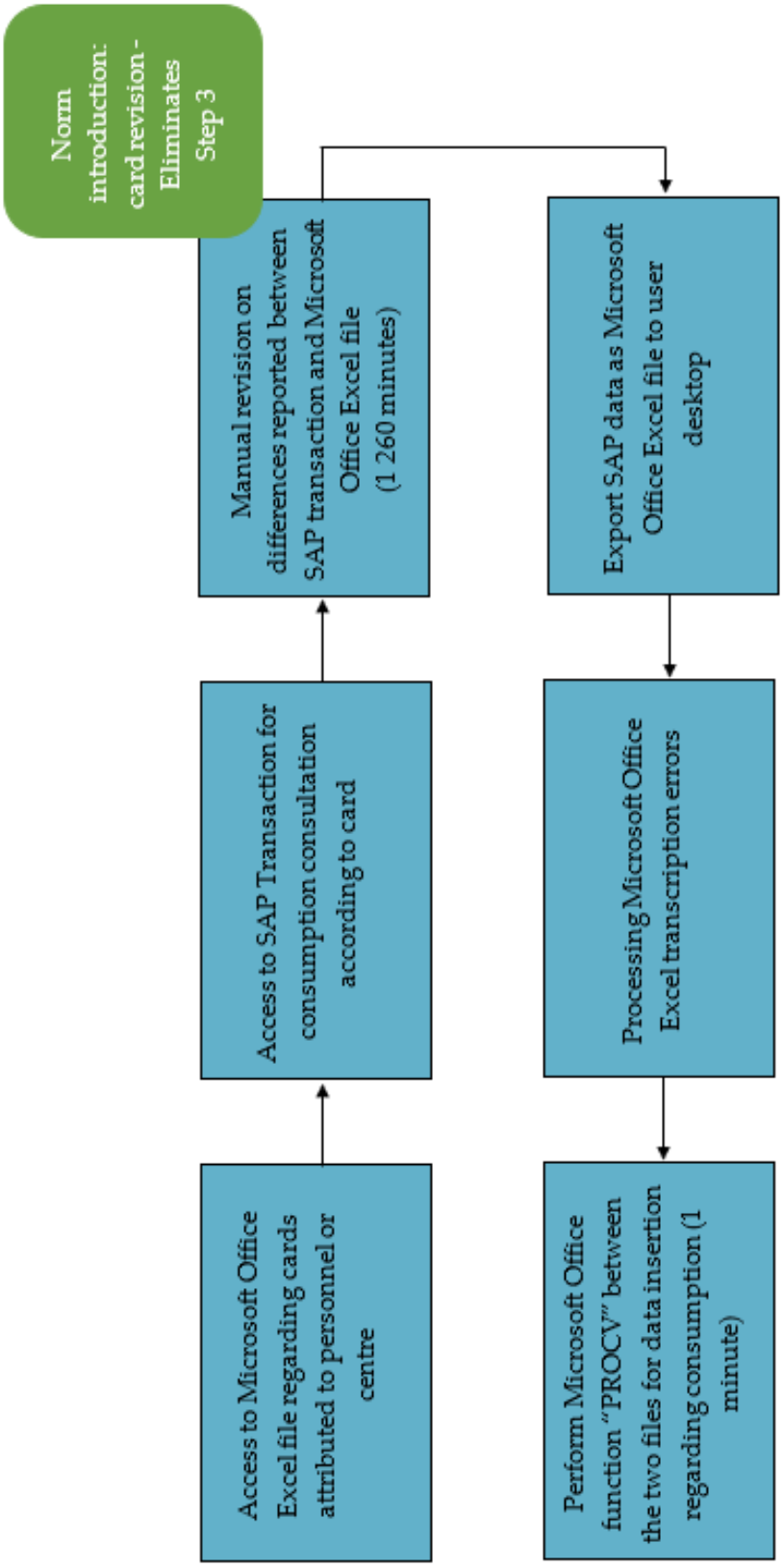


**Figure 8:** Vehicle Consumption Analysis diagram flow (current)

### 4.1.3 Digital Storage Unit optimization

Considering digital media storage, the organisation uses multiple ones. Each department has a local storage unit, attributed to team members. It is a private storage unit, since it is not accessible to all the SSC members. The private storage unit optimization does not constitute a process inside the S2P department. However, it was observed that all team members struggled with finding information that wasn't systematically being used by each person, having to be assisted by team members. On the other hand, if information was not being regularly used, then no team member would be able to know where to find it. Storage space was also being used for obsolete documents. Therefore, the main proposition was to redesign the digital storage unit, in order to save searching time and also to ease documentation access. Identification of obsolete documentation was done with managers and team members, through interviews. As every person with access to the storage unit is able to modify it, the main goal was to create an editing standard.

In fact, the optimization followed the following stages:

- Identification of information and storage unit capacity;
- Interviews with team members and management to understand what are the most relevant areas being worked;
- Documentation analysis, to identify obsolete and misplaced documentation;
- Redesign of the new storage unit;
- Implementation of new storage design;
- Editing of a manual for future storage unit intervention and standardization.

After completing the process of optimizing the space and organizing the storage unit, it was distributed a digital manual to explain the new functioning of the storage unit. Instructions included:

- Update to the whole team each time a new modification was meant to be done inside the unit;
- Name standard creation, to enable search inside the unit;
- Annual revision of the storage unit, in order to identify documents that have lost their utility and can be moved to the organisation's permanent storage or can be eliminated, depending on their need for future auditing or revision.

### 4.1.4 Response to non-recurrent customer requests

Internal customers of the S2P department perform requests upon wide range of needs (e.g., hotel booking, marketing flyers, cleaning services, and others). In order to perform requests, customers have access to catalogues where they can choose according to need. These catalogues are done by the S2P team members, after searching market availability and offers. However, some requests are not listed in the catalogue. Instead, a request must be performed via OTRS platform, which is the communication line available inside the group. There are time frames concerning expected response to customer requests. The non-delivery implies a negative impact on performance evaluation. The main issue with the so called "non-recurrent requests" is that the person receiving the ticket report from OTRS often needs to have further exchanges with the customer before understanding its need and deliver a solution. This process often leads to large amounts of time spent, which in turn delays other tasks attributed to the team. The process is presented below (***Figure 9***):

