Cranfield University

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Organisational capabilities for enhancing the sales quotas development process outcomes for pharmaceutical sales forces

School of Management

DBA Thesis
Organisational capabilities for enhancing the sales quotas development process outcomes for pharmaceutical sales forces
ABSTRACT

The improvement of the sales quotas development process in Spanish pharmaceutical organisations is challenging as the market environment becomes dramatically complex. Setting sales quotas has always been difficult, exemplified by the difficulties in quantifying future sales by sales territory. Extensive research has been conducted and several conceptual models created to facilitate the process of developing sales quotas. Effective management of this process has proved problematic mainly due to difficulties in estimating future sales by territory, the complexity of the systems utilised in the process, the granularity of the data required and the lack of attention to implementation issues. Therefore, determining organisational capabilities that facilitate developing an effective sales quotas process is paramount.

This study uses goal setting theory to understand organisational capabilities for the sales quota development process. A sales quota development process for a mid-sized pharmaceutical organisation was examined in terms of activities, which satisfied stakeholders’ expectations. Based on empirical data organisational capabilities were identified and prioritised. Goal setting theory is advanced through the development of the SQD Model that includes a set of sixteen organisational capabilities that are critical for developing an effective sales quotas process for pharmaceutical organisations. This study created the SQP Maturity Framework, a diagnostic tool that allows organisations to assess their sales quota development process and understand which capabilities to acquire or further develop to improve the process. Differences by organisational contexts are highlighted.

The focus of this research is the pharmaceutical sector in Spain. The organisational capabilities uncovered and assessed will be relevant to these and other sectors that rely on sales forces. Areas for future research include the replication of this study in different geographies and sectors focusing on identifying more organisational capabilities and routines that facilitate moving organisations towards an optimised level of maturity.
ACKNOWLEDGEMENTS

My daughter Agustina was born one month before I engaged on this project. Then Felipe joined us a year and a half later. Agustina is now almost six years old and she is already able to engage in deep conversation. She is the continuous reminder of the journey I have decided to take back in 2003.

First, my gratitude goes to my wife, Florencia, for her unconditional support across all of these years of sacrifice and to my children for the hours I have deprived them from in their first few years of life and with the promise that this will change in the near future.

Ashley Braganza, Professor of Organizational Transformation at Brunel Business School, was the lighthouse that guided me across this sea and kept me hopeful within the twelve seconds of darkness between milestones. I seriously thought of giving up a couple of times and he managed to convince me to stay on course, with the hope of reaching the destination one day. I am grateful to you Ashley. Your continuous support, guidance, encouragement and sense of humour were absolutely critical. Many thanks!

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GLOSSARY OF TERMS

**Business processes**: a collection of stakeholders’ expectations that an organisation seeks to address through a series of activities.

**Effective sales quotas development process**: refers to a sales quotas development process that satisfies stakeholders’ expectations. Effective sales quotas at the sales representative level are sales quotas that while being challenging are realistic, objective, transparent, fair, well-understood and accepted by the sales force.

**Future sales by territory**: is the amount of sales in units or value that an organisation is likely to generate in one particular sales territory in the following year.

**Response to promotion**: is the relation between the effort allocated by a sales representative in a sales territory, in a certain time period, and the results achieved. Effort is typically measured in number of calls to physicians and results in terms of incremental sales above carryover. Carryover is the bulk of sales from one year derived from the effort allocated in previous years.

**Sales quotas**: is the share of the national sales forecast allocated to each sales representative. It is both an objective and a goal the sales representative has to achieve to get their incentives paid. These are often referred to as sales targets, sales goals or sales objectives.

**Sales territory**: is a well-defined geographical area assigned to a single salesperson. The sales representative has sales responsibility over all or a number of clients within that geographical area.

**Spanish pharmaceutical organisations**: refers only to organisations that commercialize medicines in Spain. This includes both local organisations and Spanish branches of global organisations. High-revenue organisations are those pharmaceutical organisations in the top 25 in terms of revenue in the year 2007. Multinational organisations are foreign organisations with a branch in Spain. Primary care - oriented organisations have more than 40% of their products focused on primary care. Secondary care - oriented organisations have more than 40% of their products focused on secondary care. Branded organisations are those with more than 50% of their revenues coming from branded medicines. Generics organisations are those with more than 50% of their revenues coming from generic medicines.

**Stakeholders to the sales quotas development process**: are employees working within an organisation involved with or impacted by the sales quotas development process.
1 Setting direction

1.1 Chapter introduction

This chapter serves as an introduction to the thesis. First, the subject is presented and its conceptual relevance is shown through the extant gaps in knowledge. The research aims are made explicit, the methods utilized to address these aims explained and a summary of findings and contribution is presented. This chapter provides an overview of the structure of the thesis, briefly describing the contents of each of the chapters. This roadmap of the thesis facilitates ease of reading through the document.

1.2 Introducing the subject

The publication in 2004 of a review by the Academy of Management Executive on the status of goal setting theory covering the work from Edwin A. Locke and Gary P. Latham, refuelled the discussion on how to better develop and implement goals within organisational settings (Kerr, 2004; Locke, 2004; Locke, 2004; Latham, 2004; Shaw, 2004; Kerr and Landauer, 2004). The topic is important to academics and practitioners alike. For the former, there is the need to understand those capabilities that can enhance the goal setting business process. For the latter, the continuous neglect of goal setting principles by many well-managed organisations is what makes the subject very interesting (Kerr, 2004: 122).

Setting sales quotas is difficult because an accurate estimate of potential future sales in each sales territory is required. Future sales for organisations are at worst a guess and at best, based on a variety of assumptions: both guesses and assumptions can be proven wrong. Extensive research has produced conceptual models and technological solutions to facilitate the development of accurate sales quotas. However, conducting an effective sales quotas development process, at sales representative level, has proved problematic in practice. This is due to difficulties in estimating future sales by territory, complexity
of the systems utilized, granularity of the data required to feed the models and lack of attention to implementation issues in an increasingly dynamic business environment.

The pharmaceutical sector is undergoing dramatic environmental changes in Spain, which is impacting the way organisations address their markets. The decentralized nature of the healthcare system, the cost containment measures imposed at the regional level in Spain, the lack of new products’ launches, regionalized market access and increasing competition add significant complexity to the sales quotas development process. Many organisations are starting to test different sales models moving away from the traditional reach-and-frequency techniques, based purely on impacts to a relationship-based paradigm. In this paradigm, what really matters is the equity generated with each client. The extant sales quotas development processes are static and not defined to adapt to a changing environment. Altering current sales models triggers changes in most processes linked to them. The sales quotas development process is one of the key processes that need to adapt to the new environment if organisations want to keep improving their performance while retaining motivated and energized talent. Therefore, there is the need to better understand those organisational capabilities that facilitate conducting a more effective sales quotas development process for sales forces.

1.3 Aims of this study

The three aims of the research are: (a) to understand the sales quotas development process for pharmaceutical sales forces; (b) to determine a set of critical organisational capabilities for an effective sales quotas development process and (c) to develop a diagnostic tool to assess the maturity of an organisation’s sales quotas development process to identify the capabilities that need to be acquired or developed further to improve this process.

The rationale for these aims emerged from an initial examination of the research into goal setting theory. While much progress has been made in our understanding of goal
setting, the theory is particularly weak in the area of sales management and organisational capabilities required for an effective sales quotas development process.

1.4 Methods utilised

A case study is carried out in Alpha Pharmaceuticals, a mid-sized pharmaceutical organisation in Spain. Alpha Pharmaceuticals’ process is analyzed in terms of stakeholders’ expectations and the activities required to address these expectations. The analytical framework used to describe the goal setting process is based on the “Process Management Framework”, which provides a mechanism to integrate the organisation at strategic and operational levels (Braganza and Lambert, 2000). Thirty-five barriers preventing the development of an effective sales quotas development process were identified and analyzed. These were examined in the light of a systematic literature review. From the barriers uncovered in the case study and the literature review, thirty-five organisational capabilities that are important for the development of an effective process are determined. This is carried out through associating each barrier to an organisational capability that allows overcoming that barrier and through reviewing the literature on those capabilities. An initial Sales Quotas Development Model (SQD Model) of organisational capabilities that facilitate the effective development of sales quotas was created. From this model, an initial diagnostic tool of organisational capability maturity was developed: the Sales Quotas Process Maturity Framework (SQP Maturity Framework). This tool is based on the framework developed by the Software Engineering Institute of Carnegie Mellon University in 1986; the so-called SEI CMM model (Software Engineering Institute Capability Maturity Model) (Paulk et al., 1993). It allows an assessment of the presence and maturity of capabilities in organisations and includes five standard levels of maturity: initial, repeatability, defined, managed and optimizing. The different levels represent levels to be reached in the journey to improving capabilities.

The SQD Model and the SQP Maturity Framework were refined through a focus group carried out with ten business consultants specialized in the goal setting field with
specific focus on the Spanish pharmaceutical sector. The initial thirty-five capabilities were reduced into a set of twenty-seven organisational capabilities. A survey instrument was developed and applied to eighty sales and sales operations executives in forty-nine different pharmaceutical organisations in Spain. From the refined twenty-seven capabilities, sixteen are considered to be important to the quotas setting process by the survey respondents. The survey results lead to the capabilities to focus upon to achieve the maximum impact under diverse organisational contexts. These contexts include pharmaceutical organisations with high and low revenue, multinational and local organisations, organisations with branded and generic portfolios, and primary care and specialist-oriented organisations. These capabilities are grouped under different categories to facilitate a better understanding of the areas where improvements can be made. Four categories are developed through Principal Components Analysis (PCA). The SQD Model and the SQP Maturity Model are further adjusted including only those capabilities that proved to be important under their corresponding categories. These categories are “Business Intelligence”, “Infrastructure”, “Calculating Sales Quotas” and having a “Sales Quotas Development Process Owner”.

1.5 Summary of findings and contribution

This research provides a novel way to look at the sales quota development process in terms of activities satisfying stakeholders’ expectations. The sales quota development process was examined for a mid-sized pharmaceutical company and barriers to the process were determined following a realist perspective. The study contributes to the development of goal setting theory by introducing the SQD Model including a set of sixteen organisational capabilities that are critical for the effectiveness of the sales quotas development process. The SQP Maturity Framework is developed as a diagnostic tool that allows sales and sales operations managers to assess their current state of development regarding organisational capabilities that are critical for an effective sales quotas development process.
1.6 Structure of this thesis

This thesis is organised in eight chapters. Chapter 1 introduces the study, the aims of the research, the methods utilized and presents a summary of the findings and the contribution made. It provides an overview of the research work performed.

Chapter 2 consists of a literature review based on the systematic method. It introduces the concepts and constructs that form part of the research and presents the gaps in the goal setting theory. This chapter sets out the research question addressed in this thesis.

Chapter 3 establishes this study’s methodological and theoretical foundations. It also presents the design of the case study and survey as well as the operationalisation of the variables used in the study.

Chapter 4 describes the case study conducted at Alpha Pharmaceuticals. It introduces general information about the company, examines the sales quotas development process the company had in place and develops a set of barriers to the sales quotas development process.

Chapter 5 develops an initial SQD Model and initial SQP Maturity Framework and presents the results from a quantitative study to understand what organisational capabilities are more relevant than the others and how this varies by organisational context.

Chapter 6 discusses the organisational capabilities found to be important for conducting an effective sales quotas development process in the light of the extant theory. The SQD Model and the SQP Maturity Framework are further refined. The contribution to goal setting theory, processes and to the practice of management is established in this chapter.
Chapter 7 provides a summary of the research and the results achieved. It identifies the contribution to theory and practice. It highlights limitations and identifies opportunities for further research.

Chapter 8 is the appendices and includes information that supports the discussion and arguments raised in this thesis. Some critical elements included in the appendices are the terms used in the literature review search strategy, all first order constructs for expectations and barriers, organisational capabilities with their corresponding weights, the original questionnaire used for the survey and the statistical analysis performed.

A graphical description of the overview of this thesis is provided in Figure 1.1.

1.7 Chapter summary

The chapter introduced the subject area of this research highlighting the relevance of the topic and the existing gaps in knowledge. The research aims, methods utilized and the findings and contribution were presented. An overview of the structure of the thesis was provided to facilitate ease of reading through the document.

The next chapter reviews the constructs and concepts used in this study at the light of current and past research. It articulates the research question that guides the study.
**Chapter 1 Introduction**

The chapter introduces the thesis through presenting the subject, the research aims, the methods utilized, the findings and contributions. It provides a roadmap of the thesis.

**Chapter 2 Literature review**

The chapter reviews the goal setting theory, in general, and specifically in the context of sales management as a primary area of concern. Defines the concepts and constructs used in the study. Develops an initial conceptual model that guides the first phase of the research and articulates the research question.

**Chapter 3 Research methodology**

The chapter establishes the methodology used in the study and this researcher’s theoretical and intellectual foundations. Presents the design of the case study and the survey conducted and the operationalisation of variables.

**Chapter 4 Case study: Alpha Pharmaceuticals**

The chapter presents the case study conducted at Alpha Pharmaceuticals. The sales quotas development process is described in terms of stakeholders’ expectations and thirty-five barriers to the process are uncovered following a realist perspective through an interpretation of first and second order constructs.

**Chapter 5 Organisational capabilities: analysis and results**

The chapter develops the initial SQD Model and initial SQP Maturity Framework through building on the findings from the case study and through conducting a survey among 80 sales executives from 49 different pharmaceutical organisations in Spain. Sixteen critical organisational capabilities are determined and examined under different organisational contexts and grouped under four categories.

**Chapter 6 The development of the SQP Maturity Framework**

The chapter discusses the results of the study through the lenses of the existing theory and establishes the contribution from the study. The SQD Model and the SQP Maturity Framework are further refined.

**Chapter 7 Concluding remarks**

The chapter summarizes the study, presents the conclusions of the research, the contribution to knowledge and to practice, the limitations of the study and identifies implications for practitioners and further research.

**Appendices**

The chapter includes information supporting the discussions and arguments raised in the research. This includes clusters of researchers and research areas, all first and second order constructs used in the case study, all the statistical analysis performed on the survey, questionnaires and mails.
2 Literature review

2.1 Chapter introduction

The chapter starts with a description of the systematic method used as part of the literature review strategy and presents the steps taken to arrive at the final group of key documents that were used to develop the initial conceptual model that guided the first phase of the research. The chapter introduces and defines the concepts and constructs used in the study. Goal setting theory is reviewed in general, and specifically in the context of sales management as a primary area of concern. Business processes, the resource-based view of the firm, capability maturity models and the pharmaceutical sector are reviewed. There is a special emphasis on sales quota development process as it is the most common approach used in the pharmaceutical industry to define goals for the sales force. The research question addressed on this thesis is articulated.

2.2 The literature review approach: using the systematic method

The literature review is based on the principles of systematic review. Tranfield et al. (2003) argue that: “systematic reviews differ from traditional narrative reviews by adopting a replicable, scientific and transparent process, in other words a detailed technology, that aims to minimize bias through exhaustive literature searches of published and unpublished studies and by providing an audit trail of the reviewers decisions, procedures and conclusions (Cook et al., 1997)” (Tranfield et al., 2003: 209). Applying the principles of systematic literature review has a wealth of benefits; specifically, replicability, scientific in nature and transparency. However, the approach is not infallible and the possibility of missing relevant research is always present exemplified by a specific book not captured by search engines utilized. One of the main limitations of conducting a systematic literature review is consuming resources at the flat side of a Pareto curve where a lot of time and effort is required to achieve very little additional value. However, the value of following the principles of a systematic
literature review is that it is a well structured approach that ensures access to very high degree of completeness on any body of literature to be studied. The following diagram illustrates the process that was followed when conducting the literature review.

Figure 2.1: Literature search strategy

Mapping of the field of research

Identification of key subjects and concepts to investigate

Identification of synonymous for each of the terms

Creation of strings including combinations of the terms

Identification of search engines

Definition of a cut-off date (May 2004)

Actual search

Filtering of relevant articles

Exporting into Procite

Adjustment of files to Cranfield standards

Documents ready to be used

Source: originated by the author

Mapping the field first allows focusing the review on those bodies of literature or “conversations” that are most relevant to the subject being researched. The unit of analysis of this thesis is the sales quotas development process for pharmaceutical sales representatives so the concepts of interest were sales quotas, goals, goal setting, processes, sales management and pharmaceuticals. Understanding groups of researchers who are leading relevant fields of knowledge is vital to position this research. There is a
community of researchers focusing on goal setting theory and completely different
groups of researchers focusing on sales management and business processes. The three
communities rarely refer to each others’ work and thus there is virtually no cross-
fertilisation of ideas.

Once the different bodies of literature to focus upon were defined, search terms were
identified to ensure access to most documents. This implied first the identification of
key subjects and concepts to investigate and the use of synonyms for each of the terms
to be used in the search. A list of 110 associated terms was developed from initial
articles gathered (see Appendix A). From those terms, “goals”, “munificence”,
“performance”, “process”, “territory”, “pharmaceuticals” and “doctor” were selected as
key terms and synonyms were found for each one of them. The synonyms used for the
key terms are shown in Table 2-1.

Table 2-1: Terms and synonyms used to build search strings

<table>
<thead>
<tr>
<th></th>
<th>Synonyms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goals</td>
<td>objective, target, quota, sales quota</td>
</tr>
<tr>
<td>Munificence</td>
<td>bounteous, bontiful, generous, rich</td>
</tr>
<tr>
<td>Performance</td>
<td>attainment, achievement, effectiveness, efficiency, accomplisment</td>
</tr>
<tr>
<td>Process</td>
<td>method, methodology, practice, system, procedure, framework</td>
</tr>
<tr>
<td>Territory</td>
<td>region, area, district</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>pharma, rx, healthcare, prescriptions</td>
</tr>
<tr>
<td>Doctor</td>
<td>physician, medic, prescriptor</td>
</tr>
<tr>
<td>Hospital</td>
<td></td>
</tr>
<tr>
<td>Reward system</td>
<td></td>
</tr>
</tbody>
</table>

Source: originated by the author

In order to make the search replicable, search strings were defined to allow for updates
and replication of the search at any point in time. A search string was made up of
similar terms to ensure that the term is captured in different forms. Then, searches on
combinations of strings were carried out to ensure relevance and completeness. The
strategy executed is summarized in Table 2-2, where the rows are the search strings
utilized and the columns the combinations of strings used. “Combi 1”, for instance, is
the search for each string alone, while “Combi 2” represents combination of two by
two. “Multi-combi” represents multiple combinations of strings.
Table 2-2: Search strategy

<table>
<thead>
<tr>
<th>Uni-strings</th>
<th>Context 1</th>
<th>Context 2</th>
<th>Context 3</th>
<th>Context 4</th>
<th>Context 5</th>
<th>Context 6</th>
<th>Context 7</th>
<th>Context 8</th>
<th>Context 9</th>
<th>Multi-context</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 munificen*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2 munificen* OR genero* OR rich*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3 goal* OR objective* OR target* OR quota* OR quota?reward system* OR quota achievement OR sales quota*</td>
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<td>9 data envelopment analysis OR dea</td>
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Source: originated by the author

The search engines utilized were ABI (Proquest), EBSCO (Business Source Premier), Science Citation Index (SCI) and Science Direct (SD). The first two were by far the most comprehensive ones although articles were also gathered from the latter two databases. May 2004 was defined as the first cut off date to conform the base of documents to be reviewed. The same search strategy was applied in May 2005, May 2006, May 2007 and May 2008. New published work was integrated into the base of documents. The search followed the guidelines previously defined: terms and strings, combinations, search engines and cut off date. The initial results of the search and subsequent adjustments are included in the Appendix B.

All the articles captured in the searches were imported into Procite, a bibliography management software. The file was completed with books that were selected through library and internet search engines as well as through reviewing bibliographic searches. The Cranfield format was also incorporated into the files. The papers that were duplicated or lacked sufficient quality or relevance to the research were removed from the list. The following criteria were used to exclude papers: articles from non-prestigious journals or referring to non-business related goal setting processes. Moreover, the “ROSE” framework (Rose, 1982) was applied to assess quality (Rose,
The systematic approach conducted yielded a total of 325 theoretical and empirical studies relevant to the research at May 2004. This was added to across the years with new pieces of research that emerged but always following the same criteria both in terms of conducting the search and in assessing the quality and appropriateness of the articles at hand.

Appendix F has the list of main authors and articles and the areas covered in their studies. There are some clusters of researchers focusing on sales performance, motivation, goal setting, sales quota determination, sizing, territory alignment, resource optimization, incentives compensation, compensation models, sales force systems, pharmaceuticals and sales force management. Some of the work conducted by these researchers involves more than one of the aforementioned areas generating overlaps within topics. This is explored with more detail in the next sections.

2.3 Literature review: what is known about the key constructs of this research

2.3.1 Goal setting theory

Goal setting theory is still in its infancy and was inductively formulated in the last 40 years, mainly through empirical research conducted by Edwin A. Locke and Gary P. Latham. Although the origins of the theory can be traced back to the empirical work of Mace (1935), it was not until recently that goal setting theory was considered as a theory on its own merits (Locke and Latham, 2002). It was rated, in 2003, as the most important theory out of 73 management theories by organisational behaviour scholars (Miner, 2003).

According to Locke, goal setting theory is, above all, a “practical” theory (Locke, 2004). The development and testing of this theory evolved over 100 different tasks, both laboratory and field settings, using different time spans and experimental, quasi-experimental and correlation research designs, over 40,000 subjects in eight countries
(Locke, 2004). In particular, it has been demonstrated that the application of goal setting theory is highly beneficial in organisational settings (Latham, 2004).

Locke and Latham (2002) define a goal as “the object or aim of an action, for example, to attain a specific standard of proficiency, usually within a specified time limit” (Locke and Latham, 2002:705). Goal setting is one of the most effective motivators of performance, this being a primary objective of setting goals (Locke and Latham, 1984:39). Probably the most powerful contribution of goal setting theory is the realization that commitment to a specific and challenging goal leads to higher performance than just pursuing vague goals or doing ones best, as demonstrated by over 500 empirical studies (Seijts et al., 2004). Once the goal is achieved, satisfaction also increases, with a higher sense of personal achievement, often leading to higher pay and better jobs (Latham, 2004).

Once people focus on a goal they prioritize activities that have to do with the goal. Goals energise and facilitate persistence. They also push people to tap into the knowledge they have that will serve the fulfilment of the goal and when they do not have this knowledge, they have a good motive to acquire this knowledge (Latham, 2004). There is extensive research on moderating variables related to goal setting effectiveness: goal commitment, importance, self-efficacy, feedback, task complexity, performance and productivity improvement, knowledge of results, goal conflict, financial incentives, participation on setting goals, goal acceptance and commitment, individual difference, situational constraints, evaluative contexts and attributional processes, among others. The following table summarizes the key findings and researchers that focused on these areas.
Table 2-3: Researched areas within goal setting theory

<table>
<thead>
<tr>
<th>Researched areas</th>
<th>Key findings</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal commitment, importance and self-efficacy</td>
<td>When people are committed to their goals they show a higher performance than otherwise. Making a public commitment, when the locus of control is internal (as per Rotter's 29 items scale instrument) and having a strong need of achievement enhances commitment to goals, which most important when goals are difficult. Self-efficacy enhances goal commitment.</td>
<td>(Locke and Latham, 2002; Klein et al., 1999; Hollenbeck et al., 1989; Rotter, 1966)</td>
</tr>
<tr>
<td>Feedback</td>
<td>For goals to be effective, people need to know how they are progressing against their goal.</td>
<td>(Kim, 1984; Matsui et al., 1983; Erez, 1977; Cummings et al., 1971)</td>
</tr>
<tr>
<td>Task complexity</td>
<td>The higher the complexity of the task at hand, the higher the need to discover appropriate task strategies to attain the goal. The use of proximal goals is often helpful when the tasks are complex.</td>
<td>(Latham and Seijts, 1999; Erez and Zidon, 1984; Latham et al., 1982; Yukl and Latham, 1978; Stedey and Kay, 1966)</td>
</tr>
<tr>
<td>Performance and productivity improvement</td>
<td>Self-efficacy is a predictor of future performance for moderate to difficult tasks. The higher the expectancy for success, the higher the performance. Self-assigned personal goals predict performance better than goals assigned by superiors. Salespeople that attribute greater importance to goals also set their own goals at higher levels, which subsequently lead to greater achievement.</td>
<td>(Locke and Latham, 1990; Wotruba, 1989; Garland, 1984; Locke et al., 1984; Abelson, 1983; Dosset and Greenberg, 1981)</td>
</tr>
<tr>
<td>Knowledge of results</td>
<td>Correct knowledge of results significantly increases goal level.</td>
<td>(Cummings et al., 1971; Locke, 1967)</td>
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<tr>
<td>Goal conflict</td>
<td>Goal conflict is negatively correlated to performance mainly through pressure.</td>
<td>(Locke et al., 1994)</td>
</tr>
<tr>
<td>Financial incentives</td>
<td>Financial incentives are a practical way to achieve commitment to goals. When the goal is very difficult, paying people only if they achieve the goal can hurt performance.</td>
<td>(Locke, 2004; Locke and Latham, 2002; Campbell, 1984; Mowen et al., 1981; Terborg and Miller, 1978; Pritchard and Curtis, 1973)</td>
</tr>
<tr>
<td>Participation on setting goals</td>
<td>Primary benefit of participation is cognitive rather than motivational as it stimulates information exchange.</td>
<td>(Erez et al., 1985; Chang and Lorenzi, 1983; Latham et al., 1982; Dossett et al., 1979; Latham and Saari, 1979; Ivancevich, 1977)</td>
</tr>
<tr>
<td>Goal acceptance and commitment</td>
<td>To enhance goal acceptance, the level of self-regulation needs to be systematically and explicitly increased at each successive stage of the goal evaluation process.</td>
<td>(Erez and Zidon, 1984; Erez and Kanfer, 1983)</td>
</tr>
<tr>
<td>Individual differences</td>
<td>Participation is important for low need achievers, while feedback and goal specificity is important for high need achievers (Steers, 1975). For goals to influence performance, those involved in the task must be made aware of their goal progress (Matsui et al., 1983).</td>
<td>(Locke and Latham, 1984; Bandura and Cervone, 1983; Matsui et al., 1982; Yukl and Latham, 1978; Steers, 1975)</td>
</tr>
<tr>
<td>Situational constraints</td>
<td>Difficult goals improve performance only under unconstrained task conditions.</td>
<td>(Peters et al., 1982)</td>
</tr>
</tbody>
</table>
Evaluative contexts

People with high evaluation apprehension produced more than people with low, and people receiving positive social cues produced more than people receiving negative ones (White et al., 1977). Goal setting satisfaction is unaffected by evaluative contexts (Jackson and Zedeck, 1982).

Attributional processes

Participation in goal setting may lead to less objective appraisals and attributions of performance. Individuals who see performance as a result of their abilities are more likely to maintain high goal aspiration levels.

Source: originated by the author

Despite the significant amount of research conducted in the aforementioned areas, there are several unchartered avenues of research. James T. Austin and Philip Bobko (1985) highlighted four unexplored areas within the goal setting theory: (a) the distinction between quantity and quality goals and performance measures; (b) conflicts inherent in goal setting processes (later examined by Locke et al. (1994) (Locke et al., 1994); (c) individual versus group levels of analysis and (d) laboratory versus field research support for the goal setting paradigm (Austin and Bobko, 1985). Locke (2004) highlights the following areas where more research is required: which method is best under what conditions, what activities to set goals for, how many goals to set, goal integration and goal change (Locke, 2004). Another unexplored area has to do with the aim of this thesis, that is, uncovering organisational capabilities that facilitate the development of effective goals for sales forces. Specifically, there is little research on goal setting for sales representatives. When conducting the literature review, it became clear that researchers focus on goal setting theory overall or on setting goals for sales representatives. These researchers are engaged in different conversations. The focus of this thesis is the goal setting process in the context of sales management. Therefore, this
researcher focused on the latter body of literature; goal setting within the sales management area.

### 2.3.2 Setting sales quotas and determining future sales by territory

Sales forces represent a major investment for many firms. Sales forces act as a channel through which organisations implement their strategies and as a key revenue driver (Zoltners et al., 2001:2). In particular, within the pharmaceutical sector in Spain, sales forces are responsible for the major portion of the sales revenue as direct-to-consumer advertising is prohibited by law. Consequently, sales forces become the main promotional and communication channel pharmaceutical organisations have to deliver their sales strategies.

A highly motivated and energized sales force is vital to achieving the company's strategy. There is extensive research on the positive relationship between motivation and performance (Plank and Reid, 1994; Churchill et al., 1985) and even between behaviours and performance within pharmaceutical sales forces (Blackshear and Plank, 1994). Zoltners et al. (2001) argue that it is desirable to use monetary incentives as a means of motivating sales people because they drive the top line, the output of individual salespeople are measurable, they are devoid of supportive social interaction and receive considerable rejection from potential clients (Zoltners et al., 2001:270). Sales representatives in the pharmaceutical industry have a high proportion of variable pay included in their rewards ranging from 15% to 25% and also depending on their pre-set goals (Zoltners et al., 2001:283; Mantrala et al., 1994).

Goals are linked with monetary incentives to enhance salespersons’ performance (Good and Stone, 1991; Joseph and Kalwani, 1998). If they achieve their pre-set goals, they are entitled to higher rewards than what they would have achieved otherwise (Locke, 2004; Wotruba, 1989; Futrell and Swan, 1976; Winer, 1973). If the salesperson does not achieve his or her targets, sanctions in the form of explanation of failure, warnings,
probation and dismissal are applied (Challagalla and Shervani, 1997). Setting specific, challenging goals leads to a higher performance (Locke and Latham, 2002).

Sales managers design sales control systems to manage motivation and to enhance the welfare of both company and sales force (Krafft, 1999). There are three different types of sales control systems: behaviour-based (extensive monitoring considered, high levels of managerial direction and subjective evaluation of performance), outcome-based (little monitoring and managerial direction and objective measures of outcomes) and a combination of both (Anderson and Oliver, 1987). Extensive controversial research has been done on the benefits of using behaviour-based or outcome-based control systems as the following table shows.

**Table 2-4: Research on behaviour-based and outcomes-based management systems**

<table>
<thead>
<tr>
<th>Authors</th>
<th>Findings</th>
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<tbody>
<tr>
<td>(Eisenhardt, 1985)</td>
<td>When a task is highly programmable, behavioural control systems are required while for less programmable tasks outcome control systems are more adequate.</td>
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<tr>
<td>(Anderson and Oliver, 1987)</td>
<td>Contrasted different forms of control systems used in sales force evaluations in terms of emerging economic, organisational and cognitive psychological theories.</td>
</tr>
<tr>
<td>(Henderson and Soonchul, 1992)</td>
<td>Conducted a study of 41 Information Systems designs and found behaviour-based systems to be positively related to performance.</td>
</tr>
<tr>
<td>(Cravens et al., 1993)</td>
<td>Empirical study of 144 diverse sales organisations. The findings suggest incentives compensation has a limited role on sales force control systems.</td>
</tr>
<tr>
<td>(Jaworski et al., 1993)</td>
<td>Empirical study surveying 500 marketing executives. The results suggest that behavioural control systems are not related to satisfaction.</td>
</tr>
<tr>
<td>(Oliver and Andreson, 1994)</td>
<td>Empirical study surveying Sales Representatives from an electronic manufacturer. Results showed that the predicted effects of control philosophy on sales strategies and sales performance are not verified in practice. Behaviour control systems were found to be negatively related to performance but positively related to satisfaction.</td>
</tr>
<tr>
<td>(Oliver and Anderson, 1995)</td>
<td>While behavioural and control systems appear to be operating according to theory, there is evidence on an integrated philosophy exhibiting degrees of both together.</td>
</tr>
<tr>
<td>(Challagalla and Shervani, 1997)</td>
<td>They disaggregated the behaviour-based control system into two types: activity and capability control and positively tested the reliability of those measures through an empirical test in a sales force context.</td>
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</tbody>
</table>
Taking an agency theory perspective, Eisenhardt (1989) suggests that organisations prefer pay based on behaviours, and when behaviours are difficult to measure, organisations use pay based on outcomes (Eisenhardt, 1988). The latter is the case in the Spanish pharmaceutical sector. This researcher has been engaged in more than 100 different pharmaceutical organisations across Europe (more than 80 in Spain) and observed a commonality among them: salespeople work alone, are detached from the organisation because they are geographically dispersed and their behaviours are difficult to control and measure. Sales force size tends to be large because pharmaceutical organisations cover wide geographical areas. This reinforces the rationale for the use of outcome-based control systems in line with the findings from Krafft (1999) reported in the table above.

Prior research has established that sales quotas are a widely used outcome-based systems within the goal setting process for effective management of sales forces (Jackson et al., 1983). They have been used since the 1800’s although there is evidence of increased adoption and usage since the 1920’s (Douthit, 1976). Almost forty-five years ago, Oxenfeldt, identified the wide use of sales quotas and their importance to marketing people who, he argued, ought to have a thorough understanding of them (Dubinsky and Barry, 1982; Douthit, 1976; Oxenfeldt, 1966).

Sales managers use sales quotas, among others, to motivate and control their organisation’s sales force (Dubinsky and Barry, 1982; Futrell and Swan, 1976; Douthit, 1976). Sales quotas are a strong communication channel to facilitate the implementation of the company’s sales strategy (Zoltners et al., 2001: 327). Moreover, sales quotas are used to set individual sales representative objectives and if those targets are achieved the sales person is rewarded or penalized (Darmon, 1997). The reward usually takes the
form of financial incentives and reaching and surpassing the quota typically provides an incentive which is higher than the one they could have achieved (Locke and Latham, 1990; Wotruba, 1989; Futrell and Swan, 1976; Winer, 1973). The use of sales quotas can induce salespeople to produce accurate sales forecasts (Mantrala and Raman, 1990; Gonik, 1978).

Sales quotas are defined as “…sales volume objectives assigned to specific sales units, such as regions, districts, or salesmen’ territories, usually expressed in terms of dollar volume…An apparently superior quota setting procedure would take into account both manufacturing efficiency, long-term goals, and optimal use of sales effort” (Winer, 1973: 180). Douthit considers sales quotas as some “…sort of system to measure the results of selling efforts against reasonable expectations” (Douthit, 1976: 467), while Stanton considers them for the control and evaluation of the salespeople (Stanton et al., 1991). They also provide a uniform comparison of performance across the sales force (Good and Stone, 1991).

The definition used in this study considers “sales quotas” as the share of the national sales forecast allocated to each sales representative. It is both an objective and a goal the sales representative has to achieve to get their incentives paid. Therefore, “quotas”, “sales quotas”, “objectives” and “goals” are used interchangeably throughout this research to mean exactly the same thing.

Setting simple, fair, realistic and motivational sales quotas for the sales force is extremely difficult (Zoltners et al., 2001: 334; Darmon, 1997; Mantrala et al., 1994). There is a concern in the literature about how to capture and treat differences between the nature of different sales territories and the sales representatives working on them; mainly the consideration of territory future sales.

Territory, within the sales management context, represents the environment in which the representative has to compete and perform (Pilling et al., 1999), while “environment” is considered to be the domain at the representative level where both internal and external competition for resources occurs; internal when designing the territory and external...
when competing inside that territory. A territory is the task assigned to a single salesperson and the boundaries could be considered to be a geographical area, a group of clients, products or product lines or any combination of the three (Cravens et al., 1972). Baldauf et al., consider sales territory design as spelling out the work responsibility for the sales force considering both the geographic and the account responsibility perspectives (Baldauf et al., 2001).

In this research a “sales territory” is considered to be the well-defined geographical area assigned to a single salesperson. The sales representative is assumed to have responsibility over all or a number of clients within that geographical area. Also, “future sales by territory” is considered to be the amount of sales in units or value that an organisation is likely to generate in one particular sales territory in the following year.

Prior research shows that the “richer” the attributes of the territory, the higher its future sales will be. The most relevant attributes (at sales territory level) of future sales are market demand for the industry (Pilling et al., 1999), average sales by account (Pilling et al., 1999), growth rate of market demand for the industry (Pilling et al., 1999), geographical dispersion of the accounts (Grant et al., 2001), competitive intensity (Grant et al., 2001) and past performance (Douthit, 1976). Future sales in a territory influence the final performance of the sales representative within that territory (Grant et al., 2001; Baldauf et al., 2001; Pilling et al., 1999; Piercy et al., 1999; Douthit, 1976). It also determines work behaviour as well as motivation at the sales persons level (Klein, 1990).

Since the 1960’s researchers have developed several sales quota determination models to capture from theoretical and empirical perspectives territory future sales and their effects on sales force effectiveness (Darmon, 2001; Darmon, 1997; Mantrala et al., 1994; Good and Stone, 1991; Mitchell, 1979; Darmon, 1979; Easton, 1976; Herzog, 1961). However, there is still a general lack of understanding on how to develop sales quotas for sales representatives (Turner et al., 2007; Schwepker Jr. and Good, 2004). Contemporary sales managers believe that improving the quota development process is critically important (Marchetti and Brewer, 2000). There is a lack of survey research on
managers’ attitudes regarding quotas and a significant void in the general understanding and research about sales quotas (Good and Stone, 1991).

Table 2-5: Extant research on capturing future territory sales

<table>
<thead>
<tr>
<th>Authors</th>
<th>Concerns</th>
<th>Findings</th>
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<tbody>
<tr>
<td>(Talley, 1961)</td>
<td>The “kinds of evils” generated from poorly designed sales territories for Sales Representatives.</td>
<td>Empirical research illustrating how the development of improved techniques of territorial design allowed a company to improve performance.</td>
</tr>
<tr>
<td>(Lodish, 1975)</td>
<td>Determination of the boundaries of sales territories in order to maximize profit. Procedures at that time were only based on measurable sales potential by territory.</td>
<td>Development of a mathematical programming model and heuristic solution procedure to realign sales territories.</td>
</tr>
<tr>
<td>(Lucas et al., 1975)</td>
<td>Relationship between sales achieved by a salesperson and variables like sales territory potential and sales representative workload.</td>
<td>Empirical study indicating that territorial potential and sales representatives’ workload are important predictors of sales. A model to assist management in determining sales force size and evaluating performance is derived from the case.</td>
</tr>
<tr>
<td>(Shanker et al., 1975)</td>
<td>The cost of a making an industrial sales call had increased significantly and finding ways of better investing this resource was deemed necessary.</td>
<td>Development of a procedure to solve the dual problem of boundary definition and call frequency on territory design. A case example is used to illustrate how the procedure is applied in practice.</td>
</tr>
<tr>
<td>(Parasuraman and Day, 1977)</td>
<td>Sales management decision models not exhaustive enough at that time.</td>
<td>Developed a model for sales territory evaluation in an intuitive way for district managers through using quantitative methods and simulations.</td>
</tr>
<tr>
<td>(Mantrala et al., 1994)</td>
<td>Organisations usually have good reasons to use the type of compensation plan they use for their sales force. However, the shapes and parameters (at the territory level) determining the incentives to be paid are usually selected in an arbitrary fashion.</td>
<td>The paper presents an agency theoretic model-based approach that assists sales managers in determining the profit-maximizing structure of a common multi-product sales quota-bonus plan for geographically specialized heterogeneous sales force operating in a repetitive buying environment. A case involving Pharmaceutical salespeople is used to demonstrate how the approach can be applied.</td>
</tr>
<tr>
<td>Reference</td>
<td>Description</td>
<td>Notes</td>
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<tr>
<td>(Skiera and Albers, 1998)</td>
<td>The optimal assignment of SCUs (sales coverage units) to sales territories covered by individual salespersons.</td>
<td>Development of a mathematical model named COSTA “Contribution Optimizing Sales Territory Alignment”. COSTA is a response to the complex, difficult-to-implement models developed by many researchers in the 1970’s.</td>
</tr>
<tr>
<td>(Piercy et al., 1999)</td>
<td>The lack of research attention to the design of sales territories.</td>
<td>Research evaluating the determinants of sales organisation effectiveness in a sample of British organisations. The study suggests that territory design has a large effect on sales organisation effectiveness.</td>
</tr>
<tr>
<td>(Drexl and Haase, 1999)</td>
<td>The optimal sizing and deployment of the sales force, and resource allocation need to be addressed in order to maximize profits from the selling organisation.</td>
<td>Developed a fast approximation method to sales force deployment. An application on the beverage industry is presented.</td>
</tr>
<tr>
<td>(Zoltners and Lorimer, 2000)</td>
<td>Improvements of sales force productivity through better understanding the sales potential from the territories.</td>
<td>Introduce a process that assures objective criteria are used to evaluate alignment needs and recognizes the need to incorporate local management judgment.</td>
</tr>
<tr>
<td>(Baldauf et al., 2001)</td>
<td>The lack of research attention to the design of sales territories.</td>
<td>Antecedents of sales organisation effectiveness are analyzed in Austria and the United Kingdom. Among others, they found important indirect impacts on effectiveness for sales management control strategy, territory design and salesperson behaviour performance.</td>
</tr>
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</table>

Source: originated by the author

This review of the literature shows that there is lack of understanding about what facilitates the development of effective sales quotas for sales representatives. Effectiveness, as considered in this study, refers to a sales quotas development process that satisfies stakeholders’ expectations. Those expectations that are not being met by the sales quotas development process need to be reviewed and evaluated in terms of the longer term impact they can have on the business performance. Effective sales quotas at the sales representative level are goals that while being challenging are realistic, objective, transparent, fair, well-understood and accepted by the sales force.
2.3.3 Business processes

Braganza and Lambert (2000) reviewed the extant literature on business processes and concluded that there is significant divergence in definitions of the term “business process” (Braganza and Lambert, 2000). Irani et al. (2000) also reviewed this body of literature and grouped nine different definitions of business processes concluding that there is lack of consensus as to what business processes are (Irani et al., 2000). Business processes are considered most commonly as sets and/or sequences of activities and/or tasks, as ways to organize people and resources and as horizontal forms among many others (Irani et al., 2000). The problem with these definitions is that every activity in the organisation can potentially be called a business process. For this reason, Braganza and Lambert (2000) identified three characteristics that business processes need to have:

1) Processes need to add value to their stakeholders.
2) Processes coordinate those activities that people ‘should’ undertake to address stakeholders’ expectations.
3) Processes cross functional boundaries.

In this study, a business process is considered to be a collection of stakeholders’ expectations that an organisation seeks to address through a series of activities. In this sense, the goal setting business process for sales forces is described in the study in terms of stakeholders’ expectations and those activities satisfying them. Braganza and Lambert (2000) developed the “Process Management Framework”, which was used by this study and illustrated in Figure 2.2. The framework is relevant to this study because it integrates organisations at strategic and operational levels. Other more traditional frameworks, considering sets of sequential activities, were deemed inappropriate to achieve the aims of this study. The Process Management Framework enables insights into whether or not the sales quotas development business process for sales forces within the pharmaceutical industry is actually addressing the expectations of its stakeholders through the implementation of activities (Braganza and Lambert, 2000).
Figure 2.2: Process Management Framework

Stakeholders are defined as “…individuals, groups or organisations that are interdependent with the organisation’s strategy.” (Braganza and Lambert, 2000: 181).

Expectations include “…the needs, wants, delights, legal obligations and specific requirements of the stakeholder that the organisation has to address.” (Braganza and Lambert, 2000: 181).

Processes “…are derived from stakeholders expectations.” (Braganza and Lambert, 2000: 182).

Activities are defined as “…the work, roles, responsibilities and tasks that one or more individuals perform as their ‘day job’.” (Braganza and Lambert, 2000: 183).

The framework is implemented through the development of a “Process Dependency Network” (PDN) as referred in the literature and illustrate in Figure 2.3 (Braganza and Lambert, 2000).
First, the organisational business objectives are identified. Then, stakeholders and their expectations are determined and each of their expectations linked to create business processes. Finally, the sub-processes or activities are defined and linked back to the stakeholders’ expectations creating a map of dependencies that allows the researcher to understand the contribution of each activity to the achievement of the organisational objectives through the process which satisfies stakeholders’ expectations.

### 2.3.4 The resource-based view of the firm and the capability maturity model

The resource-based view of the firm focuses on the internal organisation of firm’s resources to achieve a competitive advantage in the market place. Organisations are considered as bundles of heterogeneous resources, with differences that persist over time. The way in which these resources are combined is more relevant than their sole presence (Eisenhardt and Martin, 2000). A resource is defined as “an asset or input to production (tangible or intangible) that an organisation owns, controls or has access to on a semi-permanent basis” (Helfat and Peteraf, 2003: 999). Barney (1991) categorized
the characteristics of those resources through the so-called VRIN quartet of attributes that contributes to competitive advantage. These attributes are Value, Rarity, Inimitability and Non-substitutability (Barney, 1991). The presence of certain organisational capabilities, with a configuration containing the aforementioned attributes, could generate competitive advantage; in this particular case, through the development of an effective sales quotas setting process.

An organisational capability is defined as “a high-level routine (or collection of routines) that, together with its implementing input flows, confers upon an organisation’s management a set of decision options for producing significant outputs of a particular type”, while a routine is a “behaviour that is learned, highly patterned, or quasi-repetitious, founded in part in tacit knowledge” (Winter, 2003: 991). Teece et al. (1997) refers to capabilities as “the key role of strategic management in appropriately adapting, integrating and reconfiguring internal and external organisational skills, resources and functional competences to match the requirements of a changing environment” (Teece et al., 1997: 515). Both definitions are taken in this study as they are complementary.

Helfat et al. (2003) introduce the idea of capability lifecycle. There is a (a) founding stage, (b) a development stage, (c) a maturity stage and the capability could branch into one of the following six stages: (d1) retirement (death), (d2) retrenchment, (d3) renewal, (d4) replication, (d5) redeployment and (d6) recombination (Helfat and Peteraf, 2003). The understanding of characteristics of each of the stages is relevant for deciding what actions to take in order to acquire, develop and maintain new required capabilities and close the gap between current and desired states. In a similar vein, the Software Engineering Institute of Carnegie Mellon University developed the so-called SEI CMM model (Software Engineering Institute Capability Maturity Model), in 1986, which constitutes a framework to assess contractor software development capabilities. Since then, many variations of the model have been developed for different processes and industries; for example the business development capability maturity model on business development (Nutt, 2002).
The SEI CMM defines levels of capability maturity organisations have to progress through to move towards an optimal stage. They have defined five standard levels of maturity: 1) Initial, 2) Repeatability, 3) Defined, 4) Managed and 5) Optimizing (Paulk et al, 1993):

1. Initial level

The initial level is characterized by the ad-hoc nature of the process performed. There is limited management commitment and relies on heroic behaviours of a few talented individuals in the firm. The processes are chaotic in nature and there is limited infrastructure to support them.

2. Repeatability

The repeatability level is characterized by the absence of chaos; there is some more discipline on the processes; past successes could now be repeated and there is a project management system, of some nature, in place capable of benchmarking results to previous experiences.

3. Defined

This level is characterized by more standardization and consistency of processes. There is a common, organisation-wide understanding of the activities, roles and responsibilities of the people involved in the process. Stakeholders from the processes value training, tools and resources as process facilitators.

4. Managed

The managed level is characterized by predictability of the process. The process is measurable and operates within well-defined boundaries. It allows the organisation to predict trends in order to take corrective actions on due time. The outcome of the process is predictably of high quality.
5. Optimizing

The optimizing level is characterized by as continuously improving their process capabilities through innovation.

The different levels described represent different plateaus to be reached in the journey to improving capabilities. Moving from one level to another does not necessarily implies the same degree of improvement as moving from level one to level two is presumably easier than moving from four to five. The CMM model “is a framework that describes de key elements of an effective software process. The CMM describes an evolutionary improvement path from an ad hoc, immature process to a mature, disciplined process.” (Paulk et al., 1993: 7). In this study, the CMM model was adapted to the pharmaceutical sector and to sales forces’ sales quotas development process to map the process improvement that can be achieved.

Competing models were precluded because their focus was set on specific organisations while the CMM model is more generic and applicable across industries and functions. Some other models like, for example, Hammer’s “Process and Enterprise Maturity Model” (PEMM) in essence stems from the CMM model (Hammer, 2007). The contribution of Hammer’s framework in itself is not significant. The CMM model is particularly relevant to this research because: (a) it provides a well structured framework to measure capability maturity; (b) develops a clear path to follow to improve capability maturity; (c) it is widely used by academics and practitioners alike and (d) it has been already proved to be extremely useful in many fields including human resources, program management, business development, systems engineering and strategic communication.
2.3.5 The sales quota development business process

Although the sales quotas development process fundamentals are common across organisations and sectors, the characteristics of the process vary depending on the type of company considered (Douthit, 1976). An initial distinction that could be made is the degree of participation of the sales representatives in the process. The approach could be more or less participative and the process centralized or decentralized.

If the sales management team has high quality information, sales quotas could be defined centrally and “force” the sales force to devote maximum promotional time to certain products. On the other hand, more decentralized processes allow the salesperson to decide what promotional activities to carry out depending on their utility function (Darmon, 1997).

When a degree of centralization is desired, management needs to collect concomitantly a combination of internal and external information. To start with, the input of the representatives is essential as sales response to promotion by territory, utility functions and risk positions need to be determined at the territory level. There is an information asymmetry situation that needs to be resolved. Wotruba and Thurlow suggest to have the sales force involved in the process through a two-way participative process (Wotruba and Thurlow, 1976).

The sales quotas development process could be developed at different levels depending on the degree of sophistication the company has. There is a first level, where management only considers readily available information such as past sales data and managerial judgments and perceptions (Churchill et al., 2000; Strahle and Spiro, 1986). At this level, sales for one year are based on the previous year with some judgmental adjustments and without involving the sales representative at all. This leads to a tough bargaining process between sales force and management (Darmon, 1997).

There is a second level that considers sales representatives’ sales response to promotion functions. For this process, sales force’ input is required and it is a two-ways-process
where representatives’ input is incorporated. This includes factors such as level of competition in the territory, territory sales potentials, and market penetrations. The information provided has to be as objective as possible at the eyes of the different stakeholders.

The third and final level considers the market response and also the salespeople’s preferences (Darmon, 1979; Mantrala et al., 1994). Through using conjoint analysis, Darmon estimated preferences’ judgments for combinations of quotas and bonuses for specific territories accounting for: “(1) the expected sales response function to this salesperson’s efforts, (2) the environmental uncertainty perceived by the salesperson, (3) the salesperson’s attitudes towards risk, and (4) the salesperson’s disutility for effort” (Darmon, 1997: 14). Mantrala et al. developed a mathematical model where the sales manager sets sales quotas taking into consideration territorial differences for each of the sales representatives. The model considers different sales potentials by territory and the salesperson decides the fraction of the quota to be achieved under a given common compensation plan (Mantrala et al., 1994).

Locke and Latham (1984) define how goals should be set to obtain optimal results and consider the following steps: 1) specify the general objective; 2) specify how the accomplishment of the task will be measured, 3) specify the standard or target to be reached; 4) specify the time span involved; 5) prioritize goals; 6) rate goals as to difficulty and importance; and 7) determine coordination requirements (Locke and Latham, 1984 :27). The steps proposed can not be associated with the sales quotas development process followed for pharmaceutical sales representatives. The steps presented here focus more strongly on the accomplishment of goals than in the process of defining those goals. Apart from step 1, the other steps are too specific and seem to belong to different abstraction levels. The process proposed focuses on the individual and begins with the mere definition of the objective. This thesis focuses on organisational capabilities that facilitate the development of sales quotas; in this case step one of Locke and Latham’s process. For that reason, the way in which Locke and Latham understand the goal setting process is not helpful in shaping this research.
Zoltners et al. (2001) provide another perspective of the goal setting process and on this case it is more business-oriented and specifically developed to set sales quotas for sales forces. Their approach considers five different general activities ordered sequentially, namely 1) set national goals and objectives; 2) understand territory expectations and behaviors; 3) develop potential allocation formulas and processes; 4) finalize the formulas and processes by evaluating the consequences of the proposed alternatives; and 5) review and finalize regional and district goals with sales managers.

Figure 2.4: The sales quota development process for sales forces (Zoltners, 2001)

Source: Zoltners, 2001

However, they provide little or no detail as to what the business objectives are, who the stakeholders are, their expectations or the specific activities addressing those expectations. Without these, the goal setting process is only a group of activities ordered sequentially with no explanation about what are the objectives these activities are intending to achieve, who is benefiting from them and what is enhancing or debasing the organisation’s ability to implement those activities. Zoltners et al. (2001) are explicit on potential barriers to the goal setting process. The most relevant barriers identified are the possibility to measure results, uncertainty in predicting future performance, understanding of the most appropriate activities to be carried out in the field by the sales representative and the existence of accurate and reliable territory level data (Zoltners et al., 2001). More generally, Irani et al. (2000) highlight the following barriers to an effective implementation of business processes redesign: “loss of nerve, focus and stamina; senior management who are comfortable in their ‘ivory towers’; lack of ‘holistic’ focus and setting for minor improvement gains; human and organizational issues; organizational culture, attitudes and skills based; and resource restrictions and fear of IT” (Irani et al., 2000:9).
An initial conceptual model of sales quotas development is developed to facilitate understanding and guide the fieldwork that needed to be carried out. The model is illustrated in Figure 2.5. The assumptions underpinning the model are as follow. First, the sales quotas development process is a collection of stakeholders’ expectations being satisfied or being made operational through a series of activities. This implies that the business objectives, stakeholders, their expectations and each activity satisfying those expectations need to be made explicit. For each of those specific activities there are barriers preventing that activity from being performed in the organisation.

Figure 2.5: Initial conceptual model of the sales quotas development process

Initial Conceptual Model

1. What is the sales quotas development process for sales forces? (Who are the stakeholders of the process and their expectations?)
2. What are those activities (components of the sales quotas development process) addressing stakeholders expectations?
3. What are the barriers to the effective development of sales quotas?

Source: originated by the author
2.5 Framing the research aims and question

The research aims and question stem from the analysis conducted in the previous sections. Specifically, this research attempts to determine what a sales quota development process for pharmaceutical sales forces is and to determine the barriers to the process of developing sales quotas for sales representatives. From these barriers, organisational capabilities that would allow overcoming the aforementioned barriers are derived and assessed in terms of relevance under diverse organizational contexts. The description of the sales quotas development process and the identification of barriers is required to identify barriers to the process that might or might not have been included in the literature and derive organisational capabilities from those. As discussed and according to Douthit (1976), sales quotas development process characteristics vary depending on the type of company or industry sector considered (Douthit, 1976). Therefore, understanding and explaining the sales quotas development process for sales forces within the pharmaceutical sector is paramount.

The three aims of the research are: (a) to understand the sales quotas development process for pharmaceutical sales forces; (b) to determine a set of critical organisational capabilities for an effective sales quotas development process and (c) to develop a diagnostic tool to assess the maturity of an organisation’s sales quotas development process to identify the capabilities that need to be acquired or developed further to improve this process.

The previous arguments and aims lead to the articulation of the research question as follows:

**What are the organisational capabilities required to enhance the sales quotas development process?**
2.6 Chapter summary

The chapter described first the systematic approach used as part of the literature review strategy. The concepts and constructs that form part of this research were introduced and discussed and an initial conceptual model, that guides the first phase of this research, was presented. The focus of the chapter was set on exploring the sales quota development process for sales forces as a priority. The research question is articulated.

The next chapter clarifies the intellectual and theoretical foundations of this study. It discusses the different assumptions in terms of ontology, epistemology, human nature and methodology. The methods used across the research are presented and the rationale for its use discussed.
3 Research methodology

3.1 Chapter introduction

Understanding and selecting the most appropriate methodological approach that allows addressing the research question is critical. There are a myriad of methods to select and use within distinct methodological approaches. This chapter first reviews a variety of philosophical positions and assumptions around four areas: ontology, epistemology, human nature and methodology. The intellectual and theoretical foundations this researcher holds are made explicit. The research methods utilized across the research, coherent with the methodological approach followed, given the ontological and epistemological assumptions, are discussed.

3.2 Philosophical underpinnings

Social knowledge can be gleaned through a variety of different lenses. Depending on the set of assumptions a researcher adopts, his/her research strategies might vary producing potentially different outcomes. Therefore, understanding the nature of the available options and selecting those appropriate for the research becomes essential. Reviewing the literature with a sound understanding of the various approaches to social enquiry facilitates the development of the initial conceptual model, the research question, and the research strategy that is adopted.

From the literature on “social science research”, it is clear that there are a variety of theoretical perspectives and approaches. Some of them are very similar but others are mutually exclusive. At the beginning, this researcher found himself confused and bombarded by a myriad of ways in which people not only perceive the nature of reality but also understand and communicate that reality to fellow human beings.

Burrell and Morgan developed a framework that considers the philosophical assumptions that underwrite the different perspectives that can be used by
organisational researchers to conduct research (Burrell and Morgan, 1979: 29). This framework serves as an intellectual map acknowledging four different ways in which social-scientific reality can be perceived. Each perspective is a group of meta-theoretical assumptions and takes into account different positions researchers might adopt in terms of four main areas: ontology, epistemology, human nature and methodology.

Ontology as defined in the Penguin Dictionary of Philosophy is an inquiry into, or theory of being (Mauntner, 2000). Blaikie considers the concept as “the claims or assumptions that a particular approach to social enquiry makes about the nature of social reality – claims about what exists, what it looks like, what units make it up and how these units interact with each other” (Blaikie, 2003: 6). There are different ontological perspectives ranging from realism (commonly called “naive realism”) to nominalism. In the former, an apprehensive reality is assumed to exist; there is a real world, external to the individual cognition and made up of hard, tangible and relatively immutable structures. On the other hand, nominalism “…revolves around the assumption that the social world external to individual cognition is made up of nothing more than names, concepts and labels which are used to describe” (Burrell and Morgan, 1979: 4).

Epistemology is a theory of knowledge (Mauntner, 2000). Blaikie considers the concept as “the claims or assumptions about the ways in which it is possible to gain knowledge of this reality, whatever is understood to be; claims about what exists may be known” (Blaikie, 2003: 7). Epistemological perspectives range from positivism in on side of the spectrum, to anti-positivism on the other. Positivism draws from the Aristotelian approach by combining logic and rationality with empirical observation. Positivism assumes that the researcher is a sort of “spectator” of the object of enquiry and “…good research consists of the undistorted recording of observations obtained through efficiency-driven methods of investigation and the use of precise terminologies and classifications in the documentary process” (Chia, 2003). Anti-positivism “…is firmly set against the utility of a search for laws or underlying regularities in the world of social affairs” (Burrell and Morgan, 1979: 5). For the anti-positivists there is no such
thing as an “observer” and they believe that the world is relativistic and any analysis and conclusions that could be drawn depends on the individual.

The relationship between human beings and the environment should be predicted as human life is the object and subject of enquiry. On one extreme, there is the view that human beings are the creators of the environment (voluntarism) and on the other, the view that we respond in a mechanistic or even deterministic way to events in the environment (determinism) (Burrell and Morgan, 1979: 6).

The three assumptions mentioned before have a direct implication on the methodology that the researcher might follow. Methodology “…is the analysis of how research should or does proceed” (Blaikie, 2003: 7). Easterby-Smith defines it as a “combination of techniques used to enquire into a specific situation” (Easterby-Smith et al., 2002: 31). It has to do with “…the way in which the individual creates, modifies and interprets the world in which he or she finds himself” (Burrell and Morgan, 1979: 1). There are different approaches ranging from an ideographic approach to a nomothetic approach. The former, relies on first hand knowledge of the subject under investigation while the latter relies on systematic protocols and techniques (Burrell and Morgan, 1979: 6).

Having explored different positions researchers might take in terms of ontology, epistemology, human nature and methodology, according to Burrell and Morgan, four fundamental perspectives could be developed from two dimensions: a subjective - objective view of reality (the nature of science) and radical change - regulation (the nature of society). Figure 3.1 illustrates the different sociological paradigms.
Both the interpretive and functionalist perspectives are suitable for the study of organisations. The interpretive perspective considers social reality as a network of assumptions and intersubjectively shared meanings while the functionalist perspective is rooted in the tradition of sociological positivism and concerned with generating knowledge to solve problems in a highly pragmatic way.

Radical humanism places the emphasis on human consciousness and the idea that the world could be changed through a change in the modes of cognition and consciousness. Authors within this paradigm set the basis for an anti-organisation theory. Radical structuralism is concerned with radical change within the realist social world. Although it might have significant implications on the study of organisations, they have only been developed in the most basic forms.

This researcher acknowledges that the framework is a simplification of the different available positions. Four dimensions are considered and then four perspectives are developed from them. This process of synthesis always runs the risk of oversimplifying
matters. However, this framework proved to be extremely practical and it has been widely used by many researchers before.

### 3.3 A realist ontology and epistemology

This study lies within the interpretivist and functionalist paradigms as defined by Burrell and Morgan (Burrell and Morgan, 1979: 22). In particular, this research adopts a realist perspective, which acknowledges that there are fundamental differences between the social and natural worlds. From an ontological point of view, the realist paradigm assumes that in the social world objects exist and act independently from the researcher and the activities performed. However, it also assumes that this reality is socially constructed and is impacted by underlying structures and mechanisms (Blaikie, 2003: 60).

Realism assumes the existence of three domains; the empirical, the actual and the real. In the empirical domain, events are experienced by the actor him/herself. In the actual domain, events occur independently from the actor’s observation. In the real domain is where the mechanisms that generate these events lie (Bhaskar, 1979). Table 3-1 illustrates the different domains of reality. The theories and concepts developed to explain the phenomena that occur within these three domains are called “transitive objects” and they are also objects of study on their own right (Blaikie, 2003: 61). These transitive objects are developed to explain real entities and their relationships. In this research, those organisational capabilities that allow an effective sales quotas development process are determined. The SQD Model developed as an outcome of this thesis belongs to the real domain and explains events occurring both in the empirical and actual domains. It is based on perceptions from sales and sales operations executives but also takes into account perceptions from many other stakeholders’ to the goal setting process. Blaikie postulates realism as “a search for generative mechanisms” (Blaikie, 2003:59). The SQD Model is indeed a generative mechanism that allows organisations to develop better goals.
Epistemologically, realism is interested on finding ways to understand these structures and mechanisms, which are often unknown. While the effects could be visible, what caused those effects might not be observable. The aim is not to find regularities and conjunctions of events, like in positivism, but to build tendencies that help to explain and predict phenomena. The realist perspective allows the use of multiple data sources and perspectives and allows making generalizations of tendencies that go beyond the observed elements. It tries to adapt the methods used in the natural sciences into the social world acknowledging the flaws inherent to them.

The methods utilized on this research are described in Figure 3.2. From a methods point of view, this research is first informed through the extant theory. Then, a case study is carried out focusing on uncovering barriers to the sales quotas development process through taking stakeholders’ perspectives on it. It concludes with a survey to understand relevance of organizational capabilities under diverse contexts and allowing the generalization of these results to a wider population, with limitations that are made explicit. The use of both qualitative and quantitative methods enrich the results of the research through, first allowing capturing elements that were not included in the extant literature, and second, allowing generalization of results, in terms of tendencies. Specifically, this research is about organisational capabilities that are required for an effective sales quotas development process. Conducting a survey at the outset would have been ineffective as the literature was not comprehensive in terms of organizational capabilities and many could have been missing from the list as it happened in the seminal work produced by Good and Stone (1991) (Good and Stone, 1991). Conducting a case study alone, could have been useful to understand the particular situation of the company of reference but it would have not helped in generalizing tendencies to other similar organisations due to the specificity of the context.

Table 3-1: Domains of reality

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<td>Mechanisms</td>
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Source: Blaikie, 2003:60
The literature reviewed showed that the goal setting field is not only an underresearched area but also that most studies have been performed within a functionalist paradigm. This hindered the possibility to gain knowledge on aspects that might have not been made explicit by the social actors before. The existing research is mostly quantitative in nature and takes for granted assumptions that might not be shared by the subjects and also ignores elements that might be relevant for them. Failing to incorporate different stakeholders’ perspectives in the analysis of the sales quotas development process jeopardizes the comprehensiveness and robustness of the studies as it is made explicit on this research. For this reason, this researcher reviewed several options within the interpretive paradigm to capture different perspectives.

Depending on the degree of subjectivity to be allowed, there are many different categories of interpretive theory that could be considered: solipsism, phenomenology,
phenomenological sociology and hermeneutics. Also, apart from these, and closer to phenomenology, two more categories could be found: ethnomethodology and the phenomenological symbolic interactionism. This researcher found a phenomenological approach within the interpretive sociology to be extremely appropriate for the exploratory phase of the research. More specifically, Alfred Schutz’s work on existential phenomenology was found very interesting and although it was not applied as it stands in his seminal book “The Phenomenology of the Social World”, some of the principles on the operationalisation of the approach (as adapted by Blaikie) were used (Schutz, 1972; Blaikie, 2003: 43).

Phenomenology as a school of thought has departed from Husserl’s work into different branches, which broadly speaking could be grouped into two groups: transcendental or “pure” phenomenology and “existential” phenomenology. The arguments for the former approach were not convincing altogether to the philosophical community and the “pure” approach was to be considered as a springboard for the latter approach to emerge. The transcendental approach was located in the subjectivist extreme of Burrell and Morgan’s paradigms framework (Burrell and Morgan, 1979: 22). According to Burrell and Morgan, the existential approach is often associated with the work of Heidegger, Morleau-Ponty, Sartre and Schutz. Although all of them had a lot in common in terms of how they perceived the world, they focused their work on different aspects. This researcher adopts Alfred Schutz’s approach. Schutz based his work on Weber’s contributions identifying a number of ambiguities and subjecting them through philosophical analysis. Schutz developed a phenomenological analysis of meaning identifying its origins in “the stream of consciousness”, introducing a temporal dimension, the concept of “reflexivity” and the selection of meaningful actions. The fundamental difference with Weber is that Weber understood ideal types as a methodological device while Schutz saw them as an inherent feature of everyday world. According to Schutz, human beings attach meaning to an action through the reflection on “past experiences”. Actions that are in the process of being experienced are not meaningful according to Schutz. He argues that the individual needs to define the purpose of the action in advance of the event, for the action to be meaningful. He focused on the analysis of intersubjective understanding. He was concerned with the
process of getting a “genuine understanding of the other person”; this meaning the intentional grasping of the intention of the other. This understanding depends on the occurrence of direct exchange and interaction. Also, the understanding is interpreted through the use of certain categories or types structured and defined in the minds of the people interacting through analyzing own experiences and reflecting upon them. Depending on the social context each individual would have a set of typifications, which are used to interpret the other person through interacting. “The central task of social science, according to Schutz, is to understand the social world from the point of view of those living within it, using constructs and explanations which are intelligible in terms of the common-sense interpretation of everyday life” (Burrell and Morgan, 1979:246).

This theoretical approach was implemented in this study through the identification of a set of first order constructs, which were made explicit by the subjects and captured by the researcher. Then, a set of second order constructs were developed by the researcher based on the interpretation of first order constructs that came in “pure state” from the subjects transcripts of the interviews carried out. By following this approach, one or a number of first order construct/s from different subjects were identified and “reduced” into a single second order construct considering the researcher’s interpretation. A group of second order constructs were further synthesized into categories.

### 3.4 Research techniques

#### 3.4.1 Research methods

Yin (2003) presents a framework where he considers different options of research strategies (as he calls them) such as “experiment”, “survey”, “archival analysis”, “history” and “case study”. He elicits three basic conditions to decide on which one is most appropriate: (a) the type of research question posed, (b) the extent of control an investigator has over actual behavioral events and (c) the degree of focus on contemporary as opposed to historical events (Yin, 2003: 5).
From the philosophical and theoretical positioning discussed in the previous section, the nature of the research question addressed and from applying Yin’s framework, the researcher found the case study method as the most appropriate to conduct an exploration of a sales quotas development process uncovering expectations and barriers albeit not explicitly considered in the literature. Uncovering expectations and barriers to the implementation of the sales quotas development process was only possible through digging into the different perspectives from different stakeholders to the process and the first order constructs gathered could not have been captured through an experiment, survey, archival record or history. Capturing this insights and knowledge did not require control from the investigator over actual behavioral events and the focus was contemporary.

### 3.4.2 Suitability of Alpha Pharmaceuticals for the study

The selection of potential cases followed theoretical sampling instead of statistical sampling due to the nature of the research: building theory from case studies. Eisenhardt (1989) suggests that theoretical sampling is the most appropriate method when building theory from case studies. She also highlights the importance of determining a well-defined population from where the case study can be drawn as this helps both to control potential extraneous variations and to better understand the limits for generalization (Locke et al., 1997).

The criteria that “prospect” organisations should follow in order to qualify for the study were defined in advance: (a) the sales of the products of the company are largely dependant on the promotional effort from the sales force; (b) repetitive buying environment involving short purchase and sales calling cycles; typically between three and five in the year; (c) promotion of a limited number of products with a fairly complex message to deliver. In the pharmaceutical industry for example, representatives usually promote two to four products to physicians in one sales cycle (Montgomery et al, 1971); (d) geographically specialised, which means that each representative could sell all of the products to clients in a specific geographical area; (e) there are a large
number of customers and each one of them could use one or more of the products offered; and (f) there are headquarters abroad and a branch in Spain.