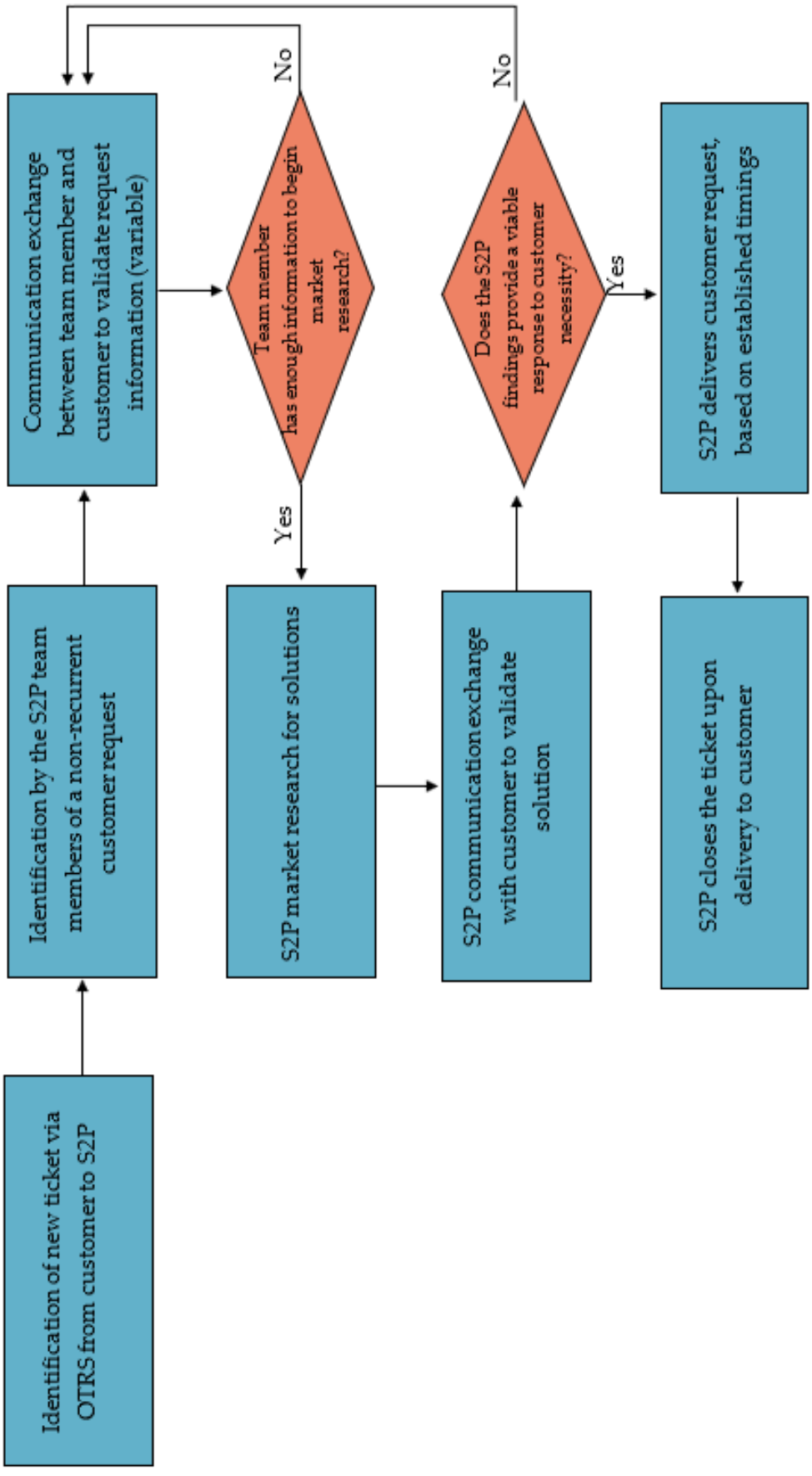


**Figure 9**: Non-recurrent customer request diagram flow (previous)

Therefore, the main concern was to find a solution to minimize time spent. As many customers place requests differently, a solution was found through the introduction of a request template, where the customer must fill in the spaces necessary to perform a request, before opening a ticket to the S2P department (***Figure 10***). Major gains identified were the ability to deliver a faster response to customer, whilst decreasing time spent on the search for the potential solution. If the internal customer places a request without presenting the template, then it faces request dismissal.