These characteristics are typical from organisations commercializing pharmaceuticals, chemicals, and medical devices.

Alpha Pharmaceuticals was selected as an organisation meeting the theoretical criteria defined. It is a company within the top 30 in Spain in terms of revenue with a diverse portfolio of products directed to both general practitioners and specialists alike. It can be considered a mid-sized, fairly-typical pharmaceutical company.

### 3.4.3 Negotiation of access

Achieving “satisfactory access” is an essential element in any scientific research as the researcher might only get, otherwise, to the tip of the iceberg. This issue has not been discussed enough in the literature and the level of awareness in general remains lower than it should. There are only a few books exploring the concept of access (Gummesson, 2000). Getting superficial access to business life is problematic for academic researchers while getting an open working relationship with the prospects takes massive amounts of time and effort. Gummesson (2000) provides many examples on the effects of not getting proper access in research in the service sector.

This researcher previously worked with the subject as a consultant in different engagements focusing on helping to understand many sales force effectiveness issues. Examples of those are profiling, segmentation and targeting of physicians, size and structure of the sales force, sales force deployment and resource allocation. These provided trust, legitimacy, openness and access to key informants within Alpha Pharmaceuticals. It also allowed the researcher to start the enquiry with a good understanding of the business, the company and the people. The prospects could be open to discuss complex topics knowing that the researcher would have a strong preunderstanding of the situation, which would then facilitate communication and
understanding. “Preunderstanding refers to things such as people’s knowledge, insights and experience before they engage in a research program or a consulting assignment; understanding refers to their improved insights emerging during the program or assignment” (Gummesson, 2000: 57)

Gummesson (2000) identified four problems coming from a lack of preunderstanding:

1) Listing factors is fairly simple, what is more difficult is to attach weights to those factors.
2) The access method chosen might not provide the opportunity for the informants to give relevant answers or reactions.
3) The risk of never being aware of the lack of preunderstanding and instead focus on advanced statistical analysis of weak empirical material.
4) Vulnerability to modish concerns within management and a tendency to believe that those are the correct methods or solutions.

This researcher had a high level of pre-understanding of the business, company and people that allowed these four risks to be reduced. However, the researcher-consultant relationship had to be carefully managed. Before starting each interview it was made clear to the interviewees that my role at those interviews was exclusively that of a researcher and not of a consultant as some of them could potentially have perceived me due to past experience. The text read to the subjects before each interview is included in Appendix C.

### 3.4.4 Logistics, timetable and data collection

The initial criteria for selecting potential interviewees were defined from the literature. Those stakeholders that usually play a role in the goal setting business process were chosen and also the researcher asked for guidance within the organisation (to the general manager) to identify the different roles that potentially were related to the goal setting business process. For each of the interviewees, feedback as to who were the
different stakeholders was requested until reaching saturation. The main ones (those impacted by or having a role in the sales quotas development process) were interviewed and some of them were left aside as their value as participants was deemed limited to the study. For those roles for which there were many people in the organisation like for example sales representatives or district managers, the number of interviews was contingent on reaching saturation. The case study served for exploratory purposes, so the need to consider small increments of knowledge derived from the potential extra interviews was deemed inefficient. This researcher felt, after doing all the interviews, that most perspectives were strongly represented.

All the interviews were set up and coordinated by Alpha’s business intelligence director who ensured access to people and to a proper environment where to conduct the interviews. It was specifically requested to run the interviews in conference rooms with controlled temperature and also to have refreshments available for the comfort of both interviewees and researcher.

This researcher identified and performed 14 interviews to the following people and roles. All environmental elements were controlled and managed in advance to the interviews. Table 3-2 provides details regarding dates, place and environmental comments for each of the interviews.
### Table 3-2: Interviews' schedule and details

<table>
<thead>
<tr>
<th>Role</th>
<th>Interview date</th>
<th>Place</th>
<th>Environmental comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business unit manager 1</td>
<td>March 9th, 2005</td>
<td>Room 2, 2nd floor</td>
<td>The business intelligence director interrupted almost at the end of the interview as we were running late for the following interview according to schedule. The disruption had no significant impact on the line of enquiry. He came across as very marketing-oriented instead of the blend of sales and marketing that the definition of the role implies. The subject's attitude across the interview was of openness.</td>
</tr>
<tr>
<td>Business unit manager 2</td>
<td>March 9th, 2005</td>
<td>Room 2, 2nd floor</td>
<td>There were no disruptions. This business unit manager (BUM) was more sales-oriented as opposed as the first BUM interviewed. The subject's attitude across the interview was of openness.</td>
</tr>
<tr>
<td>Business intelligence director</td>
<td>February 25th, 2005</td>
<td>Room 1, 2nd floor</td>
<td>There were no disruptions. The subject's attitude across the interview was of openness.</td>
</tr>
<tr>
<td>Finance controller</td>
<td>February 18th, 2005</td>
<td>Room 2, 2nd floor</td>
<td>There were no disruptions. The subject's attitude across the interview was of openness and honesty. However, it was clear that he was not motivated by the topic that was being discussed.</td>
</tr>
<tr>
<td>Business intelligence analyst</td>
<td>March 30th, 2005</td>
<td>Room 2, 2nd floor</td>
<td>There were three phone calls on my mobile during the interview but after checking that they were not important they were not taken. This did not have a significant impact on the interview. The subject's attitude across the interview was of openness. He was keen on talking and showing his interpretation of different areas showing strong opinions.</td>
</tr>
<tr>
<td>Sales operations 1</td>
<td>March 17th, 2005</td>
<td>Room 2, 2nd floor</td>
<td>There were no disruptions. The subject's attitude across the interview was of openness. The subject had an inclination to get off the line of enquiry and talk about himself and his experience on diverse areas. This researcher had to keep on re-directing the interview back to the planned track.</td>
</tr>
<tr>
<td>Name</td>
<td>Date</td>
<td>Room</td>
<td>Notes</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------</td>
<td>---------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sales operations 2</td>
<td>March 31th, 2005</td>
<td>Room 1, 2nd</td>
<td>There was a phone call on my mobile during the interview but after checking that it was not important it was not taken. This did not have a significant impact on the interview. The subject's attitude across the interview was of openness. He came across as a highly motivated individual with fresh ideas and keen on changing elements in the organisation.</td>
</tr>
<tr>
<td>District manager 1</td>
<td>March 17th, 2005</td>
<td>Room 2, 2nd</td>
<td>There were no disruptions. The researcher's interpretation of the subject attitude across the interview was of openness although some of the comments that he made triggered suspicion from my side in terms of him trying to send a message to the general manager using the researcher as a channel. This was triangulated with other participants later on the project and was verified as an honest view.</td>
</tr>
<tr>
<td>District manager 2</td>
<td>March 30th, 2005</td>
<td>Room 2, 2nd</td>
<td>There was a phone call on my mobile during the interview but after checking that it was not important it was not taken. There was also a phone call on the conference room phone, which I took and happened to be a mistaken call. Also, somebody got in the room by mistake and immediately left. These disruptions did not have a significant impact on the interview and were taken with humour by both parts. The subject's attitude across the interview was of openness.</td>
</tr>
<tr>
<td>Sales representative 1</td>
<td>March 18th, 2005</td>
<td>Room 2, 2nd</td>
<td>There were no disruptions. The subject's attitude across the interview was of openness. He had strong opinions and clear ideas as to what is not working and what should be ideal from their side.</td>
</tr>
<tr>
<td>Sales representative 2</td>
<td>April 7th, 2005</td>
<td>Room 1, 2nd</td>
<td>There were no disruptions. The subject's attitude across the interview was of suspicion at the beginning of the interview and then when the subject realized that the researcher was not going to tell anybody about his opinions he became more open though defensive. The subject showed a high level of frustration and de-motivation, which was considered by the researcher as an element to take into account when analyzing the first order constructs.</td>
</tr>
</tbody>
</table>
The researcher interacted with the general manager and commercial director to gather their input although those interactions were not tape-recorded on their request. However, notes have been taken after those interactions. The first transcript was carried out by the researcher and the rest were sent to Argentina for a professional/paid transcription. The transcripts were sent back to the researcher who carried out a quality control for each one of the transcripts. Summaries of the transcripts were developed and sent to the participants on the first week of May 2005. The interviews were carried out in the native language of both the subjects and the researcher (Spanish). This was deemed appropriate as conducting the interviews in English would have prevented the participants from providing the level of richness required due to language limitations. The interviews generated 200 pages of transcripts in Spanish from where first order constructs were taken and second order constructs developed. This was carried out with the help of “NVivo”. Translating the transcripts into English was again considered to be inappropriate. After the analysis, both first order constructs and second order constructs that were deemed relevant were translated into English by the researcher. The main aim of the translation was to facilitate the understanding of the analysis and create a trail of evidence that could be followed by any English-speaking reader. Otherwise, it would have been almost impossible for a non-Spanish speaker to follow the analysis. A third party was tasked with auditing the quality of the translation. She audited the process from the interviews in Spanish to the development of the second order sets of constructs.
3.5 Quality of the research design

Yin (2003), proposes four different tests that could be applied to judge the quality of research designs: construct validity, internal validity, external validity and reliability (Yin, 2003: 33). This is reflected in Table 3-3. Within each one of those tests there are tactics that could be followed to ensure the design is strong enough. This researcher was aware of this before starting the case study and took actions addressing each of the different tactics within each test.

Construct validity

Multiple sources of evidence were used including 14 interviews and 2 meetings, electronic data and documents. A chain of evidence was built through recording every piece of information gathered into a database. Also, the analyses and reports were developed in a way that allows the reader to track the conclusions drawn on the second order constructs back to the original source (first order constructs). All the interviewees received a summary of their interview for validation and the results were shared with key people within the organisation to check the validity and reasonability of them.

Internal validity

This researcher is following an explanation building approach. The approach consists on the following steps: development of an initial framework drawn from the literature; findings from the case study compared to the initial framework; literature revisited to get further explanations on some of the findings from the case study; the framework is adjusted; an instrument is developed and the framework further refined through a quantitative study with 80 executives from 49 different pharmaceutical organisations.

External validity

External validity is achieved through following replication logic. The SQD Model is developed including four categories of organizational capabilities. The SQP Maturity
Framework is also developed and can be applied to any pharmaceutical organisation to understand the state of development of organisational capabilities that facilitate the effective development of goals for pharmaceutical sales representatives.

**Reliability**

A case study protocol was designed before entering the field and a case study database was developed where all the data gathered got recorded. This provides a trail of evidence for any researcher to understand the reasoning line followed by this researcher throughout the case study. The research design originally proposed proved to be very strong as potential issues were identify well in advance and actions taken to diminish the risk of getting any of the tests undermined.
Table 3-3: Quality of the research design

<table>
<thead>
<tr>
<th>Tests</th>
<th>Case study tactic</th>
<th>Action</th>
<th>Phase of research in which tactic occurred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct validity</td>
<td>Use multiple sources of evidence</td>
<td>14 interviews were conducted and 2 meetings were held with the General Manager and Commercial Director/electronic data/documents.</td>
<td>Data collection</td>
</tr>
<tr>
<td></td>
<td>Establish chain of evidence</td>
<td>Kept track of findings through the use of a database where everything got recorded: documents / memos / interviews / notes / digital recordings / translations.</td>
<td>Data collection</td>
</tr>
<tr>
<td></td>
<td>Have key informants review draft case study report</td>
<td>Interviews summaries were sent to the interviewees and main findings were discussed with key stakeholders for feedback. Also analysis of translations was controlled by a third party.</td>
<td>Data collection</td>
</tr>
<tr>
<td>Internal validity</td>
<td>Do explanation-building</td>
<td>1) Initial framework from the literature review was developed. 2) Compare findings of the case study against framework. 3) Go back to the literature for further explanations of findings from the case study. 4) Revise the initial framework. 5) Develop an instrument to be validated and refined. 6) Validate the instrument and refine the framework. 7) Repeat the process as many times as needed.</td>
<td>Data analysis</td>
</tr>
<tr>
<td></td>
<td>Address rival explanations</td>
<td>Rival explanations are being addressed. For example, barriers made explicit in the literature are not the only/main ones.</td>
<td>Data analysis</td>
</tr>
<tr>
<td>External validity</td>
<td>Use replication logic</td>
<td>An instrument is developed to validate the findings from the case study in 49 pharmaceutical organisations in Spain.</td>
<td>Research design</td>
</tr>
<tr>
<td>Reliability</td>
<td>Use case study protocol</td>
<td>A protocol was produced before entering the field.</td>
<td>Data collection</td>
</tr>
<tr>
<td></td>
<td>Develop case study database</td>
<td>A case study database was developed where everything got recorded: documents / memos / interviews / notes / digital recordings / translations.</td>
<td>Data collection</td>
</tr>
</tbody>
</table>

Source: adapted from Yin (2003) for this study

3.6 Methodological approach taken for the development and refinement of the SQD Model and the SQP Maturity Framework

The initial SQD Model and SQP Maturity Framework developed were refined with ten business consultants specialized in the sales quotas development field with specific focus on the pharmaceutical sector. These group of consultants were selected for three reasons; they have executed significant work (more than 3 years experience) on sales force effectiveness matters with sales and sales operations executives in the
pharmaceutical industry and they all have strong experience on questionnaire development and administration in Spain. As Churchill et al. (1985) state in their conclusions of the meta analysis they did on determinants of salesperson performance, it is possible that many organisations are ahead of academic researchers in developing objective measures that accurately predict sales force performance (Churchill et al., 1985). This is the third reason as to why expert consultants were selected for the refinement of the tool and development of the questionnaire. This researcher believes essential to consider the impact of cultural aspects when developing and administering the questionnaire to avoid misinterpretations or even getting a lower than expected response rate. For example, Spanish respondents to surveys are used to getting rewards while in the North of Europe this is not necessarily so. Two academics provided feedback in the initial phases of the development of the questionnaire so the alternative of including academics in the group was precluded at this stage. Including sales and sales operation executives was also not considered at this stage as their input was requested at the piloting phase of the questionnaire.

The feedback requested was focused on ensuring that the capabilities included in the SQD Model were mutually exclusive and collectively exhaustive. The SQD Model was first sent to each one of these consultants through e-mail and feedback was requested around appropriateness, clearness and completeness. The email included a brief introduction explaining the background of the project and the reason as to why this researcher was requesting feedback. The initial SQD Model was attached to the email and also the following questions were made explicit:

- Is the SQD Model clear enough?
- Are there any capabilities that require further explanations or clarifications?
- Is the SQD Model covering for organisational capabilities that facilitate the development of effective sales quotas for pharmaceutical sales representatives?
- Is there any important information missing?
- What mechanisms do you suggest should be used to maximize response rates for surveys in Spain?
- Is there any other feedback you would like to provide at this stage?

The feedback was gathered and organized before the focus group session. For every repeated suggestion a card was developed and presented back to the group. The card included a description of the suggestion and two boxes; one with the label “include the change” and the other one with the label “do not include the change”. For every repeated suggestion a discussion was moderated by this researcher exploring with the group the rationale behind the changes suggested by the various consultants. The discussion was captured in a flip chart and specific arguments and quotes recorded when discussing and in front of the whole team to get upfront validation. After discussing each suggestion each card was given back to each of the consultants and a suggestion for inclusion or no inclusion issued. Those suggestions with more than five approvals were initially considered and this researcher made a decision on inclusion based on the following rules. For inclusion or exclusion of capabilities, the origin of the capability was considered. Capabilities that emerged from the literature were to be kept in the SQD Model and only those that emerged from the case study were to be adjusted. Changes on form and suggestions on administration of the questionnaire were introduced based on this researcher’s judgement on the strength and appropriateness of the suggestion after the suggestion was pre-selected.

3.7 Developing an instrument to understand relevance of organisational capabilities

The SQD Model included 27 organisational capabilities that are important for the development of effective goals for pharmaceutical sales representatives. However, not all organisational capabilities are at the same level of importance; some capabilities are more important than others and some capabilities are more important in certain organisational contexts than others. For that reason, an instrument including 41 measures from the 27 capabilities was developed and applied to sales and sales operations executives within the Spanish pharmaceutical sector. The Spanish pharmaceutical sector is defined as every pharmaceutical organisations operating in the
Spanish geography; this includes both local organisations and branches from multinational organisations operating in Spain.

3.8 Operationalisation of study variables

Each organisational capability is a construct developed both from theory and the case study carried out in a Spanish pharmaceutical organisation. Measures for each of the constructs were developed to minimize the effect of multiple interpretations when administering the questionnaire. The measures were articulated with the help of the focus group that contributed to the refinement of the SQD Model. The final list of capabilities was presented to them as a group and they were asked to highlight those constructs where potential multiple interpretations could be made and openly suggest possible different understandings and a measure of capability that could potentially mitigate this effect. For every measure suggested by group members consensus was seek. A decision of inclusion or not and refinement was made by this researcher after the session. The final list of measures was circulated among the group members for validation. The result of this session was a list of forty-one measures related to the twenty-seven constructs. These measures were then integrated into the instrument.

The statements corresponding to the measures were further refined in a pilot conducted with twenty pharmaceutical organisations. The organisations were selected from the universe considering representativeness for the clusters considered in the study. The instrument was sent via email with an introduction (see Appendix H). The pilot was carried out in the same way as planned for the fieldwork. This allowed evaluating the appropriateness of the fieldwork procedures as well as the design of the questionnaire. There was a follow-up call requesting feedback on the instrument’s clarity and appropriateness for every case. Feedback was gathered only on those cases where the respondent answered the questionnaire. The feedback received, when considered appropriate by this researcher, was incorporated into the questionnaire.
3.9 Universe, sample and data collection on the instrument

The universe considered for the study consisted of 110 Spanish pharmaceutical organisations representing 90% of the total market value in terms of sales during 2007. The focus of the study is Spain, as the case study from where the organisational capabilities emerge was carried out in a Spanish pharmaceutical organisation. The universe of organisations considered for the study is diverse including: high-revenue and small/medium organisations (in terms of revenue); multinationals and locals; generic and branded portfolios; and primary care-driven and specialists-driven. The instrument was sent through email to 230 sales and sales operations executives. From the different roles involved in the goal setting business process, these two roles were selected for the following reasons:

- They drive the goal setting business process.
- They make decisions regarding design, operations and communications.
- These roles are in the boundary between the field and the office.

A seminal work developed by Good and Stone (1991) selects the same audience as this study because of sales managers’ direct involvement with and responsibility for, the development and implementation of a company’s sales quotas development process. They believed sales managers are in a position of authority and policy making with respect to the sales quota system (Good and Stone, 1991).

From the 230 questionnaires sent, 80 valid forms were received back from 49 different organisations representing 82% of universe in terms of 2007 revenue. The sample size is large enough to allow generalization of results within Spanish pharmaceutical organisations.

Table 3-4: Description of the sample used

<table>
<thead>
<tr>
<th></th>
<th>Universe</th>
<th>% of market</th>
<th>Sample</th>
<th>% of market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies</td>
<td>110</td>
<td>90%</td>
<td>49</td>
<td>82%</td>
</tr>
<tr>
<td>Sales and Sales Operations Executives</td>
<td>230</td>
<td></td>
<td>80</td>
<td>35%</td>
</tr>
</tbody>
</table>

Source: originated by the author
A non-response bias analysis was done through comparing means of the first, second, third and fourth quarters of the samples as suggested by Armstrong and Overton (1977) (Armstrong and Overton, 1977). No statistically significant differences were found on the t-tests. This researcher believes this is so due to the high representation of organisations within the sample.

There were minor variations of non-response rates among the different statements in the questionnaire. From the sample of 80 executives, the lowest response rates were the following variables: INFO3 with 76 responses, FEED with 77 and OWNE, INTER1 and MEAS with 78. This shows that the response rate among statements was very high. Most of the statements included answers ranging from 1 to 5. The smallest response ranges found correspond to the following measures: FORE1 with only fours and fives and MEAS, INTER3, FORM2 and FORM3 with only threes, fours and fives. The descriptive statistics could be found in Appendix J.

As a benchmark of response rates, Baldauf et al. (2001), when studying antecedents of sales organisation effectiveness, used a sample of 79 chief sales executives in Austria (40% response rate) and 70 sales chief executives in the UK (25% of organisations) (Baldauf et al., 2001). They considered the response as satisfactory. Good and Stone did a survey among 315 sales managers and achieved a response rate of 37.78% in the US and their work is considered as a reference in the sales quota development field (Good and Stone, 1991).

The typology of organisations participating from the study is as follows:

- **Size:** 48 (60%) big pharmaceutical organisations and 32 (40%) medium and small pharmaceutical organisations.
- **Type:** 74 (92,5%) branded pharmaceutical organisations and 6 (7,5%) generic pharmaceutical organisations.
- **Nature:** 69 (86,3%) were multinationals pharmaceutical organisations and 11 (13,8%) were local pharmaceutical organisations.
- **Primary care-oriented or specialists-oriented:** 35 (43.8%) were primary care-oriented organisations, 25 (31.3%) were balanced and 20 (25%) were specialist-oriented organisations.

A pilot study was carried out and questionnaires were sent to 20 sales and sales operations executives from different pharmaceutical organisations. From these, 12 completed questionnaires were received back and follow-up telephone calls were made to gather feedback. The subjects thought the statements were clear enough and made a few comments regarding the need to have an open-ended question to add any additional comments. That suggestion was not considered as it was not aligned with the methodological approach used on this study.

The database used was a combination of IMS Health’s own clients’ (the market reference and a data vendor) database and the researcher’s own database built-up from a social network named “LinkedIn”. The original number of addresses included in the database was 267. From those, 37 were outdated and the emails bounced back. The database included the following fields: name, surname, email address, telephone number, role, company and address.

Each email sent to the subjects was personalized. An introduction (in Spanish) was sent on the body of the email explaining the purpose of the study, requesting their participation, ensuring confidentiality and offering to send back the consolidated results to the respondents (see Appendix H).

The questionnaire was designed and sent as an Excel attachment. Other options such as developing and administering an internet questionnaire were evaluated but disregarded due to data protection issues. Sending a questionnaire as an attachment carries the risk that the respondents might feel annoyed by the process of saving the file and re-attaching it to the body of the email. However, due to the limited number of participants, which allows conducting a follow-up call and the incentive of sending back the integrated results was thought to be enough to get a good response rate; 35% is assumed to be a fairly high response rate.
Although the original questionnaire was designed in English the actual questionnaire administered was drafted in Spanish. The process to assure translation equivalence was the following. This researcher made the initial translation into Spanish, as his mother tongue is Spanish. Then, the Spanish questionnaire was translated back into English by a bilingual English-Spanish business consultant. The three questionnaires were validated by an English-Spanish teacher and adjustments were introduced. Also, the subsequent validations and adjustments introduced in the questionnaire were already developed in Spanish as the member of the focus groups, described before, are all Spanish speaking experts.

Before conducting the survey a research protocol was developed defining every step to be taken before, during and after the questionnaire was sent. A dummy set of data was analysed in advance to ensure that the aims of the study could be reached through the application of the instrument. This allowed going to the field with confidence and facilitated a quick turnaround of results once the questionnaires were received back.

The questionnaires were integrated into an Excel worksheet, including the organisational capabilities on the rows and each of the participants' details and answers on the columns. The values that each of the measures could take lay within a scale ranging from 1 to 5 where: “strongly agree = 5”, “agree = 4”, “uncertain = 3”, “disagree = 2” and “strongly disagree = 1”. The organisations that participated from the study were coded from 1 to 49. Once the Excel worksheet was loaded with the responses, random data checks were performed to ensure the questionnaires were correctly loaded into the file. The database was copied into SPSS on a file specially prepared and defined for that purpose considering the variables and codes used in the study.

3.10 Chapter summary

The chapter presented and discussed different philosophical perspectives and centres the attention on the position taken by this researcher with specific focus on the methods utilized on the thesis. From an empirical point of view, a case study was first conducted
with exploratory purposes and then a quantitative study (survey) was carried out to understand relevance of organisational capabilities under distinct organisational settings. The chapter discussed all the critical elements related to the way in which the research was performed.

The next chapter presents the case study done at Alpha Pharmaceuticals. The sales quotas development process conducted in that company is described, analysed and examined. Barriers to the implementation of the process are uncovered and some of them taken back to the literature to enrich understanding.
4 Case study: Alpha Pharmaceuticals

4.1 Chapter introduction

The chapter presents the case study carried out at Alpha Pharmaceuticals, a mid sized Spanish-based pharmaceutical organisation. First, the company is described to facilitate understanding of the context under which the sales quotas development process operates; background, portfolio of products and structure are presented. This sales quotas development process is described in terms of activities satisfying stakeholders’ expectations. The process is examined and expectations and barriers to the process uncovered through the use of first and second order constructs. First order constructs are captured through transcripts from the interviews, while second order constructs are this researcher’s interpretation of the different perspectives elicited by the different interviewees. The case study allowed understanding what a sales quotas development process for a pharmaceutical organisation looks like and what are the barriers to overcome to be able to develop effective sales quotas. Some of those barriers were covered by the literature but many others were not considered at all, or not considered in the context of the sales quota development process for sales forces. The literature was further reviewed with focus on these new barriers uncovered and with the purpose of understanding what is known and not known around them. The case study allowed deriving organisational capabilities required to overcome the barriers uncovered and the initial development of the SQD Model and the SQP Maturity Framework. It was instrumental for the development of the questionnaire used in the survey run among sales and sales operations executives.
4.2 General information about Alpha Pharmaceuticals

4.2.1 Background

Alpha Pharmaceuticals is a privately-owned independent multinational founded in 1946, with products present in more than 80 countries worldwide. It has more than 5,000 employees worldwide and they have the vision of being one of the leading organisations in terms of innovative research and development of new drugs within different therapeutic areas, having “Pain” at the centre of their strategy.

In Spain, the company has 550 employees, with revenue of approximately 80 million Euros in 2004. They produce drugs and medicines, commercialize them through a 250 sales representatives’ sales force, and produce for third parties also exporting products to other countries.

4.2.1.1 From a local company to a multinational company

Alpha Pharmaceuticals was originally a local company that was acquired by a multinational and, between the year 2000 and 2004, the company navigated through many changes in terms of both the processes used and the way in which the company executed the day-to-day business. The idea of change often appears reflected in the opinions of the interviewees and needs to be taken into consideration upfront to better interpret some of their opinions and understand how the company evolved throughout the years.

4.2.2 Portfolio of products

Alpha Pharmaceuticals has a diverse portfolio of products with presence in many different therapeutic areas, focusing both on General Practitioners and Specialists alike with a mix of old, mature, new and to-be-launched products.
4.2.3 Structure and organisation

Alpha Pharmaceuticals has a fairly typical structure being organized in specialized Business Units (BU). One BU is specialized in “Cardiology”, another one in “Pain” and the last one in “Central Nervous System”. Each BU has a manager who concentrates both marketing (through product managers) and sales (through district managers and sales representatives). They also have a sales operations role reporting to them and acting as a strong support to the BU manager. The three BU managers and the business intelligence director report directly to the commercial director. The business intelligence director is responsible for providing the analyses that might be required for a sound management of the business.

Figure 4.1: Alpha Pharmaceuticals’s structure

Source: originated by the author
4.3 The sales quotas development process

4.3.1 Sequential description of the process

4.3.1.1 Development of national sales forecasts

The sales quotas development process starts around May, with the development of the sales forecasts for each of the products in the portfolio. The product managers are responsible for their products’ national sales forecast first draft and for this reason they interact with the medical manager, market research, sales operations and the business unit manager to whom they report. A number of formal meetings are organized in order to get the necessary input from the different stakeholders. Their forecasts are based mainly on historical performance and market trends and consider a few future events that might have an impact on the performance of their products allocating probabilities of occurrence to each of the events and adjusting future sales accordingly. The scope of the forecast considers a three years period, which is revised year on year.

This initial process does not consider any participation from the sales force and although one of the subjects emphasized that there was participation from district managers, triangulation proved this not to be the case. It might have happened a couple of times in the past but it is not a formal requirement as district managers do not have a holistic view of the business having only a regional focus. Formally, sales representatives channel up the feedback they collect from the field to the product managers through their district managers electronically through email. However, as most of the feedback is anecdotal in nature and it is “assumed” that sales representatives have a vested interest on having a lower sales forecast, the feedback they provide is not formally consolidated and analyzed.
Product managers also develop a forecast for expenses and investments that supposedly goes in line with the sales forecasts they have to produce. However, this proved not to be the case (from the interviews) as they have an “almost” fixed percentage of sales allocated to expenses and investments.

By the end of September, each product manager needs to have a proposal ready to be submitted to international headquarters for approval. At the beginning of October, sales forecasts are sent to headquarters where the numbers are challenged and adjusted following a top-down process. There could be a formal instance for negotiation but the local office has a very small room for manoeuvring. Once the adjustments are introduced, the forecasts for the following year become frozen. No modifications or adjustments are allowed within the current year.

### 4.3.1.2 Drill-down of the sales forecasts to the sales territories

The national sales forecasts are then distributed to each of the district managers’ areas through an apportionment mechanism that consists mainly on a mathematical formula. The formula considers a series of variables and allocates certain weight to each one of them. Exemplars of variables are the number of sales representatives in the area, market share and sales increase. Both variables and weights remain fairly stable throughout the years. When there is a new product launch, they take a market of reference (analogue) and distribute sales based exclusively on the share of that market. For one of their recent launches, because they could not get a proper market of reference for that product, they just divided the national sales forecast by the number of sales representatives.

There is a business line meeting late in December where the weights assigned to each of the variables being considered by the formula are discussed and adjusted. District managers provide their feedback on this respect and there is a negotiation process that ends with a final distribution of sales by product to the different areas. The three business lines take slightly different approaches to the delivery of sales goals to their subordinates. One of the business line managers does not allow the district managers to
participate at all in the development of the weights imposing the share of sales unilaterally to each district manager.

Once each one of the district managers have the forecasts for their areas they have to drill them down to each of their sales representatives. Again, the tool is used and district managers are allowed to introduce minor adjustments. However, the sum of the adjustments needs to be zero. What they normally do is to reduce the goals for new sales representatives and put more weight on high performers in order to compensate any expected low performance. They are also allowed to change the phasing throughout the four sales cycle meetings (each one for each quarter of the year). However, the final amount of sales needs to remain the same as defined by the national sales forecasts. The sales cycle meeting is an instance where the plan for the quarter is discussed in detail. It is a cascade-down process starting with a meeting among business unit managers and district managers and then, afterwards, in the subsequent days district managers have their analogue meetings with their sales representatives. At the beginning of January everything needs to be ready to be communicated to the sales representatives in the first sales cycle meeting of the year. Sales representatives have no participation in these meetings receiving just the sales quotas they need to achieve. In general this is assumed to be reasonable and normal and there are not many sales representatives complaining about the sales quotas they receive. Once the goals for each sales representative are defined, the information is introduced into the ETMS system (call reporting system) allowing for the monitoring and assessment of performance and subsequent payment of incentives. After each of the sales cycles, there is an assessment of the progress being made by each sales representative. Incentives are paid based only on sales quota achievement and considering the year as a whole with quarterly advance payments. On each quarter, there is a cumulative payment that gets reviewed and adjusted at the end of the year once the final yearly results are confirmed.

4.3.1.3 Communication

There are several instances where formal communication happens. First, when sales representatives send their feedback from the field to the product managers copying the
district managers. Then, when the product managers prepare their forecasts they have to communicate internally to the business unit managers who in turn have to communicate to the general manager who has to communicate to the headquarters. Then, the cascade down process begins through a series of meetings: one led by the business unit managers and directed to the district managers and another one led by the district managers and addressing sales representatives. There is an instance where performance from the sales representatives is assessed by the district managers and both action plans are developed and incentives are calculated and paid.

4.3.1.4 Control

After the first quarter, performance of each sales representative is assessed by the district managers and, although the goals cannot be changed, action plans for improvement are developed. The ETMS system allows both the district manager and the sales representative to track performance as they could see sales by brick (a small geographical area; could be a postal code or groups of postal codes) as well as number of calls and investments made on each of the targets.

4.3.2 Incentives

There are several informal goals or rather implicit rules of behaviour that sales representatives need to follow in order to earn their salaries. Exemplars of this are the number of times they should be visiting a physician, the quality of the message they should be delivering and the investments they should allocate to each target. However, variable pay (incentives) is based on the quarterly/yearly sales’ goal achievement. For this, they use a matrix system where, on one axis, there is the main product the sales force promotes and certain ranges for goal achievement. On the other axis, they have a combination of the other two products that each sales force promotes and again there are different scales for goal achievement. Each combination allows them to get a certain proportion of € 16,000 (the incentive when they achieve 100%). This represents approximately 30% of their fixed salaries.
Table 4-1: Illustrative example of the incentives matrix being used at Alpha Pharmaceuticals

<table>
<thead>
<tr>
<th>Product</th>
<th>80%</th>
<th>85%</th>
<th>90%</th>
<th>95%</th>
<th>100%</th>
<th>105%</th>
<th>110%</th>
<th>115%</th>
<th>120%</th>
<th>125%</th>
<th>130%</th>
<th>135%</th>
<th>140%</th>
<th>145%</th>
<th>150%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0.25</td>
<td>0.5</td>
<td>0.75</td>
<td>1.0</td>
<td>1.25</td>
<td>1.5</td>
<td>1.75</td>
<td>2.0</td>
<td>2.25</td>
<td>2.5</td>
<td>2.75</td>
<td>3.0</td>
<td>3.25</td>
</tr>
<tr>
<td>Product A</td>
<td>150%</td>
<td>0</td>
<td>0</td>
<td>0.25</td>
<td>0.5</td>
<td>0.75</td>
<td>1.0</td>
<td>1.25</td>
<td>1.5</td>
<td>1.75</td>
<td>2.0</td>
<td>2.25</td>
<td>2.5</td>
<td>2.75</td>
<td>3.0</td>
</tr>
<tr>
<td>Product A +C</td>
<td>150%</td>
<td>0</td>
<td>0</td>
<td>0.25</td>
<td>0.5</td>
<td>0.75</td>
<td>1.0</td>
<td>1.25</td>
<td>1.5</td>
<td>1.75</td>
<td>2.0</td>
<td>2.25</td>
<td>2.5</td>
<td>2.75</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Source: originated by the author

4.4 Applying the Process Dependency Network

The Process dependency Network (PDN), developed by Braganza and Lambert (2000), provides a very pragmatic approach to describe any process in terms of activities satisfying stakeholders’ expectations. Alpha Pharmaceuticals’ sales quotas development process was analysed this way. The following sections will look into each of the elements of the PDN applied specifically to Alpha Pharmaceuticals. This is objectives, stakeholders’ expectation and activities.

4.4.1 Objectives

From the interviews, it became clear that the three main objectives of the sales quotas development process are: implementation of the company’s strategy, getting a motivated sales force and achieving control over the performance of the company and each individual. This is in-line with what the goal setting literature considers as key objectives (Zoltners et al., 2001). The literature also considers the sales quotas development process as a strong communication channel and although this was not
directly mentioned in the interviews as an objective, a group of people with similar interests in the organisation (mainly people from the field) highlighted communication as a significant barrier to the process. This is an indication that the sales quotas development process is being implicitly considered as a communication channel as well.

Table 4-2: Objectives from the sales quotas development process at Alpha Pharmaceuticals

<table>
<thead>
<tr>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Behaviour and activities performed to be in line with the company strategy</td>
</tr>
<tr>
<td>2  Manage salesforce performance</td>
</tr>
<tr>
<td>3  Keep the salesforce motivated</td>
</tr>
</tbody>
</table>

Source: originated by the author

4.4.1.1 Implementation of the strategy

Successfully implementing the strategy is translated into different operational objectives. The main one from a financial perspective is to increase both the top and bottom line. This appears to be the main objective Alpha Pharmaceuticals wants to achieve and then, the other objectives are at a lower level and helping to implement the strategy. In this way, keeping a motivated sales force and control performance are second order objectives.

4.4.2 Stakeholders expectations

4.4.2.1 Stakeholders

The stakeholders identified in the study are the following: the general manager, the commercial director, the human resources director, finance controllers, the director of business intelligence, the business intelligence analyst, business unit managers, sales
operations managers, product managers, district managers, sales representatives and the headquarters.

Table 4-3: Stakeholders from the sales quotas development process at Alpha Pharmaceuticals

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CD</td>
<td>Commercial Director</td>
</tr>
<tr>
<td>FC</td>
<td>Finance Controllers</td>
</tr>
<tr>
<td>DBI</td>
<td>Director of Business Intelligence</td>
</tr>
<tr>
<td>BIA</td>
<td>Business Intelligence Analyst</td>
</tr>
<tr>
<td>BUM</td>
<td>Business Unit Managers</td>
</tr>
<tr>
<td>SOM</td>
<td>Sales Operation Managers</td>
</tr>
<tr>
<td>PM</td>
<td>Product Managers</td>
</tr>
<tr>
<td>DM</td>
<td>District Managers</td>
</tr>
<tr>
<td>SR</td>
<td>Sales Representatives</td>
</tr>
<tr>
<td>GM</td>
<td>General Manager</td>
</tr>
</tbody>
</table>

Source: originated by the author

4.4.2.2 Expectations

This section presents the analysis performed regarding expectations from the different stakeholders. Each title is an expectation and for each one of them there is a set of first order constructs coming from the transcripts (translated after the interpretation) of the interviews. This researcher’s interpretation is made explicit and second order constructs are defined and codified. Some of the first order constructs were taken into Appendix D to facilitate reading the report. For these expectations, there is a note providing directions for readers.

**Professional, accurate, reliable and punctual**

First order constructs

“...of course I would expect professionalism, that things are being conducted appropriately. It is critical...truthfulness, professionalism and accuracy. However, accuracy depends on people's capabilities. Obviously, we all know that accuracy and reliability does not mean the same for all people.” (Sales operations manager)

“I would expect to have a good planning process that would allow, at the end, the goal setting to be accurate and with minimum margins of error on both sides. Not reaching the objective would be as negative as exceeding it by far. The exercise conducted then
would be worthless. In general, it is important to be aggressive when setting goals.” (Finance controller)

“It varies a lot. In fact, there have been occasions where the information was received more than two months later and currently they are being received 20 or 30 days later. I truly believe that the data is reliable, specially the evolution. Something that does not make much sense is the way sales vary from one month to another.” (Sales representative)

**Interpretation and second order constructs**

There was a significant change from the way in which the sales quotas development process was being performed by the previous management team and the way in which it is conducted now. Before, the whole process was centralized in the commercial director who decided upon everything and held the power to decide on exceptions. Consequently, the process was perceived as being unprofessional before.

<table>
<thead>
<tr>
<th>The sales quotas development process is expected to be conducted in a professional manner. (SOC # 1)</th>
</tr>
</thead>
</table>

Accuracy, reliability and punctuality are also made explicit as expectations, acknowledging that accuracy and reliability are not the same for different people as a risk associated with setting the standards. There is also an element of trust on the management of the company and on the way the process is being conducted. They would expect the process to be carried out appropriately. This is associated with telling the truth, being accurate and reliable. There is also an expectation regarding timeliness. They would expect to receive the information and their targets on time.

<table>
<thead>
<tr>
<th>The sales quotas development process is expected to be accurate. (SOC # 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The sales quotas development process is expected to be reliable. (SOC # 3)</td>
</tr>
<tr>
<td>The sales quotas development process is expected to be punctual. (SOC # 4)</td>
</tr>
</tbody>
</table>
**Fairness**

**First order constructs**

“As a strength, I believe it is a fair system.” (Business unit manager 1)

“My business line has a small hospital sales force, which has three sales representatives in Barcelona and three in Madrid. They only visit big hospitals and consequently their sales incentives were different from what the rest of the people got. As other sales representatives were following the matrix method at 100%, they were going at a 50% and had other qualitative objectives such as product introduction in the hospital, development of workshops, penetration, etc, so they were not in the same ‘system’ and ‘intensity’ than the rest of the people. Therefore, Madrid and Barcelona were the slowest growing cities. Not sure if it was due to this but those were the cities with the lowest performance.” (Business unit manager 2)

“I would expect the system to be fair in the allocation of goals; this is what we are looking for, fairness. Then, if the objective is reachable or not could depend.” (Business intelligence analyst)

“When launching a new product I believe it should be treated as a separate element and not within the matrix. The change of incentives this year due to adding Product X in the incentives matrix and changing them at the middle of the year was an absolute disaster. We are launching a product next September and we hope will be separately considered.” (Product manager 1)

“If you look at the different teams you will find areas where they have underachieved objectives for years. The reason is they have a weak team because of the huge turnover of sales representatives they had in those areas. Zaragoza could not be assigned a lower goal than Burgos (obvious), so you keep on dragging the results you have already got. Do we consider this? Not sure to what degree we do.” (Product manager 2)

“At the moment, many of us are doing a vacant territory. We are 9 and should be 10. Consequently, the vacant territory is being covered by 3 sales representatives. I have one territory and one third of a territory.” (Sales representative)

“As far as I can see, it was more unfair before. Now, we do it in a fairer way.” (District manager 1)

“No, no ... but problems arise ... the budgets we had last year...also this year...it is not just the launches...we couldn’t change anything on them. ‘They’ have sent them to us and there we have them, ...this is where the problems arise as it is a product that according to market share or market potential could be budgeted ‘X’, considering the number of sales representatives available and quality of the territories that you can and cannot reach. However, the budget is unachievable, it is impossible, what sales representatives could achieve could be 60%, 70%, an 80% but not a 100%.” (District manager 2)
Interpretation and second order constructs

Fairness seems to be one of the guiding principles of the process. Almost all of the roles mentioned fairness as an expectation they have from the process. In some cases, this was made explicit by the interviewees. In some other cases, the narration of situations where fairness was absent (as a negative anecdote) showed that fairness is a very important element from the goal setting business process. There are indications that in the previous situation there were many instances where the management of the company was unfair in the way they handled the process. However, there are still perceived unfair situations happening today. This is being mentioned by many interviewees showing a certain level of frustration. There is also a monetary implication of these unfair situations, via fewer incentives to be received by sales representatives and district managers.

The sales quotas development process is expected to be fair. (SOC # 5)

Communication-driven

First order constructs

“The forecasting or the foreguesing…? That depends...We are launching a new product in 6 months. We will notice it in the other products as people will give more importance to the launch. Who is aware of this? The business unit manager and the commercial director...and nobody else...do you understand? 'Are we going to in-license or out-license a product'. I don't know about that...they do know it and based on this they set your objectives. To be honest, nobody knew that we were going to launch this product last summer and all the goals were changed on the fly. Nobody knew about this. The say that goes 'who owns the information has the power'....although is not 100% certain. The real power is knowledge, which is what you do with the information.” (Sales operations manager)

“I believe that by using the same criterion for all of the sales representatives (you could generate fairness) and if possible we would like to know what variables are being used to develop the goals. They know things of the market that I just do not know. They work and deal with much more information than I do. Therefore, based on the data they have and the information available they set the goals, which will be as objective as possible. Otherwise, we would have to go back to the old discussion; based on what data are my sales being evaluated, IMS data.” (Sales representative 1)

“How sales are assessed, what is the reason why they are the way they are? Weird things always happen at particular and moments such as what happens at the end of the
year, at the end of a quarter, etc. This bothers us much. I would really love to know how things are being done.” (Sales representative 2)

“It varies a lot. In fact, there have been occasions where the information was received more than two months later and currently they are being received 20 or 30 days later. I truly believe that the data is reliable, specially the evolution. Something that does not make much sense is the way sales vary from one month to another.” (Sales representative)

**Interpretation and second order constructs**

Communication is another important, recurring and unsatisfied expectation from stakeholders. The decisions being made are not communicated strongly and clearly enough across the hierarchy. However, the commercial director is convinced that the meetings that are part of the process are more than enough to communicate how and under what assumptions the goals are being developed. People just do not know and do not understand some of the decisions that are being made regarding sales quotas and need satisfactory explanations.

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The sales quotas development process is expected to be communication driven. (SOC # 24)

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**Drill-down tool to be dynamic and sensitive**

**First order constructs**

“The system is too inflexible; it is not flexible. Although it is transparent, you practically cannot make changes…” (Business unit manager)

“Oh, apart from ‘the rule’, there is the logic and ‘the common sense’. Last year, I haven’t had business unit manager as my boss was promoted so he asked me to have a look at the goal setting for the sales representatives to see how to set them this year. I have spent many hours in front of the computer. I have never done it before. Apart from the headache, I have found that despite the changes I introduced into the system, despite the market share or weights, a hundred, zero or a 25-25-25-25, one fourth of potential was giving me one number to sell. If I did 35-15-25-25, it changed only slightly. It only changed when I considered a 100, for instance, in potential, a zero in Sales Representatives and a zero in market share. Then, it changed.” (Sales operations manager 1)

“It is not inflexible, that is the point. The benefit of the actual system is that it is not inflexible, it is flexible. However, that flexibility could be improved; certainly. It is
flexible; it is not inflexible at all. That it has some moments when it gets inflexible? I am sure that if we develop any other system, it will come a time where it will get inflexible; I am sure.” (Sales operations manager 2)

“The system is static; not dynamic. It is mainly a financial system. That is the weakness. It is also fairly conservative. All of these are weaknesses; it is static, starts with a financial ratio and it is a top-down process.” (Business intelligence director)

Interpretation and second order constructs
Some people believe the tool used to drill-down the goals to the sales representatives and district managers to be flexible while others believe it is static and not dynamic. This researcher’s interpretation is that the tool is fairly static and there is the will to make stakeholders believe it is indeed dynamic. The sales quotas are calculated applying a mathematical formula that allocates the national sales forecasts to each of the sales territories. The formula considers different weights but according to the sales operations manager 1 and also from the researchers first hand experience, the tool does not change much while changing the weights. However, in some business lines there is a meeting where the district managers are asked to contribute and suggest different weights as if they could potentially decide on their destiny. Then, once the goals are assigned there is some room for minor adjustments but there is small scope to change things.

The tool used for drilling down sales quotas to the field is expected to be dynamic and sensitive. (SOC # 7)

Flexibility

First order constructs
“If sales are on budget everything is ok. If there is a sales representative that is below the sales budget, a plan of action (as we call it) is triggered. The district manager does a personal interview with the sales representative asking for explanations; ‘let's have a look at your sales as they are not doing great; on this product you are at 80%; let's analyze together what are the causes; let's work together the next three days to analyze the causes’. When this phase is over, the district manager has to draw conclusions and agree to develop an action plan with the sales representative. 'Look, there are things that need to be changed in the way you call on physicians; you are not properly closing your calls or you need training on this or you are not properly targeting physicians’. The district manager identifies the weaknesses and puts together an action plan to improve
them. Sometimes it is a sales objective that is different from the one that originally had. Example: let's imagine that at the end of the first quarter there is a sales representative that is far below objectives at 60-70 %. Maybe, they give him/her an action plan for the next three months and apart from doing all the activities included in the plan (three meetings with physicians at the hospital, etc.) they would expect the sales representative to achieve at least 85% of the goal for the second quarter. The official objective regarding incentives remains the same but if the sales representative is too far away from the number is better to fix a more achievable goal to get him/her motivated.” (Business unit manager 1)

“There were two sales representatives that were not getting their incentives for special circumstances regarding a product. Finally, they were given an extraordinary compensation at the end of December to compensate. As an example, last year in Sevilla, we had 4 sales representatives, 3 changed, one left, we had to lay off another one and then after a long time something else happened to another one (I don't remember). So, we had 3 new sales representatives in one year! The oldest sales representative sharing the territory realized that sales weren't good enough and that he was not going to get incentives. An option was then to tell him 'don't worry, keep on driving, if you do a good job we will compensate you at the end of the year”’. (Business unit manager 2)

“You need to see how we are at the end of the year, you could have great salespersons with great evolutions and at the end of the year you find out that you have to make 2,3,4,5,6 exceptions.” (Sales operations manager 1)

“There are some things that must be improved. When you are thinking of launching a product at a certain date and then it gets delayed and launched later on, it should be considered. It is not the same to sell 10 from January than....However, if you don't get approval, which does not depend on you at all nor on the sales force...it happens that in September you already have a gap since the beginning of the year...or you don't get the price that you expected and you get negative figures across the year and you get very angry...and what is really happening is that there are a lot of external elements on play, which you cannot control. This is something that must be considered.” (Product manager 1)

“We do the sales budget and the expenses budget. However for the expenses, we have a number that is a 'given' that could be debatable to a certain extent. That means that we intervene in the expense budget but we have low power to decide as the company have already decided that there is this amount of money to spend and this is what we have available. However, we could always discuss and argue but with a small chance to change things”...“It depends on the circumstances; if you have problems with one particular item for whatever reason, you could adjust it. Maybe there were problems with a very important wholesaler in the area and the sales are not in line with IMS's because in that area there were five sales representatives but two were on 'leave', one left, so the budget suffers. I know that these special circumstances will be attended.” (Product manager 2)
Interpretation and second order constructs

Flexibility appears as one of the most important and recurring themes regarding the goal setting business process. The tool used to drill down the goals to the people on the field is inflexible as discussed already (the sensitivity of the weights used is minimal). However, the company deals with flexibility through the management of exceptions. The commercial director made it explicit to the researcher that he is against exceptions and that the making of exceptions was actually and exception from the previous year. However, from the interviewees it is clear that this is no so and that they have been doing it for long and there are no indications of stopping it in the future. There is also the expectation of flexibility being improved which reinforces (SOC # 6).

The sales quotas development process is expected to be flexible. (SOC # 9)

Participative

First order constructs

“It takes more or less into account the opinion of the stakeholders. The weakness of the process is that people do not participate in the development of their own objectives.” (Business unit manager 1)

“Sales Representatives provide anecdotes from the field. These anecdotes do not have a lot of value as the sales representatives are not prepared to capture them.” (Business unit manager 2)

“Product managers develop the national sales forecasts for each product and they do so working with each of the business unit managers, although (as we are talking about a top-down process) many times the figures are ‘a given’ fixed by the business unit manager and given to them by the general manager.” (Business intelligence director)

“We do not always agree with the objectives that are being set; at least those of us closer to the field. The objectives for a launch are set based on criterion defined by the company and we don't have a say there; not the sales representative or the district managers. They do not ask for our opinion. They are being set by the company, delivered to us and full stop. Probably there are mistakes being made, not only by product but also by geographical areas.” (District manager 1)

“No, no ... but problems arise ... the budgets we had last year...also this year...it is not just the launches...we couldn’t change anything on them. ‘They’ have sent them to us and there we have them, ...this is where the problems arise as it is a product that according to market share or market potential could be budgeted ‘X’, considering the
number of sales representatives available and quality of the territories that you can and
cannot reach. However, the budget is unachievable, it is impossible, what sales
representatives could achieve could be 60%, 70%, an 80% but not a 100%.” (District
manager 2)

**Interpretation and second order constructs**

The sales quotas development process followed by Alpha Pharmaceuticals does not
allow participation from the different stakeholders, being the sales representatives the
stakeholders with the least participation in the process. The national sales forecasts are
developed by teams led by the product managers. However, once a final number is
defined and sent to headquarters, the latter decides if that is what they would expect the
local office to be selling or not. They decide on the amount of sales they expect to get
out of the country. The general manager has a say in terms of allocating the sales
budgets to specific products but the final number should sum up to the total budget.
Then, it is a cascade process down to the sales representatives and going through the
business unit managers and the district managers. The business unit managers do not
have much of a say in the process and they try to impose the sales quotas through
persuasion to the district managers in a meeting where the latter could change some
parameters on the allocation of resources. However, as discussed before, regardless of
the changes introduced, the final distribution does not change much. The business unit
managers could introduce some qualitative adjustments to what the tool is suggesting
them to distribute. However, these changes are not substantial and total sum should be
zero. District managers organize a meeting with sales representatives to let them know
what their goals will be and plan the year ahead. These sales quotas are not discussed
with the sales representatives and their feedback is not requested or considered.

| The sales quotas development process is expected to allow participation from the
different stakeholders. (SOC # 11) |  |
**Transparency**

(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

**Interpretation and second order constructs**

Both business unit managers mentioned transparency as an expectation and this is probably a consequence of their previous experience with the old process. The formula used to allocate sales quotas to the different regions provides a lot of transparency, though at the expense of fairness in some instances. At least, the stakeholders believe that a sales representative or a district manager could be unlucky and have the impact of a particular situation that might exist in a territory, but at least there is a transparent and uniform system for all.

> The sales quotas development process is expected to be transparent. (SOC # 8)

**Continuous improvement**

(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

**Interpretation and second order constructs**

Almost all of the roles interviewed believed that there was a significant improvement compared to the old process management. This aspect makes them less critical of the actual process. However, it was clear from the interviews that some of the interviewees were concerned with many perceived weaknesses that, according to them, the process still has. This implies that the stakeholders are at a stage where they are assimilating the first wave of change but have the expectation that the process will keep on improving.

> The sales quotas development process is expected to be “continuously improving”. (SOC # 6)
Logical
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

Interpretation and second order constructs
There is the expectation that the sales quotas development process makes sense and could be rationalized by all its stakeholders. Before, some decisions taken by the previous commercial director were based on nepotism and they lacked a sound rationale. This was badly perceived by most stakeholders interviewed.

The sales quotas development process is expected to be “logical”. (SOC # 10)

Unchangeable within the year
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

Interpretation and second order constructs
During 2004, one of the key products in their portfolio was launched and this triggered a review of the goal setting and incentives compensation process. Also, the price achieved for the product was lower than expected and this implied that the number of units to be sold had to be higher than initially planned. After the holiday period (in August) the sales quotas for the products and the incentives scheme was modified and that was fairly frustrating for most people; particularly for sales representatives. They do not want to have the rules of the game changed in the middle of the year as this provides uncertainty.

The sales quotas development process is expected to be unchangeable within the year. (SOC # 12)

Objectivity
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)
Interpretation and second order constructs
Objectivity is considered to be of great value by most of the stakeholders. Again, this might be a consequence of the management style from the previous management team. People believe that the process is transparent (SOC # 8) and associated with that transparency is the objectivity that comes from an impersonal process of allocating sales to territories derived from the application of a mathematical formula.

The sales quotas development process is expected to be objective. (SOC # 13)

Take the human factor into consideration
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

Interpretation and second order constructs
The so called “human factor” refers to people and the issues around personal situations that might arise as well as the skills and experience they might have. The formal process does not take into account this element although it is being considered when deciding the exceptions to be made at the end of the year. The sales operations manager said that he considers it at the beginning of the period as well. However, the adjustment that he mentions is more symbolic than material. The stakeholders expect to consider personal situations although they do not know how to do it as it is acknowledged to be extremely complex from an operational point of view.

The sales quotas development process is expected to take the human factor into consideration. (SOC # 14)

Less bureaucratic
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)
Interpretation and second order constructs
There is the expectation of reducing bureaucracy although this aspect was not mentioned by many people and also this sales operations manager is relatively new to the organisation and has a tendency to refer back to his previous company and the way things were done there.

| The sales quotas development process is expected to be less bureaucratic. (SOC # 15) |

Linked to investments
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

Interpretation and second order constructs
The sales quotas allocated to the different sales representatives are not linked to the investments to be carried out in each of their territories. This does not make a lot of sense to this researcher as one would expect to get more development from areas in which you invest more than from areas that you do not invest. In a different vein, with the same level of investment on sales representative could take more advantage of a smaller territory than from a bigger one. However, this is not being considered and there is the expectation of this being considered in the future.

| The sales quotas development process is expected to be linked to investments. (SOC # 16) |

Allow performance control
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

Interpretation and second order constructs
Business unit managers were explicit on using the sales quotas development process as a mean to controlling performance from the district managers and sales representatives. They have also mentioned that the general manager might expect to control the
performance of the company through the use of the sales quotas development process. This was triangulated on a meeting with the general manager.

The sales quotas development process is expected to allow performance control. (SOC # 17)

**Consider competition**
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

**Interpretation and second order constructs**
The sales quotas development process does not consider the competition. This implies that, if in one particular area the competition has a strong sales representative, or are heavily investing on physicians, it would not be considered in the sales quotas developed. Evidently, this particular territory will be more challenging than a similar one but with weaker competition. There is the expectation from several stakeholders that competition should be incorporated into the analysis.

The sales quotas development process is expected to consider competition. (SOC # 18)

**Respect for the initial input**
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

**Interpretation and second order constructs**
Product managers in particular are seriously concerned and frustrated as they typically spend many hours developing the national sales forecasts for their products to have the figures changed at the end of the process by headquarters. No rational explanation is typically provided as to why the figures changed. However, as this is a top-down process they have to get on with it as it is; there is no formal feedback requested.
The sales quotas development process is expected to respect the initial input from stakeholders. (SOC # 19)

**Product proposals in-line with the gameplan**
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

**Interpretation and second order constructs**
Sales operations managers expect the product managers develop robust national sales forecasts that are in-line with the gameplan. However, from (SOC # 19) it is clear that product managers provide a first draft and then the numbers are adjusted by headquarters. At the end, the national sales forecasts are not aligned with the gameplan. What ends up happening most of the times is that given the national sales forecasts, the gameplans are adjusted accordingly.

The sales quotas development process is expected to be in-line with the gameplan. (SOC # 20)

**Buy-in from stakeholders**
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

**Interpretation and second order constructs**
There is expectation that the process facilitates achieving acceptance at all levels of the organisation. It seems that although there is a certain degree of cynicism and frustration, stakeholders accept the goals and they have a sense of belonging to the same group, sharing a common destiny. This means that if the national sales forecasts are unfair for one sales representative they are unfair for everybody else as well. This researcher believes the change from a worse situation facilitates to get buy-in from the various stakeholders.

The sales quotas development process is expected to achieve acceptance from the different stakeholders. (SOC # 21)
**Clear criteria**

(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

**Interpretation and second order constructs**
An expectation made explicit by many stakeholders is that the criteria used to drill down the goals to the sales force should be clear and communicated to everybody. This is linked to the expectation on transparency (SOC# 8), on communication (SOC# 24) and the expectation of objectivity (SOC# 13). This researcher believes the criterion used is clear enough. However, they are not covering all the potential elements they should be covering, from a technical point of view. However, the perception from the stakeholders is that the company is doing great on this aspect so this is what really matters at the end; what is perceived by the stakeholders and not really what the researcher believes as an outsider.

The sales quotas development process is expected to use clear criteria. (SOC # 22)

**Represent the sales potential on the sales territories**
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

**Interpretation and second order constructs**
Whatever system is used has to represent the sales potential that could be achieved with a certain amount of resources in one particular sales territory. The actual system does not capture this element in an optimal way, although it provides an approximation that is more or less accepted by most stakeholders. People are aware of the different issues that might emerge in each of the territories but they also acknowledge how difficult it is to capture all the elements in an efficient way. Also, management styles and beliefs get on the way of representing the fair potential in each area as quoted by one of the business unit managers. He believes that if there is a sales representative achieving a high performance and responding to challenging goals, higher sales quotas should be
allocated to him/her. There is the expectation among stakeholders that the reality (according to them) of their sales territories should be captured by the process.

The sales quotas development process is expected to represent the sales potential on the sales territories. (SOC # 23)

**Everybody achieves 100%**
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

**Interpretation and second order constructs**
The business intelligence analyst made explicit the expectation that everybody achieves 100%, which at the eyes of the commercial director does not make any sense as this is not really his /the company’s intention. Typically, some people reach 100% but many stay below and others above and the company decides what financial risk is willing to assume and depending on this, defines the incentives scheme that is willing to apply to the sales force.

The sales quotas development process is expected to allow everybody to achieve their goals. (SOC # 25)

**Qualitative goals to be considered**
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

**Interpretation and second order constructs**
Many stakeholders claim that they set qualitative goals, but through triangulation this researcher found that not to be the case. They informally set some qualitative goals but there are no incentives associated to them. There is the genuine expectation of setting some qualitative goals as part of the formal process. This is in line with the literature in the sense that goals to the sales force are translated into sales quotas and there are not
meaningful qualitative goals incorporated; mainly due to the difficulties to control their achievement.

The goal setting business process is expected to consider qualitative goals as well as quantitative ones. (SOC # 26)

**Achievable**
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

**Interpretation and second order constructs**
80% of the sales force have been achieving the goals set year on year so it is an expectation that this keeps on being so. The other side of the coin is how challenging those goals are. Surprisingly, there were not many comments regarding the expectation that goals should be challenging apart from the commercial director’s.

The sales quotas development process outcomes are expected to be achievable. (SOC # 27)

**Challenging**
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

**Interpretation and second order constructs**
As mentioned before, not too many stakeholders mentioned having challenging goals as an expectation they have. The sales representatives explicitly mentioned they are motivated just by money and they are not quota achievers as the literature would suggest. Winer (1973) found that salesmen are quota achievers rather than dollar-maximizers (Winer Leon, 1973).

The sales quotas development process is expected to be challenging. (SOC # 28)
Motivating
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix D)

Interpretation and second order constructs
The commercial director mentioned to this researcher at a meeting we had that he would expect the goals to be motivating and challenging for the sales force. Also, one of the business unit managers mentioned motivation as one of the elements that the sales quotas development process needs to consider.

The sales quotas development process is expected to be motivating. (SOC # 29)

Summary of expectations
The summary of all stakeholders’ expectations is represented in the following table. Each expectation is presented already in the form of second order constructs and the boxes in yellow represent the link between expectations and roles. It is important to consider that the expectations came as a result of semi-structure interviews and expectations were not prompted to the interviewees. The expectations were collected and interpreted by the researcher from explicit and implicit comments from the interviewees.
Table 4-4: Stakeholders’ expectations

<table>
<thead>
<tr>
<th>Expectations</th>
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</thead>
<tbody>
<tr>
<td>A Conducted in a professional manner.</td>
</tr>
<tr>
<td>B Accurate</td>
</tr>
<tr>
<td>C Reliable</td>
</tr>
<tr>
<td>D Developed on time.</td>
</tr>
<tr>
<td>E Fair</td>
</tr>
<tr>
<td>F “Continuously improving”</td>
</tr>
<tr>
<td>G Dynamic</td>
</tr>
<tr>
<td>H Transparent</td>
</tr>
<tr>
<td>I Flexible</td>
</tr>
<tr>
<td>J “Logical”.</td>
</tr>
<tr>
<td>K Allow participation from sales</td>
</tr>
<tr>
<td>L Unchangeable within the year</td>
</tr>
<tr>
<td>M Objective</td>
</tr>
<tr>
<td>N Take the human factor into consideration</td>
</tr>
<tr>
<td>O Do not be bureaucratic</td>
</tr>
<tr>
<td>P Be linked to investments</td>
</tr>
<tr>
<td>Q Allow performance monitoring</td>
</tr>
<tr>
<td>R Considers competition</td>
</tr>
<tr>
<td>S Respect the initial input from stakeholders</td>
</tr>
<tr>
<td>T Be in-line with the “gameplan”</td>
</tr>
<tr>
<td>U Achieve buy-in from the different stakeholders</td>
</tr>
<tr>
<td>V Utilize a clear criteria</td>
</tr>
<tr>
<td>W Represent the sales potential on the sales territories</td>
</tr>
<tr>
<td>X Be communication driven</td>
</tr>
<tr>
<td>Y Allow everybody to achieve their goals</td>
</tr>
<tr>
<td>Z Consider qualitative goals as well as quantitative ones</td>
</tr>
<tr>
<td>AA Achievable</td>
</tr>
<tr>
<td>BB Challenging</td>
</tr>
<tr>
<td>CC Motivating</td>
</tr>
</tbody>
</table>

Source: originated by the author

4.4.3 Processes and activities

A number of sub-processes and activities within the sales quotas development process were identified. The main sub-processes identified by the researcher are: the development of national sales forecasts, the drill-down of the sales forecasts to the sales force, the process of communicating the sales quotas, providing and receiving feedback and the process of controlling the performance from the sales force.
Develop national sales, expenses and investment forecasts

This sub-process’s aim is to produce the national sales, expenses and investment forecast that will be then drilled-down to the sales force. Product managers lead a team, consisting of the business unit manager, the sales operations manager and some district managers depending on the product and situation. The participation of the latter on this group is sporadic and weak as they only have visibility on their own regions and do not have the global view of the dynamics of the brands. The most relevant activities that are part of the sub-process are the following:

- Analyze historical performance of brands
- Identify and evaluate future events that might have an impact on the forecasts.
- Develop the sales, expenses and investment forecast
- Negotiate the final number with headquarters
- Finalize national forecasts and prepare them for the drill-down process

Drill-down forecasts to territories

Once the national sales forecasts are developed, the national sales need to be allocated to each of the sales territories. These become the sales quotas that each sales representative need to achieve to cash in their variable pay. The drill-down of forecast is developed mainly by the business intelligence analyst and consists of the following activities.

- Define variables to be used and assign initial weights.
- Calibrate the system and check sensitivity of changes.
- Use the goal setting tool to drill down sales forecasts to sales territories.
- Re-define weights (if required) at the district managers meeting.
- Adjustments at the territory level.
- Evaluation of the effects of the proposed goal setting.
Control

One of the objectives of the sales quotas development process is to manage sales force performance. The sales quotas development process incorporates many activities that are specifically directed to allow sales directors and business unit managers to better monitor and control sales force performance. The following activities are included in this sub-process.

- Monitor performance at the territory level.
- Introduce contingency action plans for those sales representatives that might be under-performing.
- Monitor contingency plans and assure motivation is at high levels.
- Analyze and calculate quarterly attainment by sales representatives.
- Analyze and calculate annual attainment by sales representatives.
- Make end-of-year adjustments for those sales representatives that were exposed to special situations.

Communicate

The rationale behind the assignment of sales quotas needs to be explained and the stakeholders from the sales quotas development process need to be persuaded that the sales quotas developed are appropriate. Capturing insights form the field is also critical and this sub-process facilitates transferring insights from the field to the office providing an opportunity to adjust sales quotas to special situations. Both, gathering feedback and communicating the rationale for the sales quotas developed are part of this sub-process, which includes the following activities.

- Communication of sales goals from headquarters to the general manager and commercial director.
- Communication of sales goals from commercial director to business unit managers.
- Communicate sales goals from the business unit managers to district managers.
• Communicate sales goals from district managers to sales representatives.
• Feedback from the sales representatives to the district managers
• Feedback from district managers to business unit managers.
• Feedback from business unit managers to the commercial director.
• Feedback from commercial director and general manager to headquarters.