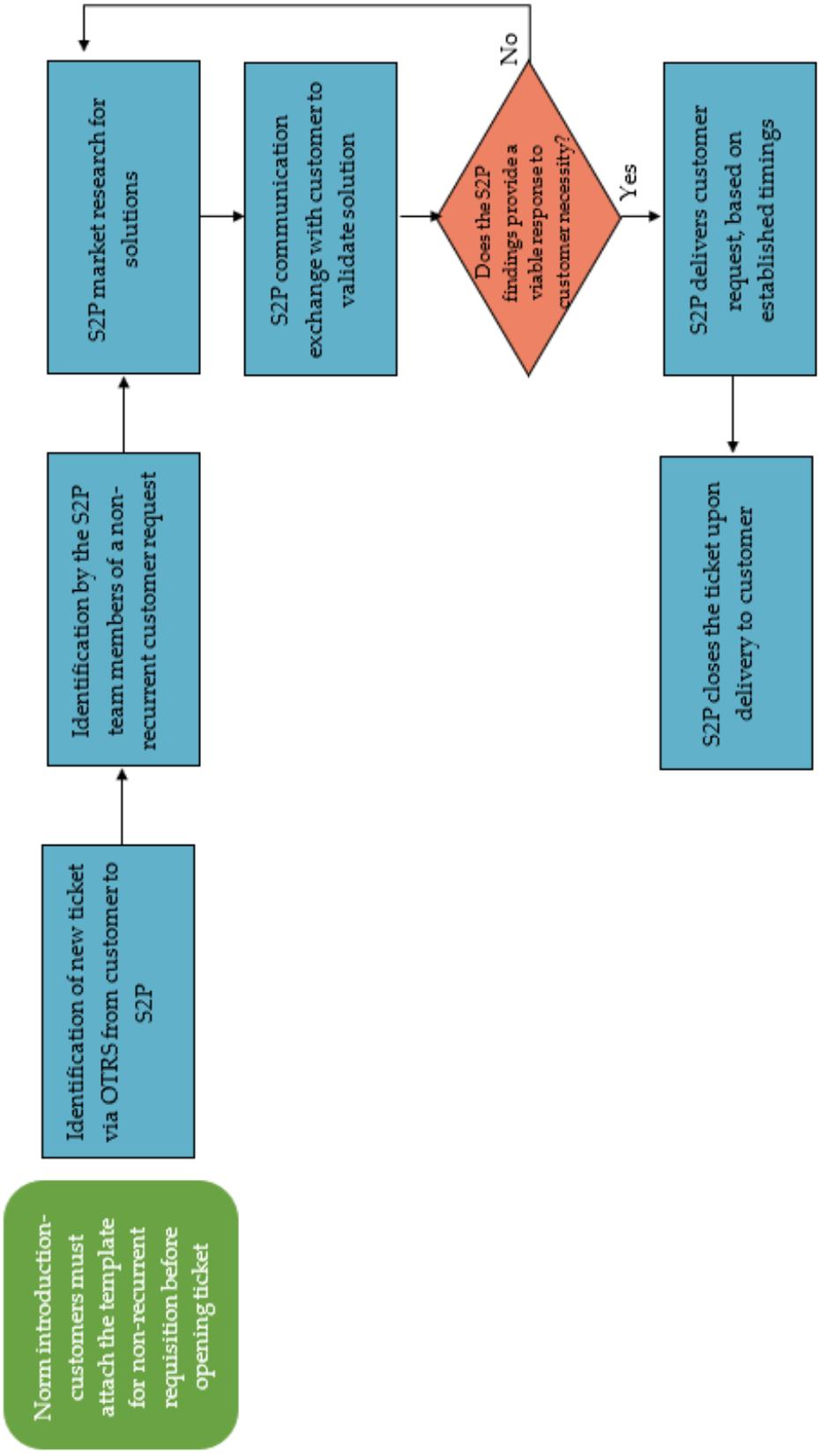


**Figure 10:** Non-recurrent customer request diagram flow (current)

### 4.1.5 Extraction and building of daily activity report

Daily activity reports are made by the department coordinator. The main goal is to understand the volume of work performed during the day, and to plan ahead for the rest of the week. The dimensions being analysed are:

- Documentation activity;
- Digitalization activity;
- Bills for approval;
- OTRS tickets being handled;
- Email processing;
- Verify platform (bill processing).

To build a report, data must be extracted from several platforms and integrated into a Microsoft Office Excel file. Platforms currently being used are: SAP, Verify, OTRS, Outlook and KOFAX. The main issue identified is the time needed to perform data extraction. Since there are many platforms, some of the data is shared among coordinators, so it must be divided accordingly. Division is performed manually by each coordinator. The main goal with intervening in this process would be to facilitate the process of data extraction. Many options were considered, however, regarding the costs associated and time frame required for the expected benefit, only a few improvements were recommended for the process, such as the possibility to provide access to full reports to the coordinator, in order to have information grouped by category.

After reviewing processes and performing improvements, it was possible to move further into analysing the assigned KPIs inside the S2P department, so as to understand their adequacy, impact on performance and suggest, if required, changes to their definition.

## 4.2 Second Phase: KPI Analysis

Information regarding KPIs is presented in a single Microsoft Office Excel file. It is noticeable that the file itself does not represent, by definition, a PMS, rather a tool to display data collected and its relation to indicators (see *1.3 Performance Measurement Systems*, pp.9). According to the information provided, the KPIs related to consumption, Pricing and SLAs are dated from nearly a decade ago, having had little or no revision[4] at all. These are indicators classified according to typology as *"Indicator"* and *"Service Level"*. The remaining indicators have been developed according to need, over the last decade. Needs include shifts on strategy, problem identification and adequacy to current operations.