Table 4-5: Activities performed within the sales quotas development process at Alpha Pharmaceuticals

<table>
<thead>
<tr>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Analyze historical performance of brands</td>
</tr>
<tr>
<td>2. Identify and evaluate future events that might have an impact on the forecasts.</td>
</tr>
<tr>
<td>3. Develop the sales, expenses and investment forecast</td>
</tr>
<tr>
<td>4. Negotiate the final number with headquarters.</td>
</tr>
<tr>
<td>5. Finalize national forecasts and prepare them for the drill-down process.</td>
</tr>
<tr>
<td>6. Define variables to be used and assign initial weights.</td>
</tr>
<tr>
<td>7. Calibrate the system and check sensitivity of changes.</td>
</tr>
<tr>
<td>8. Use the goal setting tool to drill down sales forecasts to sales territories.</td>
</tr>
<tr>
<td>9. Re-define weights (if required) at the District Managers meeting.</td>
</tr>
<tr>
<td>10. Adjustments at the territory level.</td>
</tr>
<tr>
<td>11. Evaluation of the effects of the proposed goal setting.</td>
</tr>
<tr>
<td>12. Monitor performance at the territory level.</td>
</tr>
<tr>
<td>13. Introduce contingency action plans for those Sales Representatives that might be under-performing.</td>
</tr>
<tr>
<td>14. Monitor contingency plans and assure motivation is at high levels.</td>
</tr>
<tr>
<td>15. Analyze and calculate quarterly attainment by Sales Representatives.</td>
</tr>
<tr>
<td>16. Analyze and calculate annual attainment by Sales Representatives.</td>
</tr>
<tr>
<td>17. Make end-of-year adjustments for those Sales Representatives that were exposed to special situations.</td>
</tr>
<tr>
<td>18. Communication of sales goals from headquarters to the General Manager and Commercial Director.</td>
</tr>
<tr>
<td>19. Communication of sales goals from Commercial Director to Business Unit Managers.</td>
</tr>
<tr>
<td>20. Communicate sales goals from the Business Unit Managers to District Managers.</td>
</tr>
<tr>
<td>21. Communicate sales goals from District Managers to Sales Representatives.</td>
</tr>
<tr>
<td>22. Feedback from the Sales Representatives to the District Managers</td>
</tr>
<tr>
<td>23. Feedback from District Managers to Business Unit Managers.</td>
</tr>
<tr>
<td>24. Feedback from Business Unit Managers to Commercial Director.</td>
</tr>
<tr>
<td>25. Feedback from Commercial Director and General Manager to headquarters.</td>
</tr>
</tbody>
</table>

Source: originated by the author
4.5 Barriers to the sales quotas development process

1) Us and them: field against office

First order constructs

“District managers are typically promoted sales representatives and they are in a complicated ‘sandwich’ position between the central office and their teams on the field. They have a much stronger relationship with the sales representatives than with the central office. They identify themselves more with the sales representatives than with the staff from the central office. What I mean is that sometimes district managers just re-transmit to the central office the complaints from the field without rationalizing them. Sales representatives already transmit the feedback from the field in an ‘extremely subjective’ way in order to achieve their goals; 'you are not giving me enough money to spend and my competitors are investing more than we do'; and then, we have the anecdotes. Nobody knows really what to do with them.” (Business unit manager 1)

“District managers play a very important role and we need to have them motivated; in our industry, this is essential; but they live in Sevilla or in Barcelona; they don't live here. I have been a district manager myself and I have had a very useful experience. We need to be closer to them. They are stuck in the middle. On one side you have the sales representatives seeing them as their bosses and on the other side the company telling them that they need to sell more and control expenses; get more results. It is important that we make them feel closer; they must participate from the criteria development. At the beginning when a sales representative is promoted to district manager he is typically very revolutionary.” (Business unit manager 2)

“They know things of the market that I just do not know. They work and deal with much more information than I do. Therefore, based on the data they have and the information available they set the goals, which will be as objective as possible. Otherwise, we would have to go back to the old discussion; based on what data are my sales being evaluated, IMS data.” (Sales representative 1)

“I just give up. I do understand the problem, and the way I see it is that the problem has been increased little by little to a point where the company is only concerned about the budget. I wish someone would come to me and explain the plan. I truly believe these things must be discussed. Before, I had more options. When IMS was not around, we had more options to speak up. Bosses used to come to us and tell us how much we were supposed to sell that particular year and you were able to tell him what you though of that. I even recall the way we changed some of the numbers. If we had a good reason to change them, we would say it, and they would at least take a look at it.” (Sales representative 2)
“We do not really know how they set the goals. We describe to them the actual situation in our territories, warn them of the problems we encounter, tell them about new opportunities we find. We all get this information, no matter the position we fill in the company. I suppose market studies, forecasting, etc, are carried out. We sometimes hear about these projects. The aim is to find the best alternative to pursue.” (Sales representative 3)

“We do not always agree with the objectives that are being set; at least those of us closer to the field. The objectives for a launch are set based on criterion defined by the company and we don't have a say there; not the sales representative or the district managers. They do not ask for our opinion. They are being set by the company, delivered to us and full stop. Probably there are mistakes being made, not only by product but also by geographical areas.” (District manager 1)

**Interpretation and second order constructs**

There is a clear divide between what is considered to be the field and the office. Sales representatives and district managers belong to the so-called field, while the rest of the roles belong to the office. The sales force world is quite different from the reality experienced by the people at the office. They are detached from the office (they live in the different territories or regions), they face daily rejection from clients, are motivated by money and are concerned with achieving the sales quotas assigned to them. People at the office are closer to each other as they share a common physical space and have several interactions every day. These differences on the features of the roles and the extant dynamics contribute to have a divide between people at the field and people at the office. The field complains about not being involved in the decisions. However, involving sales representatives that are scattered across Spain is not an easy task. Also, the top management of the organisation resides at the office, which implies that the power and decisions are made and centralized at the office. These are some of the reasons for the extant divide between both parties. This is a barrier to the implementation of the sales quotas development process as it prevents communication and information from smoothly flowing, not facilitating implementation of the company’s strategy.

District managers are typically promoted sales representatives and they are “stuck in the middle” but with the great advantage of understanding both “worlds” and they are probably the best roles to help to close the divide. However, many of them identify
themselves more with their subordinates than with their bosses and this exacerbates the issue even further.

The divide between the office and the field is a barrier to the implementation of the sales quotas development process. (SOC # 30)

2) Sales representatives not involved

First order constructs

“The sales representative from Cádiz (for instance) receives his goals without a chance to argue, and if he argues, it is the same because we are not changing the goals. I believe the lack of involvement of all stakeholders from the process is a weakness of the system that we must improve in the future. This process considers different internal phases without involving the sales force at all.” (Business unit manager)

“More than including the sales representatives, the district managers should be involved. At the end, the sales representative is a ‘sea’ where you could easily get lost in. In the actual system, somebody tries to assign you the highest possible objective and the sales representatives and the district managers will try to make them the lowest possible. It would be great to have a system where at least the district managers provide feedback. The previous commercial director, two years ago, was the one defining the potential of each area; very centralized. It is a matter of time to change; we are influenced by that way of proceeding.” (Sales operations manager)

“It depends, in some cases the goals are set by the business unit manager with the sales operations manager and it is unchangeable and sometimes (as I most like it), the district managers make a proposal to the business unit manager and sales operations manager and in the meeting in December they discuss it together.” (Business intelligence analyst)

“We need more field information; more information about a local territory, etc. There are times when you have international data that has nothing to do with the information you actually need to understand how the Spanish market behaves. It will help if it was a theoretical case, but when we are working on real cases it is not useful.” (Product manager)

“I just give up. I do understand the problem, and the way I see it is that the problem has been increased little by little to a point where the company is only concerned about the budget. I wish someone would come to me and explain the plan. I truly believe these things must be discussed. Before, I had more options. When IMS was not around, we had more options to speak up. Bosses used to come to us and tell us how much we were supposed to sell that particular year and you were able to tell him what you thought of that. I even recall the way we changed some of the numbers. If we had a good reason to
change them, we would say it, and they would at least take a look at it.” (Sales representative 2)

“I get involved but it is no my decision to make; to decide the goals. In this way, I am the one receiving the objectives. They are updated every year. From time to time, there are more, but they usually last a whole year. Some factors are considered only occasionally. It is not that these factors are never taken into account, but since all these factors are checked at all levels, when it is the turn for the sales representative to change it, he/she can do very little. Sales representatives feel that their opinions do not count. I do figure out what happens every year. Maybe there are weird things happening. I am respectful, but it does not mean that I do not want to know what it is happening and be heard. Sales objectives are currently like pyramids. District managers get together and then each district manager explain to each individual sales representative his/her objectives. We are not allowed to get involved.” (Sales representative 2)

“We do not always agree with the market they establish. We do not get involved in the decisions made regarding launch objectives, and they never ask us for our opinion. Maybe there is a big mistake in all of this.” (District manager)

**Interpretation and second order constructs**

Sales representatives are not involved at all in the sales quotas development process. They just receive their sales goals and they do not have a chance to argue or provide feedback on their views. The level of involvement of stakeholders in the process varies but as it is a top-down process nobody really has a lot of influence on the final sales quotas assigned. This was always like this and is entirely socialized within the company.

Not involving the sales representatives in the process becomes a barrier as they are the stakeholders that are closer to clients and with potentially a wealth of information and insight that could be used in the process. It also has an effect on motivation; not asking them for their opinion sends the message that they are just commercial arms and not capable of capturing, analyzing and transmitting information and insights. Most sales representatives have a professional degree or qualification and are intelligent enough to be capable of gathering information and generating valuable insights for the process. The challenge is how to involve them. Again, the notion of having the district managers facilitating the process through their involvement appears in the quotes.
Not involving the sales representatives is a barrier to the implementation of the sales quotas development process. (SOC # 31)

3) Following historical performance
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

Interpretation and second order constructs
The way the national sales forecasts are developed and also the drill-down to the sales representatives is mainly retroactive, based on historical trends, ignoring the impact and odds from potential future events. This becomes a barrier as there is no reason why future performance has to be in-line with past performance in an increasingly dynamic market environment.

Focusing mainly on following the historical performance of brands is a barrier to the implementation of the sales quotas development process. (SOC # 32)

4) Top-down push

First order constructs
“There are goals and commitments at corporate level that our general manager gets pushed from headquarters and although they are more general than just each product they should all sum up at the end. It is fairly frustrating to develop a plan that starts with the sales goals and resources allocated, prepare this within a team, and then receive an objective that has nothing to do with what you proposed, with the expenses that you proposed, etc. At the end, the process is bottom-up but what really happens is that it is a top-down push.” (Business unit manager 1)

“The budgets from headquarters are 'untouchable'; for the good and for the bad.” (Business unit manager 2)

“Investments are being almost pre-defined. We would all want to have more money to invest. I believe the goals are set from the general management to the commercial director with minor changes; they get them pre-defined.” (Sales operations manager)
“In June 2005, a forecast for the year is developed. The product manager sets the goals for his/her product at the national level. He/she works alongside with the business unit manager. There are times when the goals are set entirely by both business unit managers and the general manager.” (Business intelligence director)

“It depends, in some cases the goals are set by the business unit manager with the sales operations manager and it is unchangeable and sometimes (as I most like it), the district managers make a proposal to the business unit manager and sales operations manager and in the meeting in December they discuss it together.” (Business intelligence analyst)

“I wish the proposals made locally had more relevance. I am sure headquarters does not have full knowledge of the facts. They couldn’t know all there is to be known about the products, the sales force, the country, how the company works locally, etc. If they do not take all that into account they can very easily make mistakes. But the problem is that if goals are not achieved, it means that the incentives will be lower. This bothers people and makes them search for jobs in some other company.” (Product manager 1)

“They round it upwards; of course! Nobody will ever tell you that you will sell less than you say you will. Depending on the product and the way they think it will develop they adjust the goals a little later on. You just assume that they will give you less money and higher goals” (Product manager 2)

“The goals are established by headquarters. If you think that you are going to grow 10% and they think it is more than that, problems arise. It is a top-down process.” (Finance controller)

“However, if they just give me numbers and tell me this is it, I will agree or not.” (Sales representative)

“We do not always agree with the market they establish. We do not get involved in the decisions made regarding launch objectives, and they never ask us for our opinion. Maybe there is a big mistake in all of this.” (District manager)

**Interpretation and second order constructs**

This barrier is closely linked to the one referring to the level of involvement of the sales representatives. However, this one refers to a wider group of stakeholders including the general manager. The sales quotas development process in Alpha Pharmaceuticals pretends to be a bottom-up process but everybody knows that, at the end, the sales budget is fixed by headquarters abroad. Many stakeholders are tired of this situation and would prefer to get the numbers and then agree upon them or not instead of spending a lot of effort to develop something that then is unilaterally changed from the top.
Following a top-down approach that ignores the feedback from the stakeholders closer to the geography is a barrier that prevents information and insights to climb up the organisation. In this case, not only the sales representatives and district managers are impacted but also product managers, business unit managers and even the general manager that needs to set expectations right for the future in order to get an achievable budget for the following years.

Following a top-down approach is a barrier to the implementation of the sales quotas development process. (SOC # 33)

5) Inflexible

First order constructs

“The budgets from headquarters are 'untouchable'; for the good and for the bad.” The system is too inflexible; it is not flexible. Although it is transparent, you cannot practically make changes.” (Business unit manager)

“I believe the goals are set from the general management to the commercial director with minor changes; they get them pre-defined.” (Sales operations manager 1)

“There is a debate, where district managers decide on the weights to be assigned to each variable in the formula and then, consensus must be reached; it is always a qualitative adjustment.” (Sales operations manager 2)

“You just have to go and cry to your boss. What sometimes had happen (and this is not bad) is that you don't change the tool, which is what you ought to do but you go to your boss and explain what had happened (although I believe it is unprofessional), 'I haven't reached the goal by 50% but the reason is that the government have reduced prices, etc. In any case I will be gaining market share and my position against competition is still good'. Then, the company gives like a 'dad's present' for the effort and under the understanding that causes away from your control were influencing the results.” (Business intelligence director)

“It is quite small (the adjustment). If there is a 50,000 € rise, maybe the sales representative that has just joined the company is the one that gets 45,000 € and the 5,000 € left are divided among the rest of the sales representatives. I do not know what would happen if in a district 80% of the Sales Representatives has just joined the company.” (Business intelligence analyst)
“I believe the allocation of goals is conducted in an objective manner; there are many parameters being studied in a scientific way. Also, as it happens in life, it is necessary to step back and make some considerations; ‘look, I am the only one left in the area or this is a new area to me’. This is also considered, but this is maybe a little bit more ‘qualitative’; ‘I am going through a bad personal moment, so you just hold on and get what you get based on the worksheets although sometimes there are a number of considerations.” (Product manager)

“It is the approval given from headquarters. Once it is approved, sales directors set the goals. This means that it is a flexible system. I have an example that explains this very well. A new product was launched, so the goals had to change. At the end of the year a variable payment was added to lessen the potential issues that could emerge.” (Finance controller)

“We do listen. But it is also true that during the last years, at least as far as my work as a manager (for the last two years) is concerned plus one more year as a team manager helping the former manager, every time we got the budget we changed some things. We used to take away some things from some people and gave them to some other people because we believed at that time that a particular territory had more potential, but always following a logical criterion to make up for the things taken away.” (District manager)

**Interpretation and second order constructs**

As already discussed in the (SOC #9), flexibility appears to be one of the most important and recurring themes regarding the goal setting business process. The tool used to drill-down the sales quotas to the people on the field is inflexible as the sensitivity of the weights used is minimal. However, the company deals with flexibility through the management of exceptions. The commercial director made it explicit to the researcher that he is against exceptions and making of exceptions was actually and exception from the previous year. However, from the interviewees it is clear that this is not so and that they have been doing it for long and there are no indications of stopping it in the future.

Not having enough flexibility is a barrier to the implementation of the sales quotas development process because it does not allow the amendment of unfair situations. It also goes against the expectation of having more flexibility and a fair goal.
Not having enough flexibility is a barrier to the implementation of the sales quotas development process. (SOC # 34)

6) Lack of communication

First order constructs

“The forecasting or the foreguesing…? That depends...We are launching a new product in 6 months. We will notice it in the other products as people will give more importance to the launch. Who is aware of this? The business unit manager and the commercial director...and nobody else...do you understand? 'Are we going to in-license or out-license a product'. I don't know about that...they do know it and based on this they set your objectives. To be honest, nobody knew that we were going to launch this product last summer and all the goals were changed on the fly. Nobody knew about this. The say that goes ‘who owns the information has the power’....although is not 100% certain. The real power is knowledge, which is what you do with the information.” (Sales operations manager)

“I believe that improvements to the process could be achieved through using the same criteria for each and every sales representative, and if it is possible, to know what variables are used to set the goals and budget. They know things about the market that I just do not know. They work and deal with much more information than the one I use.” (Sales representative 1)

“How sales are assessed, what is the reason why they are the way they are? Weird things always happen at particular and moments such as what happens at the end of the year, at the end of a quarter, etc. This bothers us much. I would really love to know how things are being done.” (Sales representative 2)

“Something that does not make much sense is the way sales vary from one month to another. IMS should explain in a better way the information. IMS information is just there, nobody explains what it means.” (Sales representative 3)

“Before setting the goals I do not know how to explain why objectives are as they are. If they are high it is because there are products that are very interesting for the company. But if they are too high, a throughout explanation must be given since questions arise at any moment.” (District manager)

Interpretation and second order constructs

The commercial director believes he properly communicates the decisions he makes. However, people on the field and also some people within the office believe there is lack of communication. Many of the reasons as to why the goals are the way they are,
are not properly communicated. Also, regarding IMS’s data, the stakeholders at the receiving end, from the data (sales representatives) are not being explained on the way in which the data is being collected and analyzed. This generates a lot of uncertainty from their side. This is a barrier as keeping people in the dark does not allow getting their buy-in for the process.

| Lack of communication is a barrier to the implementation of the sales quotas development process. (SOC # 35) |

**7) Lack of process owner**  
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**  
Nobody formally owns the sales quotas development process. The commercial director is taking actions right now to be seen as formally owning it. Not having a process owner is a barrier to the process as lacking clear accountability for the outcomes prevents successes from happening.

| Not having a process owner is a barrier to the implementation of the sales quotas development process. (SOC # 36) |

**8) Low quality of information**  
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**  
The information used for the development of sales goals sometimes lacks the quality that is required by the sales quotas development process’s stakeholders. However, the company is acquiring the best data available in the market through a third party vendor, IMS health, which holds a dominant position on this space. Information is, generally speaking, of high quality. However, there are some regions where the quality is not
good enough to allow an effective development of goals. Not having high-quality information is a barrier as the company can easily be setting goals that are unfair when information is misleading. Primary market research could always be done to cover for this need but the cost needs to be evaluated against the benefit provided.

| Lacking high quality of information is a barrier to the implementation of the sales quotas development process. (SOC # 37) |

9) Information not available
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

Interpretation and second order constructs
Spain is a data-poor country in the context of the European pharmaceutical industry and although there is plenty of information regarding sales by geography, there are still some gaps compared with other European countries such as the UK, Germany or France. This is sometimes frustrating for the stakeholders as they see their colleagues in other countries implementing more robust goal setting business processes. As headquarters are based on a data-rich country their business assumptions tend to be based on that environment, which according to the stakeholders has nothing to do with Spain and the learnings are not transferable. Primary market research could always be carried out to cover for this need but the cost needs to be evaluated against the benefit provided.

| Not having enough information available is a barrier to the implementation of the sales quotas development process. (SOC # 38) |

10) Information not on time
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)
**Interpretation and second order constructs**

Sometimes, the information is not received on time and this provides a lot of uncertainty on the different stakeholders. This is a barrier to the goal setting process as not having the information on time does not allow the outcomes of the process to be on time. This has an impact on the expectation that the process needs to be punctual.

| Not receiving the information on time is a barrier to the implementation of the sales quotas development process. (SOC # 39) |

**11) Fiefdoms**

(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**

Each business line is different from the other and they were even compared to fiefdoms by some of the stakeholders (in Spanish: reinos de taifas). They do not follow the same procedures and their approaches to the process differ. While one line is more marketing-oriented, the other is more sales-oriented. While one of the lines allows a certain degree of participation from the district managers, the other one imposes the goals upon them not allowing any discussion at all. These are just perceptions as it was already discussed that the level of participation is actually minimum. This is as a barrier to the goal setting business process because violates many stakeholders’ expectations. Exemplars of those expectations are objectivity, transparency and participation.

| The existence of “fiefdoms” is a barrier to the implementation of the sales quotas development process. (SOC # 40) |

**12) Different Managerial styles**

(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)
**Interpretation and second order constructs**

The business line managers have different managerial styles and this has an impact on the process as one of them is more inclined to “sell” the process to their subordinates while the other one is more analytical and prefers to “push” the goals to his subordinates without many explanations. This is a barrier because it does not facilitate the implementation of the sales quotas development process. Two key drivers from the process promote different ways of handling the process while they also see the world in complete different ways.

| Having different managerial styles is a barrier to the implementation of the sales quotas development process. (SOC # 41) |

**13) Lack of analytical capacity**

(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**

The actual analytical capabilities at Alpha Pharmaceuticals are not strong. This is the researcher’s interpretation based on the knowledge he has acquired as a management consultant working with many organisations in the pharmaceutical sector in Spain. The analysis and the techniques they use are very simplistic for market standards. However, it is fair to say that some stakeholders are satisfied with this level of analysis.

This is a barrier because not having a strong analytical capacity prevents the company from developing precise goals considering the elements that determine the sales potential in the different territories.

| Lacking analytical capacity in-house is a barrier to the implementation of the sales quotas development process. (SOC # 42) |
14) Lack of power of the district managers
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**
District managers are not allowed to change the goal setting business process having only small influence on the final results. Some of them are allowed to introduce changes on the weights used by the tool, although as discussed already, this does not make much of a difference. They are also allowed to manually adjust sales quotas for the different sales representatives belonging to their area but with the final sum being zero. This implies that what they give to one needs to be taken from another one. This has obvious limitations of scope. Not empowering district managers is a barrier to the process as not allowing them to make changes prevents the adjustment of sales quotas to the extant sales potential to be seized in some territories.

Lack of empowerment of the district managers is a barrier to the implementation of the sales quotas development process. (SOC # 43)

15) Introducing too many systems and new information too suddenly
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**
The company is increasingly adopting a number of sales management systems. This is an important change considering that in the previous situation there were not many systems to manage and control the sales force. Introducing too many systems and information too suddenly is a barrier to the process. Stakeholders need time to digest and adapt themselves to the new changes before they accept new initiatives. There is also the risk of analysis paralysis due to the excess of information.

Introducing too many systems and new information too suddenly is a barrier to the
16) **Age, new skills and resistance to change**

(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**
Recently, Alpha Pharmaceuticals is introducing a fair amount of change and also has an older-than-average sales force. This makes age, new skills and resistance to change to become a barrier to the goal setting process. Some people just cannot cope with the change and this produces a lot of frustration and lack of motivation with a likely impact on performance. The issue is quoted as being “a big problem” by one of the sales representatives; a problem the company is not aware of and not addressing.

Age, new skills and resistance to change are barriers to the implementation of the sales quotas development process. (SOC # 45)

17) **Difficult to reach consensus**

(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**
Reaching consensus is a desire, although as discussed already, is more cosmetic in nature than actually happening. In one of the business lines, consensus is a goal in itself for district managers to buy-into the goals. However, in another one, goals are just being directed to the district managers without the possibility of even arguing. The difficulty to reach consensus is a barrier because it consumes significant time. Not reaching consensus has the risk of not getting the necessary buy-in from the sales force with a potential loss in motivation and performance.

Not reaching consensus is a barrier to the implementation of the sales quotas development process. (SOC # 46)
18) **Formal channels to gather insights not implemented**
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**
The company manages feedback and insights generation in an ad-hoc manner. There are no formal channels to process the insights that are gathered from the field. This is linked with (SOC# 31: no participation from sales representatives). In a meeting with the commercial director and the business intelligence director this was acknowledge as a fundamental action they needed to take. This is a barrier to the implementation of the sales quotas development process because it does not allow incorporating all the possible intelligence for the field not allowing sales quotas to better represent sales potential in each territory.

Not having formal channels to gather insights implemented is a barrier to the implementation of the sales quotas development process. (SOC # 47)

19) **Shared territories**
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**
The company has shared territories and for some products they do internal co-promotion. This means that the three sales forces could be promoting one product in common in all the territories. For this product, the goal for one sales representative in one territory has to be shared with two more colleagues. Sometimes, the colleagues’ performance is not as high as expected and then the sales quota assigned becomes unfair. This is why having shared territories is a barrier to the sales quotas development process.

Having shared territories by the sales force is a barrier to the implementation of the
20) **Not a homogeneous process**
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**
As already discussed, the process is not homogeneous. Each business line has different management styles and conducts the process in different ways. One of the lines is more participative and consensus-driven, while the other one is more directive in its management style. This is a barrier to the sales quotas development process because it makes the process very difficult to manage and the final result in each sales line might not necessarily be the same because their process is different. The top management of the organisation believes they have a single process implemented for setting sales quotas to the sales force; not two.

Not having a homogeneous process in place is a barrier to the implementation of the sales quotas development process. (SOC # 49)

21) **National sales forecast unreasonable**
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**
Sales representatives complain about the national sales forecasts as being unreasonable and people at the office struggle to explain the reasons as to why they are the way they are. The top management of the organisation knows that those sales forecasts are being set directly from headquarters but they fail to successfully communicate this issue downwards throughout the organisation and instead of sharing the burden, they own it and are being seen as villains. This is a barrier to the implementation of the sales quotas development process because it undermines motivation and performance from the sales representatives.
Having unreasonable national sales forecasts is a barrier to the implementation of the sales quotas development process. (SOC # 50)

22) Selfishness
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

Interpretation and second order constructs
Goals are linked to monetary incentives and this makes the process to be especially sensitive to individual’s private lives. They know that if they manage to get the lowest possible goal they could maximize their earnings. Selfishness is a barrier to the sales quotas development process as the company treats the whole sales force as a uniform team pursuing a common objective and selfish attitudes undermine this idea.

Stakeholders’ selfishness is a barrier to the implementation of the sales quotas development process. (SOC # 51)

23) Bureaucracy
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

Interpretation and second order constructs
As discussed before, there is the expectation to have a sales quotas development process with low level of bureaucracy involved. This researcher believes the process Alpha Pharmaceuticals follows is not bureaucratic at all. However, one of the stakeholders believes it is. Bureaucracy is a barrier to the implementation of the sales quotas development process as it takes people’s time away without adding much value to the final outcome.

Bureaucracy is a barrier to the implementation of the sales quotas development
24) The human factor
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

Interpretation and second order constructs
The so called “human factor” refers to people and the issues around personal situations that might arise as well as the skills and experience (self-efficacy) they have. The formal process does not take into account this element, although it is considered when deciding on the exceptions to be made at the end of the year. The sales operations manager claims that he considers it at the beginning of the period as well. However, the adjustment he mentions is more symbolic than material. This is a barrier to the implementation of the sales quotas development process as there is the expectation from stakeholders that the human factor is considered. It also does not allow the provision of fairness and properly represent the actual sales potential to be seized in each territory.

Not considering the human factor is a barrier to the implementation of the sales quotas development process. (SOC # 53)

25) Fairness
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

Interpretation and second order constructs
Some stakeholders believe that fairness is unreachable for practical reasons. This belief prevents stakeholders from making a stronger effort to provide fairness throughout the process.

The belief that fairness could not be achieved is a barrier to the implementation of the sales quotas development process. (SOC # 54)
26) **Measuring the wrong variables**

(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**

Many of the variables considered by the company when setting goals are fairly easy to capture and measure in the market place. However, there is the risk of not measuring other variables that are not so easy to gather but have much more descriptive value. Not measuring the right variables is a barrier to the sales quotas development process because it prevents achieving accuracy and the provision of fairness.

Measuring the wrong variables is a barrier to the implementation of the sales quotas development process. (SOC # 55)

27) **Not knowing how to deal with sales representatives’ judgment**

(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**

The company does not know how to decode the information and insights provided by the sales representatives. This was already examined in (SOC # 46: formal channels for gathering insights from the sales representatives not implemented). It is a barrier to the process as there is plenty of richness in the feedback and insights that could potentially be provided by sales representatives. By not knowing how to interpret and process that information the company is missing the opportunity to satisfy many stakeholders’ expectations (sales representatives’ participation and involvement and accuracy and fairness of sales quotas among others).

Not knowing how to deal with the subjective nature of the sales representatives’ judgment is a barrier to the implementation of the sales quotas development process.
28) **Traveling prescriptions (sales causality difficult to track)**
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

*Interpretation and second order constructs*
A sales representative promotes certain products in his/her territory with the expectation that the prescription generated by that call or promotion will land in his/her territory and be recognized as a sale. However, sometimes, the patient goes to a pharmacy closer to home instead of one closer to the hospital where promotion has been carried out. Therefore, the prescription could be recognized in another sales representative’s territory. It is fair to say that if there are prescriptions going away from each of the territories, there are also prescriptions coming into them and being generated by another sales representative. Not capturing this issue is unfair for the sales representatives and becomes a barrier to the implementation of the sales quotas development process.

Difficulties on tracking sales causality is a barrier to the implementation of the sales quotas development process. (SOC # 57)

29) **Difficulties on measuring variables**
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

*Interpretation and second order constructs*
This is linked to (SOC # 45: not measuring the right variables). As mentioned before, there are certain variables, which are very descriptive and explanatory but are fairly difficult to measure. Not being capable of measuring these variables becomes a barrier to the implementation of the sales quotas development process because it undermines its accuracy and fairness.

Not being capable of measuring some variables is a barrier to the implementation of the
30) Territories unbalanced
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**
Sales territories in Alpha Pharmaceuticals are not aligned. This means that the sales potential and the number of accounts per territory significantly differ. Therefore, the business opportunity to which each sales representative is exposed to varies as well. However, many of the elements related to the goal setting business process assume a similar business opportunity for each of the territories. As an example, when they launched one of their products they have just divided the number of units to be sold by the number of sales representatives. Also, when the investment budget is distributed, every sales representative receives the same amount of money to invest on physicians. This was already discussed before as an expectation from the process (SOC # 16). When the territory alignment situation is not being taken into account the goals assigned to each of the territories become unrealistic and not in line with the extant business opportunity in the sales territory.

Not having aligned territories is a barrier to the implementation of the sales quotas development process. (SOC # 59)

31) Transparency and clarity
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**
As discussed when defining expectations, the company makes an effort to provide both transparency and clarity into the process. This is also magnified as the company is coming from a situation where there was not a lot of transparency. The formula used to allocate the goals to the different regions provides transparency, though at the expense
of fairness in some instances. At least, the stakeholders believe that a sales representative or a district manager could be unlucky and have the impact of a particular situation that might exist in a territory, but at least there is a transparent and uniform system for all. Not providing transparency and clarity is a barrier to the implementation of the sales quotas development process because it undermines trust from the stakeholders in the process and generates uncertainty.

| Not providing transparency and clarity is a barrier to the implementation of the sales quotas development process. (SOC # 60) |

32) Unforeseen events
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**
The Spanish Pharmaceutical environment has been fairly dynamic in the last three years with many new regulations coming into place; mainly those related to cost containment measures from the government. This generates a number of unforeseen events impacting directly on the goals as a sales representative could be selling the expected number of units but not achieving the goal in Euros. Not being capable to predict events is a barrier to the implementation of the sales quotas development process as the goals previously defined might not be reasonable (achievable, motivating and fair)

| Having many unforeseen events is a barrier to the implementation of the sales quotas development process. (SOC # 61) |

33) Sales Representatives ‘gaming’
(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**
Sales representatives are being measured on sales coming from IMS; which is a third party (data provider). With time, some sales representatives learnt how to beat the system and play with it. This is a barrier as the information that IMS reports could be contaminated by the sales representatives’ actions on the field. This is a barrier to the sales quotas development process as the acceleration sales representatives could generate contaminate the goals for the following period.

| Having the Sales Representatives “gaming” is a barrier to the implementation of the sales quotas development process. (SOC # 62) |

34) **Changing sales quotas in the middle of the year**

(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**

The launch of a new product with a poor price negotiation with the Health Authority generated a change of sales force goals and incentives at the middle of the year. This was received as an unfair change and was the main generator of extraordinary payments to many sales representatives at the end of the year. Changing sales quotas in the middle of the year is a barrier to the implementation of the sales quotas development process as it generates uncertainty and a feeling of unfairness across the sales force.

| Changing sales quotas in the middle of the year is a barrier to the implementation of the sales quotas development process. (SOC # 63) |

35) **Complexity**

(Note: the first order constructs regarding the following interpretation and second order construct development could be found in Appendix E)

**Interpretation and second order constructs**

The goal setting process is perceived to be complex and there is a risk associated with overcomplicating matters. This company prefers to have things in the most transparent
and simple fashion even at the cost of not getting a perfect distribution of sales goals. Complex systems are a barrier to the implementation of an effective sales quotas development process as they are resource hungry.

| Complexity of the process is a barrier to the implementation of the sales quotas development process. (SOC # 64) |

**Summary of barriers**

The following table presents a summary of the barriers identified from the different stakeholders from the sales quotas development process within Alpha Pharmaceuticals. Each barrier is presented already in the form of second order constructs and the boxes in yellow represent the link between the barrier and the roles identifying them. The identification of barriers came as a result of in-depth, semi-structure interviews and those were not prompted to the interviewees. Barriers were collected and interpreted by the researcher from explicit and implicit comments from the interviewees and the trail of evidence could be followed through the first order constructs from each one of them presented in the previous section.

The table facilitates a visualization of common perceptions among the different roles. It is important to note though, that some roles might be sharing other people’s views on barriers if they were made more aware of them and prompted to express a view. This aspect was not validated on this study.

Exemplars of barriers that were on top of mind for most of the stakeholders are the top-down approach being followed by the company, the lack of participation from the stakeholders in the process, having flexibility to introduce changes, having a process owner, transparency and utilizing better information.
Table 4-6: barriers to the implementation of the sales quotas development process

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<td>Lack of Direct Managers involvement (SOC # 43)</td>
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<td>Introducing too many systems and new information too suddenly (SOC # 44)</td>
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<td>The belief that forecasts could not be achieved (SOC # 54)</td>
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<td>Tracking sales variance is difficult (SOC # 57)</td>
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<td>Naming the Sales Representatives’ “guaranty” (SOC # 62)</td>
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Source: originated by the author

A clear divide between the field and the office was identified. As expected, some of the barriers were more emphasized by each of those groups. The field was very much concerned with communication, participation, flexibility and fairness, while the office was more concerned with setting challenging goals, sales representatives gaming and not being objective and capturing adequate information.
4.6 Examining the sales quotas development

4.6.1 Interactions among the elements in the model

First, the interactions among the 5 elements of the model (business objectives, stakeholders, expectations, activities and measures of capabilities) are introduced through coding focusing on two elements at a time and starting from business objectives and moving towards activities.

Table 4-7: Interactions between business objectives and stakeholders

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Objectives</th>
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<td>CD</td>
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<td>DBI</td>
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Table 4-7 represents, for each stakeholder (in the rows), their view on what business objective the goal setting process should pursue. For example, while for product managers (PM) the only objective the goal setting business process pursues is to ensure behaviours are in line with the strategy, for the general manager (GM) the process should cover the three objectives described before. The same rationale is applied for all the other tables describing the sales quotas development process. Figure 4-2 is a graphic display illustrating the links from each objective with the corresponding stakeholder.
Table 4-8 represents for each stakeholder (in the columns) their expectations (in the rows) from the sales quotas development process. For example, sales operations managers (SOM) in Alpha Pharmaceuticals have the expectation that the process is carried out in a professional manner (A).

Table 4-8: interactions between stakeholders and expectations

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Source: originated by the author
Figure 4.3 is a graphic display illustrating the links between stakeholders and the corresponding expectations. Only a few links are represented to illustrate the model.

**Figure 4.3: Interactions between stakeholders and expectations**

![Interactions between stakeholders and expectations](image)

Source: originated by the author

**Interactions between expectations and activities**

Table 4-9 shows the activities (in the columns) in the sales quotas development process aiming at satisfying stakeholders’ expectations (in the rows). For example, while the expectation of having a process that is conducted in a professional manner (A) is satisfied through all the activities, the expectation of allowing participation from the sales force (K) is not satisfied by any activity.
Table 4-9: Interactions between expectations and activities

<table>
<thead>
<tr>
<th>Expectations</th>
<th>Activities</th>
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<tbody>
<tr>
<td>A</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</td>
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Source: originated by the author

Figure 4.4 is a graphic display with some of the links between expectations and activities illustrating the sales quotas development process.