In fact, the main focus during this stage is centred in verifying if indicators are actually KPIs or other types of indicators, such as KRIs or PIs, understand the documentation where KPIs are currently placed for analysis, the type of PMS being used, and acknowledge what changes are necessary when building and updating indicators. It is important to consider that due to confidentiality reasons, the majority of the indicators will not be showcased.

The following categories were being used by the department, to build an indicator table and Internal Report (***Table 4***):

[4] Data retrieved through interview with the department's manager.

**Table 4:** S2P KPI feature's table

| | |
|---|---|
| **Department Identification** | Identifies indicator relation with department; |
| **Area** | Assigns the indicator to a particular area inside the S2P department, Accounts Payable or Purchases; |
| **Indicator typology** | Classifies indicators according to purpose: Efficiency, (Control) indicators, Service Quality and Service Level; |
| **KPI definition** | Presents the name of the indicator being retrieved for analysis; |
| **Current Internal Reporting sheet (CIRS)** | Identifies where, inside the Internal Report can the indicator information be observed, and further details encountered; |
| **Time for assessment** | Defines when should data be analysed; |
| **Unit** | Identifies unit of measurement (e.g., Number, days, or other); |
| **Goal** | Identifies indicator purpose; |
| **KPI formula** | Provides the data collecting method; |
| **Target** | Sets a specific goal in terms of what should be expected to accomplished; |
| **Status** | Provides insight on indicator implementation or structuring status; |
| **Observation** | Provides insight on additional indicator comments (e.g., need to use a specific tool to collect complementary data); |

Accordingly, at the time the indicators where consulted, forty-two KPIs were revised. Only S2P KPIs were analysed. Considering the area classification, they were classified into the following:

- Non-Business Purchases: General- one KPI;
- Non-Business Purchases: Contract Negotiation- seven KPIs;
- Non-Business Purchases: Negotiation- two KPIs;
- Accounts Payable: General- one KPI;
- Accounts Payable: Records and Documentation Management- one KPI;
- Accounts Payable: Payments- seven KPIs;
- Accounts Payable: Register- nineteen KPIs;
- General- four KPIs.

In addition, considering indicator typology, each indicator was classified under one of the following typologies: Indicator, Service Quality, Efficiency, Value Adding, or Service Level. During an interview with the department's manager, it was stated that the typology was revised among the entire organisation to adopt a standardized set of measure definition. It is noticeable that in spite of having similar areas, the indicator may fall under different typologies (***Table 5***)

| Department | Area | Indicator Typology |
|---|---|---|
| S2P | General | Service Quality |
| S2P | General | Efficiency |
| S2P | General | Service Quality |
| S2P | General | Service Level |

**Table 5:** Indicator area and typology relation

## 4.3 Third Phase: Improvement proposal

As the table of current KPIs and the Internal Report are analysed, a few issues were encountered. Even though indicators can be revised on a periodical basis by management, it is mandatory that one understands what is the volume of data being included in the analysis and period of data collection as seen on "*1.4 Key Performance Indicators"*. So, a column with frequency should be included.

Team responsibility for indicator results is considered essential to conduct an analysis (see *1.4 Key Performance Indicators,* pp.18), so, a column regarding responsibility attribution is also missing from the file. Moreover, regarding the specificities of each column, the following was considered to be misaligned with what is considered the most adequate method to define PIs:

- **KPI definition** as previously seen not all indicators are KPIs (see *1.4 Key Performance Indicators*, pp.18). Some may be PIs aimed at control, whilst others may be indicators aimed at results, KRIs. In this sense it is necessary to consider this definition, while creating and updating current indicators;
- **Unit** as stated by Parmenter, (2007) in Chapter 1.4, pp.18 shall not be measured via currency. However, some of the current indicators are expressed using the unit currency (***Table 9***);
- **Goal** all indicators have goals associated to them, hence their creation (see *1.4 Key Performance Indicators,* pp.18). It has been registered that not all current indicators are associated to a goal (***Table 10***);
- **Target** despite not being required for control purposes (e.g., counting fleet vehicles) targets should be accounted in KPI and other indicators aimed at verifying performance changes (***Table 10***);
- **Status** creating indicators and adding them to the board while they are not being used, or are suffering revision, may lead to information overload and distortion for management (see *1.4 Key Performance Indicators,* pp.18). There are

some indicators accounted under the status "*Structuring*" presented in the main indicator table, which are not under analysis at the time indicators were revised[5].