Figure 4.4: Interactions between expectations and activities

Source: originated by the author
Each colour within the activities represents a different sub-process as per table below:

<table>
<thead>
<tr>
<th>Colour</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grey</td>
<td>Develop national sales forecasts</td>
</tr>
<tr>
<td>Light blue</td>
<td>Drill-down sales forecasts to territories</td>
</tr>
<tr>
<td>Green</td>
<td>Control</td>
</tr>
<tr>
<td>Orange</td>
<td>Communicate</td>
</tr>
</tbody>
</table>

### 4.6.2 The sales quota development process

Figure 4.5 describes Alpha Pharmaceuticals’ sales quotas development process for pharmaceutical sales representatives.

Figure 4.5: The sales quotas development process

Source: originated by the author

The rationale from the diagram is as follows. First, organisations develop a vision and a strategy to move the organisation towards that vision. To execute the strategy, a number of business objectives are elicited. The sales quotas development process in itself has its own business objectives to accomplish and stakeholders from that process need to be
aligned with those objectives. This means that they might agree or not but they need to be committed to pursuing those objectives. These stakeholders have, in turn, certain expectations as to what needs to be done to accomplish those business objectives. Therefore, through satisfying stakeholders’ expectations, the sales quotas development process becomes effective at the eyes of stakeholders, which is the ultimate goal of the process. Some stakeholders decide on how the process should be defined and operate in practice, others are supporting the process and others are at the receiving end of the process and their objectives are set as an outcome from the process. The activities considered in the process should be designed with the purpose of satisfying stakeholders’ expectations; mostly sales directors and sales operations executives’ expectations. They are the decision makers of the process. Uncovering expectations from many stakeholders is useful to understand the different perspectives. However, it does not make sense to think that all expectations are reasonable and need to be satisfied. For example, one of the expectations coming from the business intelligence manager was that he wanted the process to allow everybody to achieve their goals. That is unreasonable because that implies that goals are not challenging enough.

Not surprisingly, the activities identified in the case study do not differ from the activities initially considered in the literature. This is probably because executives tend to follow what is prescribed in management books or what other colleagues are doing, which is based on the so called “best practices”, shared across industries. It is interesting, though, that many of the activities in the process do not satisfy stakeholders’ expectations and in theory they should, if the company wants to have an effective sales quotas development process. Organisations need to be aware of what expectations are not being met by the process in place and evaluate if it is worth investing on satisfying those expectations or not. The following expectations were not met by any activity in the process:

- The tool used for drilling down the sales quotas to the field is expected to be dynamic and sensitive.
- The sales quotas development process is expected to allow participation from the different stakeholders.
- The sales quotas development process is expected to be unchangeable within the year.
- The sales quotas development process is expected to consider the competition.
- The sales quotas development process is expected to respect the initial input from stakeholders.
- The sales quotas development process is expected to be communication driven.
- The sales quotas development process is expected to allow everybody to achieve their goals.
- The sales quotas development process is expected to consider qualitative goals as well as quantitative ones.

Understanding to what degree these expectations are reasonable or not is important. Organisations need to know what organisational capabilities are worthy of investment. While the activities in the sales quotas development process seem to be fairly prescribed already, there are many ways in which to execute those activities. There are also different degrees of competence at executing those activities. That is why understanding what organisational capabilities are required to conduct an effective sales quotas development process is so important.

4.7 Findings from the case study

Alpha Pharmaceuticals’ sales quotas development process was determined in terms of business objectives, stakeholders’ expectations and sub-processes and activities satisfying those expectations. The process was described both through the use of tables linking two elements at a time and also mapped through a graphical display. Those unmet expectations from Alpha’s stakeholders were also highlighted. Barriers to the implementation of the process were determined.

The literature describes the goal setting process as a number of activities sequentially organized and does not take into consideration stakeholders’ expectations (Zoltners et al., 2001). Moreover, many researchers have focused on the development of mathematical models trying to capture from theoretical and empirical perspectives
territory future sales and its effects on sales force effectiveness (Darmon, 2001; Good and Stone, 1991; Darmon, 1997; Darmon, 1979; Mitchell, 1979; Easton, 1976; Herzog, 1961). They have focused mainly on the key components of the management control system: goal setting, performance measurement, territory alignment and resource allocation (Futrell and Swan, 1976). However, many of these models cannot be applied in practice (Darmon, 1997). According to Darmon (1997), the main reasons are the complexity of the systems and the granularity of data required.

The sales quotas development process in Alpha Pharmaceuticals could not be explained through the models described in the literature. The sequence of activities described in Zoltners’s sales quotas development process was verified to be in place and at first glance it would appear as if the implementation of those were appropriate. However, the data from Alpha Pharmaceuticals suggests that several stakeholders’ expectations were not being met by the process’s activities. The sales quotas development process needs to be serving the strategic business objectives the company has, which needs to be in line with stakeholders’ expectations. However, the findings from the case study suggest that implementing the activities as defined by the literature does not guarantee that all the stakeholders’ expectations are to be met. For this to happen, it is necessary to understand the strategic business objectives and stakeholders’ expectations before defining the activities that will address those expectations. Having an understanding of what expectations are reasonable and which ones are not is essential. Sales directors and sales operations executives are the decision makers of the sales quotas development process and the process should at least meet their expectations. However, they need to be aware of the expectations from all stakeholders of the process and try to satisfy as many as possible bearing in mind cost and impact.

Those unmet expectations observed in the case study were derived from problems associated with the implementation of the process. This is in line with what Darmon (1997) argues regarding the difficulties observed on the implementation of the process. However, the reasons for this were well beyond the complexity of the systems and the granularity of data as detailed on the literature. Many barriers identified have to do with “people” and the way they behave and relate to each other (Morelli and Braganza,
This is highlighted as a frequent barrier to general business process redesign (Irani et al., 2000). Aspects such as communication, level of involvement of stakeholders in the process, available skills and accountability proved to be essential for the implementation of the sales quotas development process. Most of the research performed so far on the subject is highly quantitative, looking at how to calculate goals rather than focusing on how to implement the process once you have your national sales forecasts defined. Most researchers took a strong positivist perspective on the subject and this might have prevented them from uncovering softer elements that are fundamental for the implementation of the sales quotas development process.

### 4.8 Chapter summary

The chapter presented the case study conducted at Alpha Pharmaceuticals. The company was described through providing background information, a description of the portfolio and the organisational structure. The sales quotas development process was described in terms of activities satisfying stakeholders’ expectations and examined following the Process Dependency Network approach. The case study allowed understanding what a sales quotas development process for a pharmaceutical organisation looks like and what are the barriers to overcome to be able to conduct an effective process.

In the next chapter, the analysis and results from the survey are presented and discussed. Organisational capabilities are derived from the barriers uncovered in the case study and the literature and an initial SQD Model and SQP Maturity Model are developed and further refined.
5 Organisational capabilities: analysis and results

5.1 Chapter introduction

This chapter presents the results of the analysis from the survey conducted. Organisational capabilities are derived from the barriers identified in the case study and the literature, supporting their inclusion in the SQD Model. The features of each stage of the initial SQP Maturity Framework for each organisational capability are presented. The outcomes from the focus group, to refine the list of capabilities to be considered, are discussed. The chapter explains the development of the questionnaire used for the survey and the use of measures of capabilities associated with each construct. The descriptive statistics are presented as well as the comparison of means. This is used to identify organisational capabilities, their relative importance and the impact of the context on assigning relevance. The contextual segments studied are related to size of organisations (high-revenue or small/medium), nature (multinationals or local), orientation (primary care or specialist-orientated) and type (branded or generic portfolios). The organisational capabilities are grouped under categories applying Principal Components Analysis. All the statistical analysis performed, as well as the outcomes are made explicit in the chapter.

5.2 Background information

The analysis of first order interview data constructs suggested that Alpha Pharmaceuticals’ current sales quotas development process operates ineffectively. This means there are several stakeholders’ expectations not being met by the process. Alpha’s sales quotas development process fits the profile of a level 1 process from Darmon’s (1997) typologies discussed earlier in the literature review section: (a) management considers readily available information such as past sales data and
managerial judgments and perceptions and (b) sales for one year are based on previous year’s sales with some judgmental adjustments and without involving the sales representatives:

“They are the ones developing the national sales forecasts for each product and they do so working with each of the business unit managers, although generally, (as we are talking about a top-down process) many times the figures that will be determined are ‘a given’ fixed by the business unit manager and delivered to them by the general manager.” (Business intelligence director)

“I believe the system used (based on weights) is a good one. It takes into account historical sales, market share, and deviations with respect to market share. Those three elements are essential to develop the goals.” (District manager 1)

“We do not always agree with the objectives that are being set; at least those of us closer to the field. The objectives for a launch are set based on criterion defined by the company and we don't have a say there; not the sales representative or the district managers. They do not ask for our opinion. They are being set by the company, delivered to us and full stop. Probably there are mistakes being made, not only by product but also by geographical areas.” (District manager 1)

One of the aims of this thesis is to determine those organisational capabilities that allow developing an effective sales quotas process at the sales representative level. As a result of the case study conducted at Alpha Pharmaceuticals, thirty five potential barriers to the development of effective sales quotas were identified. For each barrier identified there is an organisational capability to overcome it. All barriers identified were codified from SOC #30 to SOC #64 to facilitate processing and understanding. Each organisational capability is linked to the correspondent barrier the organisational capability overcomes. Each organisational capability is derived from both the case study results and the literature. In the following section, each organisational capability is introduced and the barriers associated to them are made explicit in the title using the second order construct number (SOC#) as the reference.
5.3 Organisational capabilities

1. The ability of sales and marketing people to interact (associated to SOC #30)

The perceived divide between people in the field (sales representatives and district managers) and people at the office, if dealt with, can help to improve stakeholders’ involvement in the process.

“District managers are typically promoted sales representatives and they are in a complicated ‘sandwich’ position between the central office and their teams on the field. They have a much stronger relationship with the sales representatives than with the central office. They identify themselves more with the sales representatives than with the staff from the central office. What I mean is that sometimes district managers just re-transmit to the central office the complaints from the field without rationalizing them.” (Business unit manager 1)

This situation is not unique to Alpha Pharmaceuticals and their sales quotas development process. It has been observed and explained also by other academics researching the sales management field. Zoltners (2005) explains the divide between sales and marketing functions based on the different mind-sets they both have: (a) customer versus product; (b) personal relationships versus analysis; (c) continuous daily activity versus sporadic projects; (d) results versus process and (e) short term versus long term orientation (Zoltners, 2005).

The CMM framework, discussed in the literature review section, is used as a tool to describe the characteristics of the different maturity levels for this organisational capability.

In the initial level there are no interactions between field (salespeople) and office (marketing people). Marketing and sales people explicitly refer to each other as "us" and "them". There is a clear divide between both functions.

In the repeatable level there is awareness in the organisation as to the relevance of field (salespeople) and office (marketing people) interacting. There are success stories where
interactions were beneficial for both functions. However, marketing and sales people still refer to each other as "us" and "them". There is still a perceived divide between both functions.

In the **defined level** there is awareness in the organisation as to the relevance of field (salespeople) and office (marketing people) interacting. There are success stories where interactions were beneficial for both functions. There are a number of pre-defined interactions arranged through setting up meetings or filling standard reports. Some marketing and sales people still refer to each other as "us" and "them". There is still a perceived slight divide between both functions.

In the **managed level** both field (salespeople) and office (marketing people) engage in most of the following activities: intelligence sharing (competitors and market intelligence, customer database management and customer profiles), direction setting (product strategy development, long term sales forecasts development, product positioning and messaging, segmentation and operational goals production), resource allocation (investments across the products, long term investment plans, calling strategy and incentives budget) and resources and services development (organisation design, training needs identification, promotional material and key opinion leaders identification and programmes). Marketing and sales people sometimes refer to each other as "us" and "them". There is no tacit or explicit divide between both functions. The outcomes from the interactions are predictable. Stakeholders are capable to assess if the interactions are working according to plan or they could be improved.

In the **optimizing level** both field (salespeople) and office (marketing people) engage in all of the following activities: intelligence sharing (competitors and market intelligence, customer database management and customer profiles), direction setting (product strategy development, long term sales forecasts development, product positioning and messaging, segmentation and operational goals production), resource allocation (investments across the products, long term investment plans, calling strategy and incentives budget) and resources and services development (organisation design, training needs identification, promotional material and key opinion leaders identification and programmes).
identification and programmes). Marketing and sales people never refer to each other as "us" and "them". There is no tacit or explicit divide between both functions. The outcomes from the interactions are predictable. Stakeholders are capable to assess if the interactions are working according to plan or they could be improved. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

2. The ability to empower district managers to make sales quotas allocation decisions (associated to SOC #43)

Despite the efforts towards decentralization, Alpha still holds some degree of centralization and many decisions are being made at the top of the organisation. The sales quotas development process is no exception. Centralization is generating more dissatisfaction in the field rather than at the office. This is because the former feel they are closer to client and in a better position to forecast the amount of sales that can be generated in each sales territory.

“We do not always agree with the market they establish. We do not get involved in the decisions made regarding launch objectives, and they never ask us for our opinion. Maybe there is a big mistake in all of this.” (District manager)

“The goals are established by headquarters. If you think that you are going to grow 10% and they think it is more than that, problems arise. It is a top-down process.” (Finance controller)

The literature describes and explains the effects of centralization among functions. Menon et al. (1997) found that centralization reduces connectedness and increases tension and conflict among the various functions (Menon et al., 1997). For Alpha Pharmaceuticals, this suggests centralization is fueling the divide between field and office while impeding the involvement of the various stakeholders’ in the process. The lack of formal involvement – particularly from the sales representatives – does not permit understanding the nature of each sales territory and the multiple utility functions from sales representatives.
The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level the decision making process for setting goals allows people in lower levels of the organisation to challenge decisions and does not rely solely on a few people on the top of the organisation (general manager, sales director, commercial director). There is full empowerment at the district managers’ level to make decisions concerning the allocation of sales quotas to salespeople. The process is well defined and clear to all stakeholders. It is possible to predict the outcomes of the process and to assess the quality of the outputs. There are also tools and processes in place to aid this process. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

3. The ability to allow high participation of district managers and sales representatives in the development of sales quotas (associated to SOCs #31, #33 and #56)

The interviewees reported consistently that the participation of sales representatives in the process was important to an effective sales quotas development process. The impact of sales force participation in the sales quotas development process has been long discussed within the academic community. Specifically, the effects on performance due to participation of sales representatives in the goal setting process have generated a dispute between two groups of researchers, namely Latham and his team and Erez and her team. While Latham and his colleagues found that participation in decision making did not lead to enhanced performance, Erez and her colleagues arrived at the opposite conclusion (Locke and Latham, 2002). Working both together with the mediation of Locke, they concluded that if the rationale for the goals being set is explained to the subjects, participation on the development of the goal has no effect on performance. If the goal is imposed without explanation, then performance can be significantly lower (Latham et al., 1988). The main benefit of participation is cognitive rather than motivational in that it stimulates information interchange (Locke and Latham, 2002).
Wotruba et. al. (1976) found that “formal procedures for guiding salespeople (for forecasting and quota setting) appear to aid the accuracy of the results, and those procedures should incorporate giving the salesperson information regarding company plans as well as economic data and interpretations pertinent to each salesperson’s market” (Wotruba and Thurlow, 1976)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the **optimizing level** district managers and sales representatives participate from the sales quotas development process allowing more accurate forecasting. Their opinions are reflected on the sales quotas set and they are recognized in the organisation as being influential on shaping the process's outcomes. There is at least one annual meeting where district managers meet business unit managers and product managers to define sales forecasts for different regions. There is at least one annual meeting where sales representatives provide feedback to district managers as to the business situation in their area and the impact this could have on sales quotas in the following year. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There are also tools and processes in place to aid this process. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

**4. The ability to develop excellent analytical skills in the business intelligence and brand teams (associated to SOCs #32 and #42)**

The stakeholders interviewed in the study have the potential to make a contribution to the development of effective sales quotas. This potential resides in the tasks they perform. In order to fulfill this potential, each one requires competencies that are commensurate to the tasks they perform at their level of involvement in the context of the sales quotas development process. The data highlights analytical skills from product managers and business intelligence executives as an essential capability that needs to be
present in the organisation. Analytical capability refers to the required financial understanding, of the nature of each sales territory to set accurate goals. It is the ability to produce sound analyses, descriptive of the existing sales potential a product might have.

Alpha Pharmaceuticals derives sales forecasts mainly from historical data or the use of analogues (analogues are similar products in the market that can be considered as proxies when developing a sales forecast). There is no analysis of the utility function of each sales representative or analysis of potential future events with probabilities assigned to each one of them. Utility functions are preferences sales representative have when facing competing options. For example, sales representatives could choose to promote product A as a priority, or product B, or even go home and rest; it depends on the utility each option provides. Darmon (1997) describes the use of utility functions as sales quotas development type three.

“I believe the main handicap is the way some people respond to changes in their working habits, analytical capacity, etc.” (Business intelligence director)

“No every district is the same. There are very complicated as well as very vast areas; however this is not being taken into account. I believe the company does not bear this in mind.” (District manager)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level sales quotas are developed considering more elements than just historical trends. Product managers and business intelligence look at patient flows, prevalence of the disease, competition, new launches, analogues, benchmarks, governmental regulations, resource level, investments and analyse various scenarios (optimistic, pessimistic and likely). The analysts have formal education on statistics, economy, marketing or administration. They use specific, tailor-made tools to support their analyses. All stakeholders in the organisation pride the work produced by product managers and business intelligence. There is a recognized expert or champion from the
process. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There are also tools and processes in place to aid this process. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

5. The ability to promote excellent sales management skills in sales top executives (associated to SOC # 40 and # 41)

The case study also highlights the importance of having professional sales executives to avoid having different management processes and the development of fiefdoms. Alpha Pharmaceuticals has a diverse way of managing their different business lines and this lack of consistency is negatively perceived by the lower levels of the organisation.

“Every business line is different. What I dislike is the fact that there are three lines and that they are fiefdoms. I consider ‘Alpha Line’ as a sales line and ‘Beta Line’ as a marketing line. There are two points of view.” (Business intelligence analyst)

“That is the problem. There is where it all starts. There are maybe people to whom you may be able to talk. On the other hand there are people that are just not reachable. I think the company should be more aware of what is happening.” (Sales representative)

Sales management skills are essential for sales executives not only for understanding the business but also for setting the sales quotas that drive the company’s strategy. Latham (2004) argues that a vision, provided by a leader, is essential to increasing goal commitment from salespeople. He considers situational constrains as conditions for goal setting effectiveness and argues the leader needs to remove potential obstacles and provide resources to attain the goals (Latham, 2004).

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level Sales directors have a proven track record of success on leading a selling organisation with formal education behind supporting this performance. Most
district managers are not only promoted sales representatives but they have a background on leading teams with a proven successful track record. They also have formal education on sales, marketing or management. There is a general consensus in the organisation that having pharmaceutical education is not enough to lead a high performing team. The process of recruiting, developing, promoting and retaining sales people is well-defined and owned by Human Resources in combination with the top sales management. There are specified training courses. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

6. The ability to generate a homogeneous management style embedded in the culture of the organisation (associated to SOC #49)

Alpha Pharmaceuticals, in common with many other organisations, consists of different managerial styles and “fiefdoms”, as supported by the quotes in the previous section. Our data suggests that, within Alpha, these are perceived as sources of inequity among sales representatives. Prior research suggests that perceived inequity can result in demotivation and have a negative impact on performance (Darmon, 2001). Shaw (2004), found a similar situation in her research in Microsoft. She found a lack of consistency in the goal setting process in different areas of the organisation: While some groups’ goals were assigned from the top with little or no discussion, other areas had a bottom-up goal setting process with a great deal of discussion (Shaw, 2004). Something similar is discernable at Alpha, where some business unit managers allowed district managers more participation in the sales quotas development process.

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level, business units or district managers or sales managers are aligned with the organisation in terms of the way the business should be managed. Sales
lines are similar in terms of their go-to-market strategy as well as the values they share although there are explicit guidelines as to what is expected from each executive. There are formal sales management trainings across the year. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

7. The ability to balance the amount of formal and informal communication being used (associated to SOC #35)

The ways in which communication flows across the organisation is an essential aspect to consider when setting sales quotas. Salespeople in Alpha expect to have a detailed explanation of the rationale used to arrive at the actual sales quotas they are expected to achieve. They are interested in the process by which sales quotas are set, regardless of their level of participation in the process. Sales representatives do not want to be told to achieve some target sales numbers whose source is obscure.

“Before setting the goals I do not know how to explain why objectives are as they are. If they are high it is because there are products that are very interesting for the company. But if they are too high, a throughout explanation must be given since questions arise at any moment.” (District manager)

“If possible, I would like to know what variables are used to set the goals and budget. They (top management) know things of the market that I just do not know. They (the top management) work and deal with much more information.” (Sales representative)

However, the top management of the organisation feels communication is not a problem as there are various meetings planned across the year fulfilling this aim. They have the belief that field information is anecdotal and there is not much they can do with it. Therefore, management is comfortable with the cascade-down process followed by the company.

“We have many meetings throughout the year where we communicate the goals to our salespeople. Communication shouldn’t be an issue; we are telling them what they need to know” (Commercial director)
The general manager, business unit managers and business intelligence director indicated there are a number of meetings scheduled across the year with the aim of communicating downwards the centrally defined goals. However, communication from the top management towards the field does not appear to be enough, both in quantity and quality. Communication from the field towards the top management is not formalized and horizontal channels of information sharing are not even conceived by the stakeholders interviewed.

“There are no adequate channels to consolidate the information and understand at some point in time if we need to change our strategy or not. Therefore, almost everything that our competitors do comes as a surprise to us.” (Business unit manager 1)

An equal mix of formal and informal communication is suggested as optimal in a study about market intelligence dissemination done by Maltz et al. (1996). Informal communications were found to be particularly effective when information is needed on a recurring basis such as market intelligence reporting and when dealing with uncertainties in the environment. Exemplars of this are raising competition in one area, changing regulations or changes on client needs. Formal communication tends to be more credible and verifiable encouraging the use of intelligence among employees; particularly when “it is contrary to receivers’ prior beliefs” (Maltz et al., 1996).

Sales force participation enhances the accuracy of the goal setting process’s outcomes when there is an interchange of information. However, sharing information does not happen by chance. It needs to be designed through the development and implementation of a sound communication strategy. This implies the determination of communication channels to capture and communicate information.

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level, there is a balance between formal and informal communication. There is a good organisational climate and proximity among people allowing informal
communication. This happens naturally on the corridors and/or cafeteria and frequently through email and over the phone. There are at least quarterly meetings where functions share information, insights, issues and potential solutions. There are monthly and quarterly memos or emails updating and informing stakeholders on several issues. Every time there is a change on direction or a relevant event there is a formal communication going into each stakeholder. There are monthly internal newsletters. Both formal and informal communication are promoted and facilitated by the top management of the organisation. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

8. The ability to facilitate excellent vertical communication (associated to SOC #35)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level, there is a lot of communication flowing up and down the organisation. Sales quotas are being communicated and discussed. People at lower levels of the organisation understand the long term strategy and the rational for the decisions being made. Sales representatives understand why they are given their goals; how they have been developed and the strategic aim behind. The top management of the organisations knows exactly what the situation on the field is. They understand what the barriers are and share points of views and potential solutions with people on the ground. There are no gatekeepers filtering communication and there is an atmosphere of openness. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices. There is communication flowing up and down the organisation. Sales quotas are being communicated and discussed. People at lower levels of the organisation understand the long term strategy and the rational for the decisions being made. Sales representatives
understand why they are given their goals; how they have been developed and the strategic aim behind. The top management of the organisations knows exactly what the situation on the field is. They understand what the barriers are and share points of views and potential solutions with people on the ground. There are no gatekeepers filtering communication and there is an atmosphere of openness.

9. The ability to facilitate excellent horizontal flows of communication (associated to SOC #35)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the **optimizing level**, there are horizontal flows of communication across the different levels in the organisation. Business unit managers, district managers and sales representatives meet with their peers, at the same level, at least quarterly to share their views on different topics. There is an atmosphere of openness among them and a strong sharing of information about the state of the business. For example, a sales representative in one territory facing certain difficulty shares the problem with another sales representative working on a different territory to identify possible solutions. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

10. The ability to be flexible to adapt sales force goals as unforeseen market events emerge (associated to SOC #61)

Management of exceptions in this study refers to the extant flexibility within the process to allow covering for unexpected contingencies related to both the market and the individual sales representative. Unexpected events occurring in the market could have a strong impact on the goals developed beforehand. Exemplars of these are price reductions, medicines not achieving governmental reimbursement or medicines being
withdrawn from the market for safety reasons. In a similar vein, sales representatives can face unexpected circumstances that might lead to them not achieving their commitments. Exemplars of those are sickness, an exceptional performance from the competition, a sudden change in regional law or a fellow sales representative sharing the territory and leaving the company. These unforeseen events have an impact on the performance of the sales representatives and the organisation has to consider them during the year to produce better sales quotas.

Having a degree of flexibility in this area is an important attribute as the opposite leads to undesired behaviors from the sales force. First, not achieving a fixed sales quota is demoralizing and produces results lower than what can be achieved when sales representatives are motivated. Second, it can lead to unethical behavior; sales people will try to get to the goal by all means and they will start to: pile up inventory, take short cuts and cheat in order to receive their bonus (Locke, 2004).

At Alpha, when a sales representative is underperforming, the organisation tries to boost performance through the development of a plan of action and the allocation of a lower target that is challenging but achievable. Then, depending on the circumstance, there could be a lump sum for the sales representative to compensate for the low earnings obtained during the year. The original goals are never changed during the year. That is a well-understood implicit rule.

“It depends, in some cases the goals are set by the business unit manager with sales operations and they are unchangeable throughout the year.” (Business intelligence analyst)

Changing goals too frequently (e.g.: every quarter) can lead to people not taking them seriously (Locke, 2004). However, depending on the dynamism of the market, updating goals might become essential. At Microsoft, they found very difficult to set specific goals that actually fit the business needs for an entire year (Shaw, 2004). For some therapeutic areas, particularly those that are new to the company, it might become necessary to keep the option of changing goals open.
“If sales are on budget everything is ok. If there is a sales representative that is below the sales budget, a plan of action (as we call it) is triggered. The district manager does a personal interview with the sales representative asking for explanations; 'let's have a look at your sales as they are not doing great; on this product you are at 80%; let's analyze together what are the causes; let's work together the next three days to analyze the causes'. When this phase is over, the district manager has to draw conclusions and agree to develop an action plan with the sales representative. 'Look, there are things that need to be changed in the way you call on physicians; you are not properly closing your calls or you need training on this or you are not properly targeting physicians’. The district manager identifies the weaknesses and puts together an action plan to improve them. Sometimes it is a sales objective that is different from the one that originally had. Example: let's imagine that at the end of the first quarter there is a sales representative that is far below objectives at 60-70 %. Maybe, they give him/her an action plan for the next three months and apart from doing all the activities included in the plan (three meetings with physicians at the hospital, etc.) they would expect the sales representative to achieve at least 85% of the goal for the second quarter. The official objective regarding incentives remains the same but if the sales representative is too far away from the number is better to fix a more achievable goal to get him/her motivated.”

(Business unit manager 1)

“There were two sales representatives that were not getting their incentives for special circumstances regarding a product. Finally, they were given an extraordinary compensation at the end of December to compensate. As an example, last year in Sevilla, we had 4 sales representatives, 3 changed, one left, we had to lay off another one and then after a long time something else happened to another one (I don't remember). So, we had 3 new sales representatives in one year! The oldest sales representative sharing the territory realized that sales weren't good enough and that he was not going to get incentives. An option was then to tell him 'don't worry, keep on driving, if you do a good job we will compensate you at the end of the year’”. (Business unit manager 2)

“You need to see how we are at the end of the year, you could have great salespersons with a great evolutions and at the end of the year you find out that you have to make 2,3,4,5,6 exceptions.” (Sales operations manager 1)

“If you have problems with one particular product for whatever reason, you could adjust it. Maybe there are problems with a very important wholesaler in the area and the sales are not in line with IMS's because in that area there were five sales representatives but two were on 'leave', one left; so the budget suffers. I know that these special circumstances are contemplated.” (Product manager 2)

“You just have to go and cry to your boss. What sometimes had happen (and this is not bad) is that you don't change the tool, which is what you ought to do but you go to your boss and explain what had happened (although I believe it is unprofessional), 'I haven't reached the goal by 50% but the reason is that the government have reduced prices, etc. In any case I will be gaining market share and my position against competition is still good'. Then, the company gives like a 'dad's present' for the effort and under the
understanding that causes away from your control were influencing the results.” (Business intelligence director)

Locke (2004) proposed an effective method to link goals to monetary incentives. Employees are given challenging goals but the decision about bonus award is made taking into account the whole context in which the goal is pursued and making concessions when required (Locke, 2004). Alpha is following this principle to a certain extent although the process is not formalized. This approach provides flexibility, comprehensiveness as well as fairness. The drawback of using this approach is that it assumes that leaders know exactly what is going on in the market and, sometimes, this is not verified in practice. While Alpha’s stakeholders assign significant value to the objectivity of the goal setting process, this approach is fairly subjective. The sums to be distributed are determined by the business unit managers.

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level, every time market dynamics change significantly this change is adjusted on the goals being developed for the sales representatives. "Significantly", can be understood as impacting on the compensation sales representatives will perceive as a result of the change. District managers and sales representatives believe the top management of the organisation is flexible enough and has good judgement to amend unfair situations derived from uncontrollable/unforeseen events. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.
11. The ability to be flexible to adapt sales force sales quotas as unforeseen personal circumstances arise (associated to SOC #61)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level, every time a sales representative faces an unexpected issue in his/her territory that exceeds his scope of control this is adjusted on the sales quotas being developed for the territory. For example, if a sales representative is out on maternity leave for three months, the sales quotas are reduced to contemplate for this matter. Sales representatives that are underperforming, have a discussion with their district manager and develop a plan for overcoming the gap in performance but the original sales quotas are not adjusted. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

12. The ability to handle transparency on the formulae used for the development of sales quotas (associated to SOC #60)

The data from the case study highlights transparency in the calculations as one of the most valued elements (by employees) of the actual goal setting process. Transparency is used in the sense of providing clarity to the different stakeholders as to how the sales quotas at the sales representative level are being developed. It has to do with making explicit the number and type of variables being considered, the rationale for the formula used to derive the sales quotas. Sales representatives need to understand how their sales quotas are being developed. This facilitates achieving commitment with the sales quotas assigned and opens a channel of feedback from the sales force towards the sales management. Being transparent facilitates the provision of a baseline over where to make the adjustments to the sales quotas that might be required depending on the sales representatives’ situations. Providing transparency contributes to generating a sense of
equity among peers through providing information on the sales quotas other people are getting.

Employees at Alpha are satisfied with the way the sales quotas development process incorporates this attribute. There is the belief among some stakeholders that goals are being developed in an objective and commonsense manner.

“I believe that a logical path is being followed. The national level forecast is developed in a logical way. The drill down to the sales representatives appears to me as logical as well with more or less information available, more or less flexibility. It seems logical to me as well.” (Business intelligence analyst)

“Apart from ‘the rule’, there is the logic and ‘the common sense’.” (Sales operations manager)

“We took away sales goals from some people and gave them to some other people because we believed, at that time, that a particular territory had more potential; but always following a logical criterion.” (District manager)

The company is transitioning from a worse-perceived process where decisions were made only by the sales director without providing any explanation as to the rational employed. Letting people know how their sales quotas are being developed facilitates the buy-in from the sales force to achieving their goals.

“We have moved away from a worse system into one where we sell to stakeholders the application of a formula. People feel much more involved when they received the criteria and the weights and it is much easier for the district managers to drill them down into their people. That's the reason why people don't complain; people feel the system had significantly improved being more transparent.” (Business unit manager)

“I believe the allocation of goals is conducted in an objective manner; there are many parameters being studied in a scientific way.” (Product manager)

“I believe the system used (based on weights) is a good one. It takes into account historical sales, market share, and deviations with respect to market share. Those three elements are essential to develop the goals.” (District manager)

Surprisingly, there is not much said in the literature about the importance of being transparent when developing sales quotas. There is research on elements that are important when developing sales quotas (Good and Stone, 1991), attitudes and
applications of quotas by sales executives and sales managers (Good and Stone, 1991b), how to set goals (Seijts, 2001) and sales force participation in quota setting and forecasting (Wotruba and Thurlow, 1976) (Seijts, 2001; Good and Stone, 1991; Good and Stone, 1991; Wotruba and Thurlow, 1976). None of these researchers mentions the transparency and simplicity required when developing sales quotas to help the sales force to understand what is the rationale behind the goal they are receiving.

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the **optimizing level**, there are no more than four variables being considered for the development of sales quotas for the sales representatives. There is a standard and consistent process to develop the formulae. There are trainings, tools and resources to facilitate the process. Any stakeholder could easily understand where the sales quotas are being derived from. Many organisations utilize sales, increase in sales, market share and increase in market share for the formula. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

13. **The ability to simplify the formula being used so people can easily understand how their sales quotas are being developed (associated to SOCs #60 and #64)**

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the **optimizing level**, the formula being used to develop sales quotas is simple enough that could be understood by all sales representatives. It should be able to be explained in an A4 page. It is not considered by stakeholders to be a "black box". There is a standard consistent process to develop the formulae and training, tools and
resources are made available to facilitate the process. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

14. The ability to select the right variables to measure (associated to SOC #55)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level, the variables being considered in the development of sales quotas are meaningful and the right variables to consider. The organisation does not consider only readily available information, which might not be meaningful, but proactively seeks the right variables to measure and then tries to get the information to feed in these variables. There is a standard and consistent process in place. There are trainings, tools and resources available to facilitate the process. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

15. The ability to select variables that are measurable (associated to SOC #58)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level, the variables considered for the development of sales quotas are measurable; there are reliable and objective sources of information to feed in these variables. For example, measuring self-efficacy from a sales representative from the competition might not be easy to capture nor objective. There is a standard and consistent process in place. There are trainings, tools and resources available to
facilitate the process. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

16. The ability to select and develop a sales quotas development process owner (associated to SOC #36)

Nobody formally “owns” the sales quotas development business process. The commercial director is taking actions right now to be seen as formally owning it. Not having a process owner is a barrier to the process as lacking clear accountability for the outcomes facilitates failure. Somebody has to be accountable for the process’s outcomes.

“Somebody must be the process owner; I don't know.” (Sales operations manager 1)

“In this case it is each sales line. For the national number there has to be consensus with the general management. All stakeholders have their share of responsibility. If a problem arises, who will be held responsible? I would expect all of us depending on the role you have.” (Sales operations manager 2)

“No, responsibility is shared by everyone. What you are supposed to do is to take a stand and defend your position. If you commit yourself to selling so much, you have to justify your position.” (Product manager)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level, there is a sales quotas development process formally defined with a formal process owner designated. The process owner is responsible for a smooth development of the process and accountable for its outcomes. If something goes wrong there is ultimately one person in the organisation to look at to work all problems out. This role is well regarded within the organisation. It could be the business intelligence manager or a business unit manager or the sales director among others. There is a standard and consistent process and there are trainings available for this role. The results
from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

17. The ability to develop a culture of collaboration and solidarity (associated to SOC #51)

Reducing the level of “gaming” among the different employees is seen by some interviewees as an important capability. Collaboration and solidarity among peers contributes to make decisions that are beneficial for the organisation overall above each of the individuals. In Alpha Pharmaceuticals, each sales representative is looking after their territories, their share, independently from their peers. What is at risk every month is their bonus; their money.

“It is due to selfishness, since people are actually putting at risk their money. The point is that it is quite complex to deal with. That is the reason why I like the system we have. It allows people to be able to reach a consensus.” (Business intelligence analyst)

“Sure, but then you are surprised with what you find. For instance, I have learnt that some of my colleagues have a lower budget, and they are complaining. I am not critical with them, but it surprises me a lot. And since mine is higher, I am not able to comply with my duty, I think it is unfair.” (Sales representative)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level, most employees collaborate with the process and show solidarity with the rest of their peers. There is no "gaming" among sales representatives to try to get sales quotas as lower as possible. There are no local dealings with wholesalers to influence the sales numbers at the end of the months or the quarters. There are no fiefdoms in Sales, Marketing or Medical Departments. All different lines and Departments in the organisation work together well with consistency in terms of vision, strategy and processes. There are no sales lines following peculiar ways of operating in the market place or with significant differences in culture compared to
other sales lines. There is a standard and consistent process in place. There are trainings, tools and resources available to facilitate the process. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

18. The ability to phase the introduction of new information and systems (associated to SOC #44)

Alpha introduced too many new systems too suddenly no allowing some employees to absorb them from a cultural point of view. From the interviews it became evident that a better phasing of these systems could have been beneficial for the development of the sales quotas development process. The organisation was willing to quickly introduce change and wanted to have all their issues fixed in the short term and became impatient.

“We have moved from having no systems to have a lot of different systems and people say 'so many systems?'. I mean excess of information, which is as bad as not having information.” (Sales operation manager)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level, information technology, systems and new information is introduced in phases allowing smooth adoption from users. There is a standard and consistent process in place. The organisation does not introduce more than three systems in parallel. The organisation does not introduce more than three initiatives (new processes) in parallel. For example, the company does not introduce a new targeting process, a new size and structure, a new resource allocation and a new compensation system all at once. Implementation is seriously considered and until the previous system or process is implemented there are no new initiatives coming in. There are trainings, tools and resources to facilitate the process. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes.
There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

19. The ability to develop a resilient (to change) organisation (associated to SOC #45)

Alpha introduced a fair amount of change too soon and also has an “older than average” sales force. Some of these people just could not cope with change and this produced a lot of frustration and lack of motivation with a probable impact on performance. The issue is quoted as being “a big problem” by one of the sales representatives; a problem the company is not aware of. Being resilient to change is a capability worth taking into consideration when performing on a dynamic environment. Conditions are changing all the time and the organisation will need to smoothly adapt to these changes.

“I truly believe the main factor is the way sales representatives put up a lot of resistance to changes. Starting from the top of the organisation downwards we all need to be extremely open-minded to cope with this change” (Business intelligence director)

”There is one thing to bear in mind, something that the company does not pay much attention to, and that is the knowledge we all have about computers. For me it is a big problem. Sometimes it gets to a point where I just do what I think it is right without giving it much thought. Sometimes I save things I am working on, and suddenly they are all gone. I try to look for them everywhere but I just can not find them. I wish I could go over everything before sending them, just to check but if I save them I may lose them and be not able to find them. So I end up wasting lots of hours doing these tasks. For me, it would be better to spend those wasted hours calling on more doctors or calling with a higher frequency. The worse part of it is that the company does not care if you are good or not with computers.” (Sales representative)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level, employees are open and used to changes. This is reflected on the average number of years salespeople have been with the company. The longer they have been the more resistance to change they will show. Age is another determinant of resistance to change. Initiatives introduced in the past were well received and resistance
to change was never an issue to be considered critical. There is a change management process implemented that is consistent and standard. There are trainings, tools and resources available as facilitators of the process. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

20. The ability to build consensus (associated to SOC #46)

Reaching consensus is “a desire” although as discussed already is more “cosmetic” in fashion than actually happening. In one of the Business Lines, consensus is a goal in itself for district managers to accept their goals. However, in another one, sales quotas are just being “pushed” to the district managers without the possibility of even arguing. Reaching consensus is always difficult because it is time consuming and risky as not reaching consensus generates de-motivation. Having the ability to build an atmosphere of consensus is a desired capability.

“The ones that complain are the ones that do not reach a consensus as far as the proposal is concerned.” (Business intelligence analyst)

“However, if they just give me numbers and tell me this is it, I will agree or not.” (Sales representative)

“I do not know. I guess it is hard to agree. It is quite difficult to be always on the same page.” (District manager)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level, an atmosphere of consensus is desired for getting acceptance of the sales quotas from the sales representatives. In this environment all employees feel accountable for the goals they receive and they understand the rationale behind those goals. Stakeholders are flexible and collaborative and consensus is something normally achievable and desirable by most people. There is an organisational intent to reaching
consensus when developing sales quotas. There is a standard and consistent process for building consensus. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

21. The ability to develop formal feedback channels (associated to SOC #47)

Gathering information from the field is essential for the development of sound goals. Therefore, the ability to develop formal feedback channels becomes critical. Alpha does not have formal communication channels in place and they regret it.

“There are no adequate channels to consolidate the information and understand at some point in time if we need to change our strategy or not. Therefore, almost everything that our competitors do comes as a surprise to us.” (Business unit manager 1)

“I learned about a meeting our competitors were planning in Paris for the most representative doctors of Madrid. I sent an email to the product manager of XXX and I copied my district manager.” (Sales representatives)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the **optimizing level**, there are formal channels to capture feedback from the field. There is a standard and consistent process. This could take the form of specific meetings or technology and systems to achieve this aim. The information gathered is captured, stored and analyzed and delivered to selected end users. Sales representatives, district managers, business intelligence people and product managers participate from this process. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.
22. **The ability to define independent territories for each sales representative** (associated to SOC #48)

Having shared territories makes it difficult to clearly assign responsibilities to each of the sales representatives. The existence of free-riders is a concern; particularly from high-performing sales representatives.

“In theory, in almost all bricks there are 3 sales representatives but these 3 people don't share the same bricks all the time. Sometimes, a sales representative has to sell the sum of three people. In the brick that is shared by the three of us we have the same goals.” (Business unit manager)

“In big cities such as Madrid, 50% comes from the pool (team work) and the other 50% comes from the individual work. But there will always be people that work more and some others that will work less.” (Sales representative 1)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the **optimizing level**, sales territories are not shared. There is a standard and consistent process to review this aspect on a yearly basis. There are trainings, tools and resources to facilitate this process. All the stakeholders involved are aware of the process and know who is responsible and accountable for it. Sales representatives, district managers, business intelligence people and product managers participate from this process. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

23. **The ability to develop a homogeneous goal setting process that does not vary by business unit or sales force** (associated to SOC #49)

The sales quotas development process at Alpha is not homogeneous as each business line has different management styles and conducts the process in different ways. One of
the lines is more participative and “consensus driven”, while the other one is less participative.

“It depends, in some cases the goals are set by the business unit manager with the sales operations manager and it is unchangeable and sometimes (as I most like it), the district managers make a proposal to the business unit manager and sales operations manager and in the meeting in December they discuss it together. I consider Alpha Line as a sales line and Beta Line as a marketing line. There are two points of view. On one hand, Peter, who does not pay much attention to the budget and on the other John who gets involved and discusses thoroughly the budget until a point where everything is very well tied up.” (Business intelligence analyst)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the **optimizing level**, the sales quotas development process is the same regardless of the business unit or sales line being considered. Specialist and hospital sales forces might have slightly different process being implemented. The aim, activities, variables, formula and even the people developing the sales quotas are always the same. There is a standard and consistent process well-know to everyone in the organisation and there are trainings, tools and resources available to facilitate the process. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

**24. The ability to produce reasonable national sales forecasts (associated to SOC #50)**

National sales forecasts are mostly defined by headquarters through assigning more to those products they feel the local organisation is not being aggressive enough with. Alpha’s local top management is obviously aware of this situation but fail to be transparent with the sales force on the matter. Therefore, they are seen like villains when they do not have a say on the national sales forecasts numbers; the budgets come imposed from outside.
“It is not a matter of assigning more to one or to another person. Maybe they complain about the goals set at a national level.” (Business intelligence analyst)

“Before setting the goals I do not know how to explain the rationale behind them. If they are high it is because there are products that are very interesting for the company. But if they are too high, a thorough explanation must be given since questions arise at any moment.” (District manager)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the **optimizing level**, national sales forecasts are reasonable and based on the market situation and company historic and potential future performance given certain planned resources. Sales forecasts are based on the national situation and not dictated from abroad. Stakeholders in the local organisation believe sales forecast are reasonable and based in good analyzes and judgement. There is a standard and consistent process. There are trainings, tools and resources allocated to this activity. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

**25. The ability to keep bureaucracy to the minimum (associated to SOC #52)**

Bureaucracy was not strongly highlighted in the case study. Only one interviewee raised the issue. However, from the case it is clear this organisation is not too bureaucratic and the whole sales quotas development process approach is fairly pragmatic. This is a capability worth studying with some other organisations.

"I believe the goal setting process is a little bit bureaucratic." (Sales operations manager)
The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the **optimizing level**, there is no bureaucracy on the development and adjustments of sales quotas. The number of people involved and the milestones required to complete the process are minimum. Introducing changes to the outcomes of the process is not considered to be an insurmountable task. Stakeholders in the organisation do not complain about bureaucracy getting in the way of high performance. There is a standard and consistent process. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

26. **The ability to capture the human side of goals (associated to SOC #53)**

Selling is a social activity and as such it is about people. Different people behave differently when facing different stimulus. This can hardly be captured by any mathematical formulae. The sales operations manager claims he makes adjustments to the results trying to capture this aspect. There is a general acknowledgement among the interviewees that capturing the human side of goals is extremely challenging.

“The human component is not being considered by the tool but I do adjust the results upwards or downwards” (Sales operations manager)

“I believe the main handicap is the way some people respond to changes in their working habits, analytical capacity, etc.” (Business intelligence director)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the **optimizing level**, personal circumstances are considered when setting goals and not the mere result of a formula. High performing people get higher sales quotas than
objectively deserved and low performing people get lower sales quotas than objectively deserved. Special personal circumstances are considered when setting sales quotas. There is a standard and consistent process. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

27. The ability to understand and track sales causality (associated to SOC #57)

A sales representative does promotion in his/her territory with the expectation that the prescription generated by that effort will land in his/her territory and be recognized as a sale. However, what sometimes happens is that the patient goes to a pharmacy closer to home instead of one closer to the hospital where promotion has been carried out. Therefore, the prescription could be recognized in the territory of another sales representative. It is fair to say that if there are prescriptions going away from each of the territories, there are also prescriptions coming into them and being generated by another sales representative.

“I work in Madrid. The most important clients are there. Many of them work in private clinics such as San Camilo, La Paloma, El Rosario, La Beata, etc. People from every part of Madrid go to those places. But there are also people from the outskirts of Madrid who go there. However, the prescriptions that they may generate are not usually (delivered to the patients) in the area I work in, so some of my work is wasted.” (Sales representative)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level, there is a standard and consistent process for tracking sales causality that allows knowing who sold what on a monthly basis. There is clarity as to who is actually generating the sale. There is no travelling of prescriptions between territories and if there is, it is controlled and measured. There are no sales influenced in some other geography from the one in which the sale gets recorded. The results from the
process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

28. The ability to have balanced sales territories in terms of business opportunity (associated to SOC #59)

Having unbalanced territories, in terms of business opportunity, generates difficulties when developing goals as it makes it more difficult to apportion sales quotas in a fair manner. The issue is that due to the dynamic nature of the market environment, territories need to be adjusted and re-balanced almost every two years. Aligning territories generates distortion among the sales force in terms of changes of long-term relationships with their clients. This needs to proactively be managed.

“I have right now 'x' provinces. I have a problem in Madrid. I need at least another sales representative to cover the area in a better way. It comes from a bad territory alignment. I have 3 sales representatives in Madrid out of a total of 9. They are overloaded with work. We try to do our best, but there are places that we just can not visit, such as some hospitals. If things like this happen, there is a problem, or maybe it is just that more sales representatives are needed.” (District manager)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level, the business opportunity in each of the territories is checked and balanced through a standard and consistent process every two years or when a special event occurs. Business opportunity is defined as a combination of market and product potential and workload. All sales representatives have a business opportunity that lays within a range of plus or minus 15% percent to the average business opportunity index. The potential to be extracted from each territory will be similar. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.
29. The ability to keep the bulk of sales quotas initially defined unchanged throughout the year (associated to SOC #63)

The sales force has the expectation of, once their goals are assigned, not changing the rules of the game on the fly. Sometimes, particularly on new launches, it becomes clear that sales forecasts were not accurate and there is the need to adjust upwards or downwards. Making these adjustments sends a message to the sales force that the sales quotas they signed for, and committed to, can be adjusted if they prove too challenging or too easy. From a management point of view, the organisation needs to have the capability of sticking to the commitments made at the beginning of the year and manage the divergences in a different way.

“When there are things that are already assumed and suddenly are changed people are prone to think that it is unfair and are affected by those changes.” (Business intelligence analyst)

“When launching a new product I believe it should be treated as a separate element and not within the matrix. The change of incentives this year due to adding Product X in the incentives matrix and changing them at the middle of the year was an absolute disaster. We are launching a product next September and we hope will be separately considered.” (Product manager 1)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level, once the sales quotas are defined, they are not changed within the year. There might be exceptional circumstances allowing changing the sales quotas but is not the norm. Stakeholders in the organisation are well aware of this and not expecting any changes across the year. There is a standard and consistent process to manage this. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.
The development of sales quotas requires high-quality information. The analysis of the first order constructs gathered in the interviews shows that Alpha based sales targets on information that was easily available rather than on seeking out data relevant to variables that influence the setting of more accurate goals. For example, when developing sales forecasts to launch a new product, product managers utilized information based on analogues instead of analyzing and evaluating different options. Instead, they could have looked at number of patients, prevalence of disease, medicines substitution, patient compliance and physicians’ attitudes to prescription.

“We should look at number of treated patients on the disease and patients taking medicines from the competition in a particular geographical area. We should transform units into daily doses and we could begin to understand how many patients there are in on brick. We could also determine who the ‘Gold’ physicians in that brick are.” (Business intelligence director)

For the sales quotas allocation, they ended up splitting the sales by the number of sales representatives instead of looking into the different territories’ characteristics. Darmon (1997) argues that having relevant information determines the type of quota bonus plan a company can implement. Having sufficient information and adequate procedures is essential to develop efficient quota bonus plans (Darmon, 1997).

“There are some products, like Omega, that were launched only on Specialists, Hospitals, Pain Units, Rheumatologists and Oncologists. That market was extremely data-poor and available information had no value. We just split the sales by the number of Sales Representatives.” (Business unit manager)

“Ideally, we would have the means needed and the largest source of information…more field information, more information about a local territory, etc.” (Product manager)

Alpha barely accesses or uses internal information that sales representatives have or acquire from their day-to-day dealings with customers. A study by Wotruba et. al. (1976) suggests gathering and analyzing information from the field enables a better understanding of the nature of the different sales territories, which can improve the prediction of future sales (Wotruba and Thurlow, 1976).
The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the **optimizing level**, the information used in the process is of high quality and not being questioned by any stakeholder from the sales quotas development process. They do not make explicit any issues with the quality of the information being used in to develop goals at the sales representative level. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

**31. The ability to acquire timely information (associated to SOC #39)**

The information used to monitor progress on the goals being set needs to come on time and needs to make sense to the users. Sales representatives in Alpha are concerned with both the quality of the information and the timeliness of it.

“It varies a lot. In fact, there have been occasions where the information was received more than two months later and currently they are being received 20 or 30 days later. I truly believe that the data is reliable, specially the evolution. Something that does not make much sense is the way sales vary from one month to another.” (Sales representative)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the **optimizing level**, the information used in the goal setting process arrives on time as there is a standard and consistent process behind. Business Analysts do not make explicit any issues with the timeliness of the information received to develop goals at the sales representative level. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an
ongoing drive for continuous learning and improvement of the process through innovative practices.

32. The ability to acquire adequate information (associated to SOC #38)

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the optimizing level, the information used in the sales quotas development process is adequate as perceived by all stakeholders. There is a standard and consistent process in place to evaluate its adequacy. The information is gathered through multiple channels; external and internal and through primary and secondary market research. The information used in the goal setting process has the granularity required to develop goals at the sales representative level permitting to identify each of the territories in isolation from the rest. There are trainings, tools and resources in place to facilitate the process. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

33. The ability to provide equity across the sales force (associated to SOC #54)

People involved in the sales quotas development process have the expectation that the process should develop fair sales quotas for the sales representatives (fairness and equity will be treated as equivalent concepts in the context of this study). This is aligned with a survey run by Good and Stone (1991) where it was found that failure to provide satisfaction and equity among employees has a negative impact on sales force morale and turnover (Good and Stone, 1991).

Delivering equity while setting sales quotas means that every sales representative will receive a target to sell as achievable as the targets the other sales representatives receive. The return-on-investment ratio should be the same for all the “relevant others”
with whom they compare (Darmon, 2001). This will also translate into an amount of money earned as a result of achieving their goals similar to what they would get anywhere else investing a similar amount of effort.

Some of the subjects of the study considered the achievement of fairness as one of the strengths of the actual goal setting process; an objective in itself; an attribute to be relentlessly improved.

“As far as I can see, it was more unfair before. Now, we do it in a fairer way.” (District manager 1)

“I would expect the system to be fair in the allocation of goals. This is what we are looking for: fairness. Then, if the objective is reachable or not could depend.” (Business intelligence analyst)

Some other people believe there is a lot more to do in order to improve fairness within the sales quotas development process:

“My business line has a small hospital sales force, which is composed of three sales representatives in Barcelona and three in Madrid. They only visit big hospitals and consequently their sales incentives are different from what the rest of the people receive. While the other sales representatives were following the matrix method at 100%, they were going at 50% and had other qualitative objectives such as product introduction in the hospital, development of workshops, penetration, etc. They are not in the same ‘system’ and ‘intensity’ than the rest of the people. Therefore, Madrid and Barcelona are the slowest growing cities. Not sure if it was due to this but those are the cities with the lowest performance.” (Business unit manager 2)

“If you look at the different teams you will find areas where they have underachieved objectives for years. The reason is they have a weak team because of the huge turnover of sales representatives they had in those areas. Zaragoza could not be assigned a lower goal than Burgos (obvious), so you keep on dragging the results you have already got. Do we consider this? Not sure to what degree we do.” (Product manager 2)

“At the moment, many of us are doing a vacant territory. We are 9 and should be 10. Consequently, the vacant territory is being covered by three sales representatives. I have one territory and one third of a territory.” (Sales representative)

“However, the budget is unachievable, it is impossible, what sales representatives could achieve could be 60%, 70%, an 80% but not a 100%.” (District manager 2)
Some people believe achieving fairness for all is unfeasible. The development of fair sales quotas for everyone is a very difficult task as many parameters are required to develop the calculations and many of them are very difficult to estimate or measure (Raju and Srinivasan, 1996). For that reason, simpler approaches are common practice as they are more cost effective and easier to implement. These approaches are those described by Darmon (1997) as level 1; management considers only readily available information such as past sales data, managerial judgments and perceptions.

“One has a huge market; another person has one that is too small; in one, a new sales representative has just entered; on the other one all of the sales representatives are experienced. How can you define a plan that is fair with everybody? That is not possible. You can't do it! You could try to develop the best plan for all the Sales Representatives as a whole.” (Sales operations manager)

“Yes, there are always differences because the territories are not all exactly the same. I may have bad luck and one of the best sales representatives from Pfizer might start working in the same area I am working in. That would affect me greatly.” (Sales representative)

The common ground to the people interviewed is that they believe equity to be an essential attribute the sales quotas developed need to have. Darmon (1997) has also identified equity as an essential attribute in the context of quota bonus plan development. He has identified three types of equity: equity among peers, equity among the other functional areas of the company and equity within the industry (Darmon, 1997). Equity among peers is referred to comparisons made by sales people within the same sales force. It could be only limited to a number of people within the sales force. Equity among other functional areas (or the so-called corporate equity) refers to the belief that the sales force is not getting the fair share for the value they are generating to the organisation. Equity within the industry (or the so-called occupational equity) is related to what their colleagues in other organisations are experiencing. There might be the belief that in some organisations the return on investment ratio is more beneficial than in their own organisation.

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.
In the **optimizing level**, sales representatives feel they are being treated fairly in terms of the sales quotas each one is receiving and compared to the rest of the sales representatives in the company. There is a standard and consistent process in place. There are resources in place to facilitate the process. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

34. **The ability to provide equity for the sales force compared to the industry (associated to SOC #54)**

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the **optimizing level**, sales Representatives feel they are being treated fairly in terms of the sales quotas each one of them are being allocated compared to other sales representatives from competitors. There is a standard and consistent process in place. There are resources in place to facilitate the process. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

35. **The ability to provide equity among functions (associated to SOC #54)**

The CMM framework descriptions, for each level, are included in the body of the SQP Maturity Framework within Appendix M. This researcher is only including the optimized level in the body of the report for reference.

In the **optimizing level**, sales representatives feel they are being treated fairly in terms of the sales quotas allocated and the compensation to be perceived if they are to achieve
those goals compared to other functions within the company. There is a standard and consistent process in place. There are resources in place to facilitate the process. The results from the process are predictable and there are benchmarks and clear boundaries to assess the quality of the outcomes. There is an ongoing drive for continuous learning and improvement of the process through innovative practices.

5.4 Developing the SQD Model and the SQP Maturity Framework

The purpose of building the SQD Model and the SQP Maturity Framework is to identify the presence and maturity level of organisational capabilities that facilitate the sales quotas process for sales representatives. Once the current state of the company is assessed, in terms of the maturity level of each capability, organisational routines that can facilitate moving the organisation towards the optimized level of maturity needs to be developed. The development of these routines is beyond the scope of this thesis.

Thirty-five capabilities were developed and became the foundation for the initial SQD Model. From these, seven capabilities were eliminated and two were merged into a new one, as a result of the focus group conducted, ending up having only twenty-seven capabilities in the SQD Model. Every decision taken, as a result of the feedback gathered, is explained in the following paragraphs.

The ability to be flexible to adapt sales force sales quotas as unforeseen personal circumstances arise (capability #11) was considered to be redundant with capability #10, “the ability to be flexible to adapt sales force sales quotas as unforeseen market events emerge”. Three people in the group highlighted to treat “flexibility” as one capability and when fed back to the team eight people agreed on staying only with the one related to market events, which was considered by the team to be much more important than the one associated to the individual. Later on the study, even this capability, scored below average on importance, which validates the decision taken at this stage.
The ability to phase the introduction of new information and systems (capability #18) was considered to be unimportant. Four people originally suggested removing the capability and two other people where unclear as to the rationale and the meaning of the capability. After explaining the origin and rationale of the capability eight out of ten people agreed on removing this capability from the list as it seemed to be very specific to the case study. Following the protocol defined, as this capability was not considered in the literature and given the feedback received from the focus group, a decision has been made to remove the capability from the model.

The ability to develop a resilient (to change) organisation (capability #19) was suggested to be removed by two focus group members. When discussed as a group they both produced similar arguments; they believed resistance to change is too vague, too general, and belongs to a different layer of abstraction. One of them made the following argument:

“Resistance to change is part of our nature and, although there is no question about its importance for every organisational change, I believe it does not belong to this group of capabilities. It is more general; it belongs to a higher level of abstraction. I wouldn’t include it”.

When feedback was requested again, six people agreed with removing it. As the capability was not considered in the literature as important, this researcher decided to remove it from the tool.

Four focus group members suggested removing capability #25 “the ability to keep bureaucracy to the minimum”. When discussed in the team it became clear that as with the previous capability, bureaucracy belongs to a different level of abstraction and also might not be very relevant to the goal setting process. One of the people made the following argument:

“I don’t think this is a capability. Bureaucracy is a relative term and I don’t think it applies to the goal setting process in itself. Maybe, through developing the process in a proper way, the amount of bureaucracy required becomes automatically regulated”.

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When the group was asked again for individual feedback eight people agreed to remove the capability. This researcher considered the capability to be very specific to the case study and in particular to one person within that organisation so a decision has been made to remove it from the list.

The ability to keep the bulk of goals initially defined unchanged throughout the year (capability #29) was questioned by five people as they believed the capability was already covered by “capability #10”. After highlighting and discussing the matter as a group, the second round of feedback provided consensus as to removing the capability. As the capability stem directly from the case study, this researcher made the decision of removing the capability from the list.

Four people questioned the split made into three of “the ability to acquire adequate information”. Originally, acquiring high quality information was one capability, acquiring timely information another one and acquiring adequate information a third one. They believed the three of them could be covered by the ability to acquire adequate information. One of the group members made the following argument:

“I don’t see any point in having three capabilities referring to the same thing; to have adequate information. At the same time, you have ‘acquiring adequate information’ as a separate capability. This doesn’t make any sense to me”.

After conducting the discussion among group members, feedback was requested again through the use of the cards. Consensus was reached on the need to remove the capabilities referring to high quality and timing of the information to be acquired. The decision of removing these capabilities was taken by this researcher based on the views of the focus group members and with the understanding that acquiring adequate information considers both the constructs of high quality and proper timing of the information received.

The ability to handle transparency on the formula used for the development of sales quotas (capability #12) and the ability to simplify the formula being used so people can easily understand how their sales quotas are being developed (capability #13), were
both thought to be strongly connected and belonging to a lower level of abstraction and could easily be merged into one capability named “a simple formula being used so people can easily understand how their sales quotas are being developed”. Three people in the group suggested reformulating capability #12. One of the arguments was the following:

“What do you mean by handling transparency? If the formula is simple, then it becomes easier to be transparent and communicate that in a proper way”.

Another person said:

“Transparency has to do with communication. You might want to remove the capability and focus on the capabilities around vertical and horizontal communication”.

As a result of the group discussion a new card was created with the following capability: “A simple formula being used so people can easily understand how their sales quotas are being developed”. This new capability was supported by seven people in the group instead of having capabilities #12 and #13. This researcher took the decision of implementing the suggestion from the focus group.

Table 5-1 shows the twenty-seven organisational capabilities that resulted from the refinement process and were kept in the SQD Model.
Table 5-1: Constructs of organisational capabilities

<table>
<thead>
<tr>
<th>Code</th>
<th>Construct</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EMPW Empowering District Managers (DM)</td>
</tr>
<tr>
<td>2</td>
<td>PART Allowing participation of the salesforce in the development of sales quotas</td>
</tr>
<tr>
<td>3</td>
<td>FLEX Allowing flexibility to adapt salesforce sales quotas as unforeseen market events emerge</td>
</tr>
<tr>
<td>4</td>
<td>HOMO Having a homogeneous (based on the same principles) goal setting process that does not vary by sales line</td>
</tr>
<tr>
<td>5</td>
<td>HUMA Capturing the human side of goals</td>
</tr>
<tr>
<td>6</td>
<td>FAIR1 Providing fairness across your company’s salesforce</td>
</tr>
<tr>
<td>7</td>
<td>FAIR2 Providing fairness with respect to other functions in the organization</td>
</tr>
<tr>
<td>8</td>
<td>FAIR3 Providing fairness for the salesforce compared to other Sales Representatives in the industry</td>
</tr>
<tr>
<td>9</td>
<td>MGMT Having a homogeneous management style embedded in the culture of the organization</td>
</tr>
<tr>
<td>10</td>
<td>UTIL Having a culture of collaboration and solidarity</td>
</tr>
<tr>
<td>11</td>
<td>CONS Build consensus in the decisions taken</td>
</tr>
<tr>
<td>12</td>
<td>ANA2 Develop excellent analytical skills in the brand teams</td>
</tr>
<tr>
<td>13</td>
<td>SSKI Having sales management skills in sales top executives</td>
</tr>
<tr>
<td>14</td>
<td>OWNE Having a goal setting process owner</td>
</tr>
<tr>
<td>15</td>
<td>INTER Interaction between sales and marketing people</td>
</tr>
<tr>
<td>16</td>
<td>INFO Acquisition of adequate information</td>
</tr>
<tr>
<td>17</td>
<td>FORM Simple formula being used so people can easily understand how their goals are being developed</td>
</tr>
<tr>
<td>18</td>
<td>VARI Selection of the right variables to measure</td>
</tr>
<tr>
<td>19</td>
<td>MEAS Selection of variables that are measurable</td>
</tr>
<tr>
<td>20</td>
<td>CAUS Track sales causality</td>
</tr>
<tr>
<td>21</td>
<td>COMM1 Balance the amount of formal and informal communication being used</td>
</tr>
<tr>
<td>22</td>
<td>COMM2 Facilitate vertical communication</td>
</tr>
<tr>
<td>23</td>
<td>COMM3 Facilitate horizontal flows of communication</td>
</tr>
<tr>
<td>24</td>
<td>FEED Develop formal feedback channels</td>
</tr>
<tr>
<td>25</td>
<td>INDE Define independent territories for each Sales Representative</td>
</tr>
<tr>
<td>26</td>
<td>FORE Produce reasonable national sales forecasts</td>
</tr>
<tr>
<td>27</td>
<td>ALIG Develop balanced sales territories in terms of business opportunity</td>
</tr>
</tbody>
</table>

Source: originated by the author

5.5 Development of the instrument

Some of the constructs were considered as measures because their articulation meant the same to different people. However, some other constructs required the development of specific measures to cover for different interpretations. For example, allowing participation of the sales force in the sales quotas development could be referred to both sales representatives and district managers. For that reason, the construct was broken down into two different measures; one regarding sales representatives and the other regarding district managers.
<table>
<thead>
<tr>
<th>Construct</th>
<th>Code</th>
<th>Essence of statement</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowering District Managers (DM)</td>
<td>EMPW</td>
<td>DM empowered to change allocation</td>
<td>District Managers are able to change Sales Representatives’ centrally allocated sales quotas, keeping the overall regional sales quota unchanged.</td>
</tr>
<tr>
<td>Allowing participation of the salesforce in the development of sales quotas</td>
<td>PART1</td>
<td>DM participation</td>
<td>District Managers participate in the development of their Sales Representatives’ sales quotas through sharing their views at a regional/national sales meeting.</td>
</tr>
<tr>
<td></td>
<td>PART2</td>
<td>SR participation</td>
<td>Sales Representatives participate in the development of their own sales quotas through sharing their views at an area sales meeting.</td>
</tr>
<tr>
<td>Allowing flexibility to adapt sales quotas as unforeseen market events emerge</td>
<td>FLEX</td>
<td>Change SR sales quotas within the year</td>
<td>Sales Representatives’ sales quotas change, within the financial year, as unforeseen market events emerge.</td>
</tr>
<tr>
<td>Having a homogeneous (based on the same principles) goal setting process that does not vary by sales line</td>
<td>HOMO1</td>
<td>Sales quota process to be homogeneous in sales lines</td>
<td>The sales quota development process for Sales Representatives is the same across all sales lines.</td>
</tr>
<tr>
<td></td>
<td>HOMO2</td>
<td>Sales quota process different in Hospital sales lines</td>
<td>The sales quota development process for Hospital sales lines is different to the process used for Primary Care sales lines.</td>
</tr>
<tr>
<td>Capturing the human side of goals</td>
<td>HUMA1</td>
<td>High performers to be over tasked</td>
<td>High performers get a higher share of sales quota than the one suggested by the formula.</td>
</tr>
<tr>
<td></td>
<td>HUMA2</td>
<td>Sales quotas to be developed focusing on each sales territory independently from the Sales Representative responsible for it</td>
<td>Sales quotas should be developed focusing on each sales territory independently from the Sales Representative responsible for it.</td>
</tr>
<tr>
<td>Providing fairness across your company’s salesforce</td>
<td>FAIR1</td>
<td>Sales quotas aligned with business potential</td>
<td>Sales Representatives’ sales quotas are proportional to the business potential of their territories.</td>
</tr>
<tr>
<td>Providing fairness with respect to other functions in the organization</td>
<td>FAIR2</td>
<td>SR goals as challenging as goals from SR from competing companies</td>
<td>Sales Representatives’ goals are perceived to be as challenging as the goals of their peers in competing companies.</td>
</tr>
<tr>
<td>Providing fairness for the salesforce compared to other Sales Representatives in the industry</td>
<td>FAIR3</td>
<td>SR goals as challenging as goals from other functions</td>
<td>Sales Representatives’ goals are perceived to be as challenging as the goals of their peers in other functions, such as Product Managers in Marketing.</td>
</tr>
<tr>
<td>Having a homogeneous management style embedded in the culture of the organization</td>
<td>MGMT</td>
<td>SD with similar management style</td>
<td>Sales Directors exercise a similar management style to avoid having Sales Representatives from different sales lines being treated differently.</td>
</tr>
<tr>
<td>Having a culture of collaboration and solidarity</td>
<td>CULT</td>
<td>Avoiding “gaming” among SR</td>
<td>The company put incentives in place to avoid “gaming” among Sales Representatives when sales quotas are developed.</td>
</tr>
<tr>
<td>Build consensus in the decisions taken</td>
<td>CONS</td>
<td>Most DM to reach consensus</td>
<td>The majority of District Managers agree with their sales quota allocation before it is finally approved.</td>
</tr>
<tr>
<td>Develop excellent analytical skills in the brand teams</td>
<td>ANAZ</td>
<td>Sales forecasts developed looking at the future</td>
<td>Brand teams develop their sales forecasts looking at potential number of patients, competition and future market events as opposed to only considering historical trends.</td>
</tr>
<tr>
<td>Having sales management skills in sales top executives</td>
<td>SSKI</td>
<td>SD to be competent</td>
<td>Sales Directors understand the business environment so they are able to assess the reasonableness of the sales quotas developed.</td>
</tr>
<tr>
<td>Having a goal setting process owner</td>
<td>OWNE</td>
<td>Goal setting owner</td>
<td>There is one goal setting process owner.</td>
</tr>
<tr>
<td>Interaction between sales and marketing people</td>
<td>INTER1</td>
<td>Sales and Marketing meet to discuss market dynamics</td>
<td>Sales and marketing people meet up at least on a quarterly basis to discuss market dynamics.</td>
</tr>
<tr>
<td>Construct</td>
<td>Code</td>
<td>Essence of statement</td>
<td>Measure</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Acquisition of adequate information</td>
<td>INFO1</td>
<td>Adjustments to be manually introduced when information is missing</td>
<td>When Sales Directors perceive information to be inadequate, they introduce adjustments following their judgement</td>
</tr>
<tr>
<td></td>
<td>INFO2</td>
<td>Adjustments to be manually introduced when information is missing</td>
<td>When Sales Directors perceive information to be inadequate, they consider Sales Representatives inputs to introduce adjustments</td>
</tr>
<tr>
<td></td>
<td>INFO3</td>
<td>Information availability should not drive the goal setting process</td>
<td>The goal setting process is not driven by information availability</td>
</tr>
<tr>
<td></td>
<td>INFO4</td>
<td>Use of alternative methods when information is not on time</td>
<td>When information is not on time Sales Directors use alternative methods to come up with sales quotas</td>
</tr>
<tr>
<td>Selection of the right variables to measure</td>
<td>VAR1</td>
<td>Use of &quot;last year's sales&quot; in the formula</td>
<td>The formula used to drill down the national sales forecasts into each territory considers &quot;last year's sales&quot;</td>
</tr>
<tr>
<td></td>
<td>VAR2</td>
<td>Use of &quot;actual market share&quot; in the formula</td>
<td>The formula used to drill down the national sales forecasts into each territory considers &quot;actual market share&quot;</td>
</tr>
<tr>
<td></td>
<td>VAR3</td>
<td>Use of other variables in the formula</td>
<td>The formula used to drill down the national sales forecasts into each territory considers other elements apart from &quot;sales&quot; and &quot;market share&quot;</td>
</tr>
<tr>
<td></td>
<td>MEAS</td>
<td>Variables to be measurable</td>
<td>Every variable included in the formula is objectively measurable</td>
</tr>
<tr>
<td>Track sales causality</td>
<td>CAUS</td>
<td>Track sales causality</td>
<td>Sales Directors know the amount of sales developed exclusively by each Sales Representative</td>
</tr>
<tr>
<td>Balance the amount of formal and informal communication being used</td>
<td>COMM1</td>
<td>Formal meetings in the context of the SEBP</td>
<td>There are three formal meetings, at least, related to the goal setting process</td>
</tr>
<tr>
<td>Facilitate vertical communication</td>
<td>COMM2</td>
<td>Rationale behind sales quotes explained to SR</td>
<td>Sales Directors explain the rationale behind the sales quotes developed, to their Sales Representatives</td>
</tr>
<tr>
<td></td>
<td>COMM3</td>
<td>SR are free to voice their concerns</td>
<td>Sales Representatives voice their concerns if they disagree with the sales quotas received</td>
</tr>
<tr>
<td>Facilitate horizontal flows of communication</td>
<td>COMM4</td>
<td>SR share experiences with peers</td>
<td>Sales Representatives share their experiences on the field with their peers in at least one yearly meeting</td>
</tr>
<tr>
<td></td>
<td>COMM5</td>
<td>SR share experiences with Product Managers</td>
<td>Sales Representatives share their experiences on the field with the Product Managers in at least one yearly meeting</td>
</tr>
<tr>
<td>Develop formal feedback channels</td>
<td>FEED</td>
<td>Process to formally capture feedback</td>
<td>There is a formal process in place that allows capturing feedback from the field</td>
</tr>
<tr>
<td>Define independent territories for each Sales Representative</td>
<td>INDE</td>
<td>Independent territories</td>
<td>Each Sales Representative works in an independent sales territory</td>
</tr>
<tr>
<td>Produce reasonable national sales forecasts</td>
<td>FORE1</td>
<td>National sales forecasts challenging but realistic</td>
<td>National sales forecasts are challenging but achievable</td>
</tr>
<tr>
<td></td>
<td>FORE2</td>
<td>SR filtered from unreasonable national sales forecasts</td>
<td>National sales forecasts are unreasonable, Sales Directors introduce adjustments to ensure Sales Representatives still get a reasonable sales quota</td>
</tr>
<tr>
<td>Develop balanced sales territories in terms of business opportunity</td>
<td>ALG1</td>
<td>Sales territories with similar workload</td>
<td>Sales territories have approximately the same size in terms of number of clients to be visited</td>
</tr>
<tr>
<td></td>
<td>ALG2</td>
<td>Sales territories with similar sales potential</td>
<td>Sales territories have approximately the same size in terms of market sales</td>
</tr>
</tbody>
</table>