On the other hand, when considering the column "Indicator typology" it was observed that even though it was agreed a common definition among the SSC, the relation between typology and "KPI definition" seems to vary, according to the indicator being analysed. The following example (**Table 6**)constitutes one of the cases regarding discrepancy in indicator classification.

[5] According to management, indicators under structuring were not being accounted or subjected to data retrieval during operations.

| Department | S2P | S2P |
|---|---|---|
| Area | General | General |
| Indicator Typology | Efficiency | Service Quality |
| KPI definition | Nº FTE assigned to each area | Nº and average response time to ticket by priority |
| CIRS | #50 | #49 |
| Time for assessment | Annual | Annual |
| Unit | (No unit described) | (No unit described) |
| Goal | Measure team efficiency concerning customer volume | Verify SLA level of fulfilment/ Decrease response time |
| KPI Formula | NºFTE worked<br>Timesheet processes/company are | Nº of tickets closed by age and average response time |
| Target | There is no target associated | |
| Status | OK | OK |
| Observations | No observations | Assess usage of Power BI |

**Table 6:** Comparison between similar indicators with different classifications

Therefore, to avoid distortion and lack of clarity in PI's definition, in the next section, a proposal concerning updates and future PI definition will be contemplated.

Moreover, as stated before, the file where indicators were listed is not an example of a PMS. It is relevant to notice that not all organisations follow the same pattern when defining PMSs. Some may act based on variations of other PMSs described in literature. While gathering information about the structure used to design a potential PMS, whether concerning the SSC or the entire organisation, it was stated that indeed the SSC does not have a clear model serving as the basis for a PMS[6].

At the time this work was performed, PIs and PMS changes add not been implemented. This is directly linked with the time necessary to implement changes versus the limited time frame existent. It is pointed out that in order to proper determine any PIs, construct a functioning PMS, and execute PM, the organisation must acknowledge what is the purpose of its activity, goals and what needs to measured. Main findings concerning the subject include:

- Revision on the subject of standardization regarding indicator typology. It is understandable that the SSC chooses to adopt criteria for standardization, due to its goals, and to ease top-management interpretation. However, it must be accounted that by doing so, departments inside the SSC may have their performance undermined;
- PI revision and continuous assessment since once the target associated to the performance measure is achieved, it is expected that change occurs (see *1.3 Performance Measurement Systems*, pp.9). Revision includes establishing PI relevancy and update necessity;
- Dismissal, and subsequent PI reduction due to exclusion of PIs that no longer reflect the departments' current necessity. Organisations must direct their focus to specific subjects and obey the rule to include as little, however necessary indicators, as possible (see *1.4. Key Performance Indicators*, pp.22);

[6] Information retrieved during an interview with management

- Follow-up on a potential PMS implementation. Literature suggests that PMS have the ability to provide great feedback regarding monitoring, HR, and benchmarking (see *1.3 Performance Measurement Systems*, pp.9).

To sum up, recommendations regarding current PIs and PMS are focused on decreasing the number of current measures through their revision, introduction of relevant measures according to current results, and considering performance improvement and future results, thus presenting a chance of achieving greater competitive advantage.

Nevertheless, as far as processes occurring inside the S2P department are concerned, some improvements were able to be performed. It has been clear that many interventions resulted in time gained during the work-day to devote to other activities inside the department. It is also been verified that up until now, all changes are still functioning and that the team has been using them and acknowledging their benefits. However, it must be said that introducing changes inside a team can prove to be difficult due to resistance (Johnson, 1998). Many members expressed their fear of losing control and autonomy over the processes they were performing. However, team members were given the chance, similarly to many other departments in the SSC to provide their input on potential improvements.

At the ending of this chapter, it is relevant to understand what were the main phases and work developed. In that sense, ***Table 7*** presents a summary referring to each phase's objectives and results.

| Phase | Objective | Results |
|---|---|---|
| I- S2P process analysis | • Counting of number of processes executed in the department;<br>• Identification of pain-points associated to processes;<br>• Proposal of potential process improvements; | Identification of fifty-nine recurrent processes, accompanied by improvement proposal in five, that resulted in a decrease of waste associated to time consumption; |
| II- KPI analysis | • Counting and identification of S2P KPIs;<br>• Revision on KPI formulation methodology;<br>• Identification of KPI usage associated to use of PMS;<br>• Identification of KPI misclassification; | Forty-two KPIs identified according to S2P categorization, apparently with no visible or documented relation to a PMS. Agreement over KPI misclassification and need for improvement; |
| III- Improvement proposal | • Proposal on improvement associate to performance measurement; | Proposal for restructure and update measures, suggestion of the potential to adopt a PMS inside the organisation. |

**Table 7:** Chapter Four summary table

# Conclusion

Throughout this work it has been verified the importance of performance measurement, the implementation of performance measurement systems and performance indicators, to conduct a proper department analysis. In fact, upon arrival and updating on the organisation and department, there was an identification of a main research question: *"Why are the current KPIs adequate to appraise performance at the moment?"*. Therefore, there was a particular focus on what implications did the KPIs had on department performance. However, secondary research questions were considered, due to the KPIs relevancy on the performance assessment process, which were essentially focused on:

- How should department indicators be grouped?
- How should KPIs be defined for the department?

Therefore, this work separates a department process analysis and a KPI analysis, to provide answer to the main research question as well as secondary ones. Firstly, a process analysis was conducted, where it was verified what were the processes that could be classified as daily activities, followed by the analysis of main hazards encountered while working in daily activities, as well as opportunities for improvement. In fact, main issues encountered where related to time consumption associated to performing daily activities. It was considered that process revision was necessary, to exclude pain-points associated to the processes. In that sense, during the process analysis phase, it was possible to verify potential to improve performance through:

- Creation of standard procedures to complete daily tasks;
- Update on current work solutions, namely IT solutions.

Interventions planned, performed and executed during this phase proved to be successful mainly in reducing waste associated to time for task completion.

In addition, having established the relation between process improvement and department performance, a KPI analysis was conducted. During this work phase, all of the department's KPIs were revised, in order to understand the reasoning behind their creation, need for KPI inclusion or exclusion, KPI reformulation and grouping. It was verified that the department holds a high number of KPIs, which, as previously seen, may influence management negatively and decrease focus through an information overload. The reason behind the development and usage of a high number of KPIs is mainly due to lack of periodical assessment, since the majority of indicators have been added without regard for past indicators, or in some cases maintaining indicators that no longer serve a useful purpose or are suited to appraise current performance. Revision on KPI can act as a trigger for change and create opportunity for performance improvement.

Moreover, as far as grouping indicators into categories, it was clear that the organisation as a criterion of standardization, focusing on grouping indicators according to organisational focus areas. Nevertheless, a proposal for revision on this matter is presented, so as to determine the relevancy of changing indicator categorisation and grouping them, depending on the department in which they are inserted, due to the existence of risk of misapprehending results.

Therefore, through this work, the main benefits verified upon analysis are related to the possibility to create managerial opportunity for revision and broader discussion inside the organisation concerning performance measurements, PIs and KPIs. On the other hand, it is acknowledged that a limited time frame does not allow to implement KPI changes, only to perform a revision on the subject, thus prompting a proposal to update the current system, which may or not be adopted by the organisation. Other limitations include restrictions

imposed by the SARS-CoV-2 pandemics, which required most of the work to be performed remotely. It is noticeable that direct observation associated to being the first encounter with the organisation, in field has been compromised on this subject.

Lastly, as far as future work and recommendations are considered, it is acknowledged that undergoing extensive KPI restructuring, as well as adopting a structured PMS, is most likely able to determine future performance changes and improve results. In addition, although this work was carried on inside a specific shared service department, it is clear that a revision of the aforementioned topics could be performed on the whole shared service unit.

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# Appendix

## Appendix I: Process register inside the S2P department

| Subject | Services | Number of processes | Responsibility |
|---|---|---|---|
| **FLEET** | Monthly review of vehicle taxation | 1 process | Person A and B |
| | Fleet insurance | 2 process | |
| | Semi-annual- Fleet Washing Management | 1 process | |
| | GALP Fleet Management | 4 processes | |
| | Toll | 2 processes | |
| | Fleet Management and Control | 3 processes | |
| | Sinister and Breakdown Management | 2 processes | |

| | | | |
|---|---|---|---|
| | | | |
| | Fine Management | 1 process | |
| **INSURANCE** | Register and approval of insurance policies inside database | 1 process | Person C and D |
| | Annual control of insurance cover | 1 process | |
| | Insurance minute control | 1 process | |
| | Control of invoice cancelling sent by the insurance company | 1 process | |
| | Management of the documentary archive | 1 process | |
| | Civil and work accident insurance | 1 process | |
| | Travelling aid Assistance insurance | 1 process | |
| | Sinister participation and compensation control | 1 process | |
| **COMMUNICATIONS** | Administrative process management (with the communication company) | 1 process | Person C and D |
| | Complaint and breakdown management | 1 process | |
| | Periodical renewal of communication equipment | 1 process | |
| | Registration of services database and maintenance | 1 process | |

| | | | |
|---|---|---|---|
| | Validation and control of monthly invoices | 1 process | |
| | Analysis of ZComunica transaction (SAP) | 2 processes | |
| **CONTRACTS** | Management of contracts in force | 1 process | Person C and D |
| | Contract Management (cancelling, renewal) | 1 process | |
| | Internal customer complaint management | 1 process | |
| | Selection and introduction of new suppliers | 1 process | |
| | Service redemptions to the organisation's companies | 1 process | |
| | Internal reporting | 1 process | Person B |
| | Invoice validation | 1 process | Person C and D |
| **CUSTOMER REQUESTS** | Update on proposal request sheet | 1 process | Person E and F |
| | Saphety catalogue creation | 1 process | |
| | SAP4Hana material creation | 1 process | |
| | Quotation request | 1 process | |

| | | | |
|---|---|---|---|
| | Materials quotation | 2 processes | |
| | Centralized negotiation of hotel fares | 1 process | |
| | Product and Service negotiation on non-business area; | 1 process | |
| | | 1 process | |
| **SAPHETY** | Access Management | 4 processes | Person B |
| | Error analysis | 1 process | |
| | Creation of Saphety orders and catalogue | 1 process | |
| | Bottleneck analysis on invoices | 1 process | All team |
| **TECHNOLOGICAL EQUIPEMENT** | New equipment negotiation | 1 process | Person A and B |
| | New equipment requests | 1 process | |
| | Technological Equipment periodical renewal | 1 process | |
| | Rollout | 1 process | |
| | Monthly analysis of SAP transactions: Zequ 1/ Zequ 2/ Zequ 3 | 1 process | |

**Table 8:** Processes identified inside the S2P department (September 2020)

# Appendix II: First KPI demonstration

| Department Identification | Area | Indicator typology | KPI definition | Current Internal Reporting sheet | Time for assessment | Unit | Goal | KPI Formula | Target | Status | Observation |
|---|---|---|---|---|---|---|---|---|---|---|---|
| S2P | CNN General | Indicator | FSE's Purchases Scope | Spending | homologated period | Euros | Understand what belong to the Business department and was allocated to the S2P | | | OK | |

**Table 9**: KPI expressed via currency

# Appendix III: Second KPI demonstration

| Department Identification | Area | Indicator typology | KPI definition | Current Internal Reporting sheet | Time for assessment | Unit | Goal | KPI Formula | Target | Status | Observation |
|---|---|---|---|---|---|---|---|---|---|---|---|
| S2P | CNN Contract Negotiation | Indicator | Nº of Fleet vehicles | D0026-Vehicles | Annual | Number | | | | OK | |

**Table 10:** Control KPI with no goal associated