Source: originated by the author
Each of these forty-one measures, included in Table 5-2, became a statement in the instrument. Next to each one of them there was a Likert-type scale ranging from 1 = completely disagree to 5 = completely agree. The middle point in the scale corresponds to “Uncertain” and it was given a value of 3. In the analysis, an average is calculated and high scores represent higher importance and low scores lower importance. The only exception is INFO1, INFO2, INFO3 and INFO4 where the statement was articulated on the negative form. On these four measures, having a low score represents high importance to information while having a high score represents that information is not so relevant to the development of sales quotas. A copy of the questionnaire both in English and Spanish could be found in Appendix I.

Because of the way in which the constructs were derived, the expected scores were in general high, while low scores indicate that the case study was not generalizable on that particular construct or highlight a conflict with the existent literature. The variables considered are referred to the organisations to which each one of the respondents belong, instead of focusing on the individual itself. The common factor across the population studied is that all of them are sales or sales operations executives form the ethical pharmaceutical sector. For each company, the following variables were considered:

- **Size**: the criterion used is to consider the top 25 organisations based on revenue as big pharmaceutical organisations (coded with a 1) and the rest as medium and small pharmaceutical organisations (coded with a 2).

- **Type**: the criterion used is to consider the proportion of branded products in their portfolios. Organisations with more than 50% of branded products in their portfolios were considered as “branded pharmaceutical organisations” (coded with a 1) while organisations with more than 50% of generic products were considered as “generic pharmaceutical organisations” (coded with a 2).
- **Nature**: organisations with a major composition of local capital were considered as “local pharmaceutical organisations” (coded 2) while local branches of multinational organisations were considered as “multinational pharmaceutical organisations” (coded with a 1).

- **Primary care-oriented or specialists-oriented**: organisations with more than 40% of primary care products in their portfolios are classified as “primary care-oriented organisations” (coded with a 1). Organisations with more than 40% of secondary care products in their portfolios are classified as “specialists-oriented organisations” (coded with a 3). The rest of the organisations were considered as “balanced organisations” (coded with a 2).

### 5.6 Statistical analysis

Statistical analysis was conducted with the following three aims; first to be able to understand which capabilities were perceived to be more important than the rest; second to determine how these perceptions vary depending on the organisational context of reference; and third, to group those critical organisational capabilities under categories. Figure 5.1 illustrates the three objectives and steps followed.

**Figure 5.1: The three aims and steps the statistical analysis addressed**

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Assigning relevance to organisational capabilities</td>
</tr>
<tr>
<td>2</td>
<td>Comparing means under diverse organisational contexts</td>
</tr>
<tr>
<td>3</td>
<td>Group organisational capabilities into categories</td>
</tr>
</tbody>
</table>

Source: originated by the author

Step one consisted of analysing descriptive statistics and a ranking of the results achieved by the means for each measure of capability. Step two was addressed through
the use of means comparisons under different contexts; in other words, each of the means achieved by the measures within each segment created was compared to the means of the same measure within a different segment. The third step, grouping organisational capabilities into categories was performed using a technique called Principal Components Analysis and has in itself a number of steps to follow and are described in Figure 5.2.

Figure 5.2: Steps taken to conduct Principal Components Analysis

- Measures of capability to be used in the analysis selected
- Communalities among measures of capability analysed
- Kaiser-Meyer-Olkin measure of sampling adequacy reviewed
- Bartlett’s test of sphericity reviewed
- Total variance explained and Scree Plot analysed
- Principal Components Analysis and Alpha Factoring conducted
- A rotated matrix produced with 3 components
- Categories developed based on the loadings
- Reliability analysis conducted through Cronbach’s Alpha
- An additional category extracted from the literature

4 categories of organisational capabilities developed

Source: originated by the author
5.7 Assigning relevance to the organisational capabilities

Data analysis was performed using SPSS. Descriptive analysis was performed to understand which capabilities were more important than the rest for the development of effective sales quotas. A numeric scale from 1 to 5 was used so the maximum possible score for each measure was 5 while the minimum was 1. The descriptive analysis produced a mean score for each of the 41 measures that ranged from 2.32 to 4.75. All the measures were ranked from the highest to the lowest scores. The top 25 measures of capabilities were flagged as representative of the most important organisational capabilities to acquire or develop. All of those capabilities achieved a score above 4 (agree or strongly agree). INFO1, INFO2, INFO3 and INFO4 had negative statements so small scores on those are equivalent to high scores on the rest of variables. These four measures were included in the top 25 measures as they got very small scores. The most important measures identified, in order of relevance, are the following:

- National sales forecasts are challenging but achievable (FORE1).
- District managers understand the formula used to develop their sales quotas (FORM3).
- Every variable included in the formula is objectively measurable (MEAS).
- Sales representatives understand the formula used to develop their sales quotas (FORM2).
- Sales and marketing people meet up at least on a quarterly basis to discuss market dynamics (INTER1).
- There is a formal process in place that allows capturing feedback from the field (FEED).
- Sales directors understand the business environment so they are able to assess the reasonability of the sales quotas developed (SSKI).
- Sales and marketing people share localized field insights on a quarterly basis (INTER3).
- Brand teams develop their sales forecasts looking at potential number of patients, competition and future market events as opposed to only considering historical trends (ANAZ).
- Sales representatives' sales quotas are proportional to the business potential of their territories (FAIR1).
- Sales directors exercise a similar management style to avoid sales representatives from different sales lines being treated differently (MGMT).
- Sales representatives share their experiences on the field with the product managers in at least one yearly meeting (COMM5).
- Sales territories have approximately the same size in terms of market sales (ALIG2).
- Sales representatives share their experiences on the field with their peers in at least one yearly meeting (COMM4).
- The formula used to drill down the national sales forecasts into each territory considers other elements apart from "sales" and "market share" (VARI3).
- Sales directors explain the rationale behind the sales quotas developed, to their sales representatives (COMM2).
- Sales directors know the amount of sales developed exclusively by each sales representative (CAUS).
- There is one sales quotas development process owner (OWNE).
- The formula used to drill down the national sales forecasts into each territory considers "actual market share" (VARI2).
- Sales and marketing people meet up at least twice a year in the context of the sales quotas development process (INTER2).
- When sales directors perceive information to be inadequate, they introduce adjustments following their judgement (INFO1).
- When information is not on time sales directors use alternative methods to come up with sales quotas (INFO4).
- When sales directors perceive information to be inadequate, they consider sales representatives inputs to introduce adjustments (INFO2).
- The goal setting process is not driven by information availability (INFO3).
Table 5-3: Descriptive statistics

<table>
<thead>
<tr>
<th>Measure</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORE1</td>
<td>79</td>
<td>4</td>
<td>5</td>
<td>4.75</td>
<td>0.436</td>
<td>0.191</td>
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<tr>
<td>FORM3</td>
<td>80</td>
<td>3</td>
<td>5</td>
<td>4.50</td>
<td>0.544</td>
<td>0.296</td>
</tr>
<tr>
<td>MEAS</td>
<td>78</td>
<td>3</td>
<td>5</td>
<td>4.55</td>
<td>0.560</td>
<td>0.303</td>
</tr>
<tr>
<td>FORM2</td>
<td>80</td>
<td>3</td>
<td>5</td>
<td>4.53</td>
<td>0.551</td>
<td>0.303</td>
</tr>
<tr>
<td>INTER1</td>
<td>78</td>
<td>1</td>
<td>5</td>
<td>4.51</td>
<td>0.619</td>
<td>0.401</td>
</tr>
<tr>
<td>FEED</td>
<td>77</td>
<td>2</td>
<td>5</td>
<td>4.49</td>
<td>0.641</td>
<td>0.411</td>
</tr>
<tr>
<td>SSKI</td>
<td>80</td>
<td>1</td>
<td>5</td>
<td>4.40</td>
<td>0.704</td>
<td>0.490</td>
</tr>
<tr>
<td>INTER3</td>
<td>79</td>
<td>3</td>
<td>5</td>
<td>4.39</td>
<td>0.564</td>
<td>0.310</td>
</tr>
<tr>
<td>ANAZ</td>
<td>79</td>
<td>1</td>
<td>6</td>
<td>4.34</td>
<td>0.783</td>
<td>0.612</td>
</tr>
<tr>
<td>FAIR1</td>
<td>79</td>
<td>2</td>
<td>5</td>
<td>4.33</td>
<td>0.603</td>
<td>0.480</td>
</tr>
<tr>
<td>MGMT</td>
<td>79</td>
<td>2</td>
<td>5</td>
<td>4.30</td>
<td>0.806</td>
<td>0.650</td>
</tr>
<tr>
<td>COMM5</td>
<td>79</td>
<td>2</td>
<td>5</td>
<td>4.28</td>
<td>0.750</td>
<td>0.562</td>
</tr>
<tr>
<td>ALIG2</td>
<td>80</td>
<td>2</td>
<td>5</td>
<td>4.20</td>
<td>0.863</td>
<td>0.744</td>
</tr>
<tr>
<td>COMM4</td>
<td>80</td>
<td>1</td>
<td>5</td>
<td>4.18</td>
<td>0.854</td>
<td>0.728</td>
</tr>
<tr>
<td>VAR13</td>
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<td>2</td>
<td>5</td>
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<td>0.625</td>
<td>0.391</td>
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<tr>
<td>COMM2</td>
<td>80</td>
<td>1</td>
<td>5</td>
<td>4.18</td>
<td>0.987</td>
<td>0.824</td>
</tr>
<tr>
<td>CAUS</td>
<td>80</td>
<td>1</td>
<td>5</td>
<td>4.18</td>
<td>0.705</td>
<td>0.502</td>
</tr>
<tr>
<td>OWNME</td>
<td>78</td>
<td>1</td>
<td>5</td>
<td>4.14</td>
<td>0.908</td>
<td>0.978</td>
</tr>
<tr>
<td>VAR12</td>
<td>79</td>
<td>2</td>
<td>5</td>
<td>4.10</td>
<td>1.081</td>
<td>1.149</td>
</tr>
<tr>
<td>INTER2</td>
<td>80</td>
<td>1</td>
<td>5</td>
<td>4.09</td>
<td>1.011</td>
<td>1.023</td>
</tr>
<tr>
<td>INFO1</td>
<td>80</td>
<td>1</td>
<td>5</td>
<td>2.70</td>
<td>1.066</td>
<td>1.123</td>
</tr>
<tr>
<td>INFO4</td>
<td>79</td>
<td>1</td>
<td>5</td>
<td>2.54</td>
<td>1.066</td>
<td>1.123</td>
</tr>
<tr>
<td>INFO2</td>
<td>80</td>
<td>1</td>
<td>5</td>
<td>2.44</td>
<td>0.938</td>
<td>0.892</td>
</tr>
<tr>
<td>INFO3</td>
<td>76</td>
<td>1</td>
<td>5</td>
<td>2.32</td>
<td>1.023</td>
<td>1.056</td>
</tr>
</tbody>
</table>

Source: originated by the author

Table 5-3 above makes clear the most important aspects to consider when developing sales quotas for pharmaceutical sales forces. The rest of measures and their values could be found in Appendix J. Each measure is ranked with a score next to it. The sixteen most important organisational capabilities for the development of effective goals, and linked to these measures, are the following: 1) FORE (produce reasonable national sales forecasts), 2) FORM (a simple formula being used so people can easily understand how their goals are being developed), 3) MEAS (selection of variables that are measurable), 4) INTER (interaction between sales and marketing people), 5) FEED (develop formal feedback channels), 6) SSKI (having sales management skills in sales top executives), 7) ANAZ (develop excellent analytical skills in the brand teams), 8) FAIR1 (providing fairness across your company's sales force), 9) MGMT (having a homogeneous management style embedded in the culture of the organisation), 10) COMM2 (facilitate vertical communication), 11) ALIG (Develop balanced sales territories in terms of...
business opportunity), 12) COMM4 and 5 (facilitate horizontal flows of communication), 13) VARI (selection of the right variables to measure), 14) CAUS (track sales causality), 15) OWNE (having a sales quotas development process owner) and 16) INFO (acquisition of adequate information).

5.8 Comparing means

Understanding how organisational capabilities are valued in different organisational contexts is critical to better decide on what capabilities to focus upon to achieve the maximum impact under different contexts. The contexts defined for this study, as previously discussed, are the following: high-revenue and small-revenue organisations; multinationals and locals; organisations with generic and branded portfolios; and primary care-driven and specialists-driven organisations.

5.8.1 Comparing means on size

All 41 measures were tested applying independent samples t-tests. 48 organisations were classified as high-revenue pharmaceutical organisations and 32 were considered to be medium-revenue and small-revenue. Levene’s test on equality of variances was also applied to assume equal variances. With a statistical significance smaller than 0.05, equal variances should not be assumed. This was the case on a few measures like: HOMO2 (0.032), FAIR2 (0.008), COMM3 (0.028), FORE1 (0.044) and FORE2 (0.036). The differences of responses were significant on the measures included in Table 5-4.
Table 5-4: Differences between high-revenue and small/medium-revenue pharmaceutical organisations

<table>
<thead>
<tr>
<th></th>
<th>Significance</th>
<th>high-revenue Pharma</th>
<th>Medim/Small-revenue Pharma</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLEX</td>
<td>0.049</td>
<td>4.15</td>
<td>3.69</td>
</tr>
<tr>
<td>CONS</td>
<td>0.027</td>
<td>3.77</td>
<td>4.19</td>
</tr>
<tr>
<td>SSK1</td>
<td>0.048</td>
<td>4.27</td>
<td>4.69</td>
</tr>
<tr>
<td>INTER3</td>
<td>0.018</td>
<td>4.27</td>
<td>4.60</td>
</tr>
<tr>
<td>CAUS</td>
<td>0.017</td>
<td>3.96</td>
<td>4.44</td>
</tr>
<tr>
<td>COMM2</td>
<td>0.006</td>
<td>3.9</td>
<td>4.66</td>
</tr>
<tr>
<td>INDE</td>
<td>0.05</td>
<td>3.1</td>
<td>3.69</td>
</tr>
</tbody>
</table>

Source: originated by the author

High-revenue pharmaceutical organisations place significant more relevance than smaller organisations on allowing flexibility to change sales quotas as unforeseen market events arise. High-revenue organisations tend to have wider portfolios both in terms of number of products and revenue. This allows them to diversify risk and be more flexible with the quotas they set up. An adjustment downwards of a sales quota on one product could be compensated by an adjustment upwards on another product. High-revenue firms also invest more on technology and tools to facilitate the management of the business and are probably better prepared than smaller organisations to understand that unattainable sales quotas make sales representatives to disconnect from the task at hand and, therefore, act upon it. Therefore, introducing flexibility when an unforeseen market event emerges makes a lot of sense to them.

Smaller-revenue pharmaceutical organisations feel stronger than high-revenue organisations about:

- Trying to reach consensus among district managers on the sales quotas assigned. Smaller firms have smaller sales forces and many of them are being managed as family businesses and as such, reaching consensus becomes an important aspect of the business; typically, everybody knows everybody and relationships are very close and strong on these organisations.
- Having sales directors with strong sales management skills. They value sales skills on sales directors because of the scarcity of this resource among these organisations. It is obviously more difficult for a smaller firm to attract talent in the market place due to difficulties on matching reward packs, brand and career opportunities.

- Sharing localised insights among sales people and marketing people. In small organisations sales and marketing people could be just two persons or even one could concentrate both functions so it is inevitable that they get together and share insights. They clearly value the interaction as it is one of the virtues of small firms and the cost of it in terms of time and effort is very small. In high-revenue firms there are too many stakeholders to be aligned and this aspect is an important barrier to the sharing of intelligence among sales and marketing.

- Understanding sales causality at the territorial level. Because sales directors in small firms tend to know every single sales representative they have a stronger grip on sales causality, which allows them to manage it introducing adjustments. In high-revenue firms, this is very difficult to implement qualitatively. There were attempts to measure it quantitatively through mathematical formulas but the cost of conducting these analyses and the precision achieved makes it not viable.

- Providing transparency and clarity from the sales directors to their sales representatives on the rationale as to why they are getting their sales quotas. Small-revenue firms are more personal than high-revenue firms in the way they are managed. As with reaching consensus, providing transparency on the rationale of quotas is a key element as it allows getting the team closer together and motivated to achieving the goals. The process in high-revenue firms tends to be more mechanical and impersonal.

- Having independent territories. High-revenue firms tend to have more and stronger products to promote and it is often the case that they do not have an
option of having independent territories; they have to share a territory among two or more sales representatives. This may explain why small-revenue firms place more relevance to this aspect than high-revenue firms.

5.8.2 Comparing means on nature

All 41 measures were tested applying independent samples t-tests. 69 organisations were classified as multinational organisations and 11 were considered to be local organisations. Levene’s test on equality of variances was also applied to assume equal variances. With a significance smaller than 0.05, equal variances should not be assumed. This was the case on a few measures like: INFO2 (0.046), FORM3 (0.027) and COMM1 (0.031). The differences of responses were significant on the measures included in table 5-5.

Table 5-5: Differences between multinationals and local pharmaceutical organisations

<table>
<thead>
<tr>
<th>Source: originated by the author</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Measure</th>
<th>Significance</th>
<th>Multinational companies</th>
<th>Local companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART2</td>
<td>0.048</td>
<td>2.99</td>
<td>3.73</td>
</tr>
<tr>
<td>CULT</td>
<td>0.014</td>
<td>3.87</td>
<td>4.64</td>
</tr>
<tr>
<td>INTER2</td>
<td>0.034</td>
<td>3.96</td>
<td>4.73</td>
</tr>
<tr>
<td>VARI2</td>
<td>0.024</td>
<td>4.03</td>
<td>4.55</td>
</tr>
<tr>
<td>FORE1</td>
<td>0.038</td>
<td>4.71</td>
<td>5.00</td>
</tr>
<tr>
<td>FORE2</td>
<td>0.051</td>
<td>3.55</td>
<td>2.62</td>
</tr>
</tbody>
</table>

Multinational organisations pose more relevance than local organisations on allowing flexibility when the national sales forecast is unachievable to adjust and provide a more realistic sales quota to sales representatives so they keep on being motivated to achieving their sales quotas. This is probably so because multinational organisations invest more on technology and tools to facilitate the management of the business and are probably better prepared than local organisations to understand that when a goal is perceived to be unreachable people disconnect from the task as demonstrated by many researchers (Locke, 2004; Hollenbeck and Klein, 1987).
Local pharmaceutical organisations feel stronger than multinational organisations about:

- Allowing sales representatives to participate from the sales quotas development process. Local organisations are typically managed as family organisations and are often smaller than multinational organisations. They tend to be closer to the sales force as many times the management of these organisations knows each sales representative by name and surname. They do know what each one of them has to contribute. They can also articulate this feedback process as they typically have less sales representatives.

- Promoting a culture of solidarity and cooperation among sales representatives. Again, local organisations tend to favour solidarity and cooperation as most of them are family businesses. They have a spirit of unity and pride that makes them work truly as a team; size allows them to do so.

- Getting marketing and sales to meet up at least twice a year on the context of the sales quotas development process. In local organisations sales and marketing people could be just two persons or even one could concentrate both functions so it is inevitable that they get together and share insights. They clearly value the interaction as it is one of the virtues of local firms and the cost of it in terms of time and effort is very small. In multinational firms there are too many stakeholders to align and sometimes they belong to international structures that work as silos.

- Using market share as a proxy for market potential. Using market share as a proxy for market potential is the most basic and traditional approach used. Multinationals understand that there are other elements that are critical to consider when assessing market potential like number of patients, evolution of prevalence of a disease, among others so it is not surprising that multinationals score lower than local firms on this measure.
Ensuring that national sales forecasts are challenging but achievable. Local organisations achieved the maximum score possible on this measure. In any case, multinationals also achieved an extremely high score (4.71) so it does not make a lot of sense to explore the differences as they both believe this is the most important element to consider when developing sales quotas.

5.8.3 Comparing means on orientation

All 41 measures were tested applying independent samples t-tests. 35 organisations were classified as primary care - oriented organisations and 20 were considered to be specialists - oriented organisations. Levene’s test on equality of variances was also applied to assume equal variances. With a significance smaller than 0.05, equal variances should not be assumed. This was the case on a few measures like: FAIR2 (0.027), FAIR3 (0.011), ANAZ (0.005) and COMM1 (0.010). The differences of responses were significant on the measures included in Table 5-6.

Table 5-6: Differences between primary care and specialist oriented pharmaceutical organisations

<table>
<thead>
<tr>
<th>Source: originated by the author</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Significance</th>
<th>PC oriented</th>
<th>SP oriented</th>
</tr>
</thead>
<tbody>
<tr>
<td>CWNE</td>
<td>0.031</td>
<td>4.03</td>
<td>4.55</td>
</tr>
<tr>
<td>ALG2</td>
<td>0.047</td>
<td>4.00</td>
<td>4.45</td>
</tr>
</tbody>
</table>

Specialist oriented pharmaceutical organisations feel stronger on the relevance of having a sales quotas development process owner and having balanced territories in terms of future market sales. These organisations tend to be more advanced and more successful as the market grows through new launches in the specialty sector. These organisations might be more advanced in their understanding of management techniques and they might also have a stronger talent base in their ranks.
5.8.4 Comparing means on type

All 41 measures were tested applying independent samples t-tests. 74 organisations were classified as branded organisations and 6 were considered to be generic organisations. Levene’s test on equality of variances was also applied to assume equal variances. With a significance smaller than 0.05, equal variances should not be assumed. This was the case on a few measures like: HUMA1 (0.024), INTER1 (0.05) and FORE1 (0.001).

The differences of responses were significant only on HUMA1 (Significance: 0.007) with a score of 2.33 for branded organisations and 3.50 for generic organisations. Although, both clusters agree that assigning a higher sales quota to high performers than the one suggested by the formula is not very relevant, generic organisations pose more weight to it than branded organisations. The sample of generic companies is fairly small with only 6 cases these results are considered not significant.

5.9 Grouping organisational capabilities into categories

Grouping the 25 organisational capabilities into dimensions facilitates a better understanding of the areas where improvements can be made. For that reason “Principal Components Analysis” (PCA) and “Alpha Factoring” was carried out on the most relevant measures of organisational capabilities. Both methods produced three identical components. There is a rule of thumb that says that when conducting PCA the number of variables used should be approximately four times smaller than the sample. Therefore, this researcher decided to conduct the analysis only with those variables that were found to be very relevant. The following variables were used for the analysis: ANAZ, SSKI, CULT, COMM2, INFO1, INFO2, COMM5, FEED, INTER1, FAIR1, INTER3, COMM4, MGMT, VARI3, FORE1, FORM2, FORM3, MEAS, ALIG2 and CAUS.
Communalities after extraction should be ideally above 0.5 (Field, 2005). Table 5-7 shows the communalities found in the variables after the extraction. From the 21 variables used 13 are below 0.5 and from those only 4 were below 0.4. Moreover, most of the variables that got a low communality value were also variables that scored low in terms of importance.

Table 5-7: Communalities among measures of organisational capability

<table>
<thead>
<tr>
<th>Communalities</th>
<th>Initial</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAZ</td>
<td>1,000</td>
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</tr>
<tr>
<td>SSKI</td>
<td>1,000</td>
<td>.608</td>
</tr>
<tr>
<td>CULT</td>
<td>1,000</td>
<td>.504</td>
</tr>
<tr>
<td>COMM2</td>
<td>1,000</td>
<td>.403</td>
</tr>
<tr>
<td>INFO1</td>
<td>1,000</td>
<td>.471</td>
</tr>
<tr>
<td>INFO2</td>
<td>1,000</td>
<td>.521</td>
</tr>
<tr>
<td>COMM5</td>
<td>1,000</td>
<td>.661</td>
</tr>
<tr>
<td>FEED</td>
<td>1,000</td>
<td>.471</td>
</tr>
<tr>
<td>INTER1</td>
<td>1,000</td>
<td>.619</td>
</tr>
<tr>
<td>INTER3</td>
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<tr>
<td>FAIR1</td>
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<td>MGMT</td>
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</tr>
<tr>
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<td>.621</td>
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</tr>
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<td>.212</td>
</tr>
<tr>
<td>MEAS</td>
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<td>.656</td>
</tr>
<tr>
<td>CAUS</td>
<td>1,000</td>
<td>.406</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

The Kaiser-Meyer-Olkin measure of sampling adequacy, in Table 5-8, was 0.555, above 0.5 as required. Also, the Bartlett’s test of sphericity is provided a Chi-Square value of 614.373 (df = 190), which is approx three times smaller. Bartlett’s test is highly significant and therefore PCA analysis is appropriate.
The 20 items exposed to PCA account for 45.3% of the total variance in those variables as is shown in Table 5-9.

The point of inflection on the “Scree Plot” curve also provides a hint as to the number of factors to be used; in this case three. The Scree Plot is illustrated in Figure 5.3.
After confirming that selecting four components was appropriate, PCA was applied and generated Table 5-10.

Table 5-10: Components Matrix

<table>
<thead>
<tr>
<th>Component Matrix(a)</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>ANAZ</td>
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</tr>
<tr>
<td>SSKI</td>
<td>0.086</td>
</tr>
<tr>
<td>CULT</td>
<td>0.105</td>
</tr>
<tr>
<td>COMM2</td>
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</tr>
<tr>
<td>INFO1</td>
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<tr>
<td>INFO2</td>
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<tr>
<td>COMM5</td>
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<tr>
<td>FEED</td>
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</tr>
<tr>
<td>INTER1</td>
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<tr>
<td>INTER3</td>
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<tr>
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<tr>
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<tr>
<td>MEAS</td>
<td>0.280</td>
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<tr>
<td>CAUS</td>
<td>0.034</td>
</tr>
</tbody>
</table>

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.
Each component was filled in with those variables that had the highest/high loadings first. The procedure utilized for this was to start at the top-left of the table and move to the right row after row and pre-select variables based on the loading each one had.

Component 1 is named “**Business Intelligence**” and is composed by the following measures:

- Sales representatives share their experiences on the field with the product managers in at least one yearly meeting (COMM5).
- There is a formal process in place that allows capturing feedback from the field (FEED).
- Sales and marketing people meet up at least on a quarterly basis to discuss market dynamics (INTER1).
- Sales and marketing people share localized field insights on a quarterly basis (INTER3).
- Sales representatives share their experiences on the field with their peers in at least one yearly meeting (COMM4).
- The formula used to drill down the national sales forecasts into each territory considers other elements apart from "sales" and "market share" (VARI3).

There is information or rather “business intelligence” that cannot be captured straight away from third party data. Moreover, third party data is available to most players in the market and do not constitute a competitive advantage. Being capable of acquiring, sharing and disseminating business intelligence is critical. The organisation needs to get the different departments and roles to talk to each other; marketing needs to meet up with sales, sales representatives need to talk to the product managers and so on.

Component 2 is named “**Infrastructure**” and is composed by the following measures:

- Brand teams develop their sales forecasts looking at potential number of patients, competition and future market events as opposed to only considering historical trends (ANAZ).
- Sales directors understand the business environment so they are able to assess the reasonability of the sales quotas developed (SSKI).
- The company put incentives in place to avoid "gaming" among sales representatives when sales quotas are developed (CULT).
- Sales directors explain the rationale behind the sales quotas developed, to their sales representatives (COMM2).
- When sales directors perceive information to be inadequate, they do not introduce adjustments following their judgement (INFO1).
- When sales directors perceive information to be inadequate, they do not consider sales representatives inputs to introduce adjustments (INFO2).
- District managers are able to change sales representatives' (centrally allocated) sales quotas, keeping the overall regional sales quota unchanged (EMPW).

Building a solid infrastructure has to do with acquiring adequate data to process and analyse and also having the right profiles of people in the right roles. This implies that the organisation needs to have a strong analytical capability when producing the national sales forecasts but also great sales management skills to validate sales quotas and also to communicate them and manage the sales force. Producing a challenging but achievable national sales forecast was the most important measure by far with a score of 4.75. Strong brand teams are critical to develop these forecasts. Once the national sales forecast is developed, the drill-down to the sales representatives’ territories has to make business sense. Sales directors need to be capable to assess if those sales quotas assigned to the territories are reasonable or not and also they need to have interpersonal skills to be able to communicate those goals to their sales force. They need to facilitate collaboration and teamwork through providing incentives for people to communicate and share. These incentives not necessarily need to be monetary incentives but a situation, where everyone wins, requires to be generated.

Acquiring and using hard facts where to base the sales quotas calculations is an important ingredient of any sales quota development process. It provides precision and “objectivity” to the outcomes. Respondents to the survey do not prefer to fill in the data holes with district managers and sales representatives’ feedback alone due to the
subjectivity involved. Empowering district managers, even to make a trade-off of sales 
quotas assigned within their territories is also not liked as an option by sales and sales 
operations executives. They strongly believe third party data is a standard to follow 
while being also objective and irrefutable.

Component 3 is named “Calculating Sales Quotas” and is composed by:

- National sales forecasts are challenging but achievable (FORE1).
- Sales representatives understand the formula used to develop their sales quotas 
  (FORM2).
- District managers understand the formula used to develop their sales quotas 
  (FORM3).
- Every variable included in the formula is objectively measurable (MEAS).
- Sales territories have approximately the same size in terms of market sales 
  (ALIG2).
- Sales directors know the amount of sales developed exclusively by each sales 
  representative (CAUS).
- Sales directors exercise a similar management style to avoid having sales 
  representatives from different sales lines being treated differently (MGMT).
- Sales representatives’ sales quotas are proportional to the business potential of 
  their territories (FAIR1).

The act of calculating sales quotas looks as if it is trivial but it requires careful attention. 
National sales forecasts need to be reasonable; the sales force needs to accept the 
formula that is being used to calculate their sales quotas; the variables used in the 
formula need to be measurable; sales territories should be similar in future sales and 
sales causality needs to be understood to be able to make the link between sales and 

Having a goal setting process owner (OWNE) is considered to be the fourth 
component but, as it only has one variable, it was not grouped with the others to avoid 
contamination. When conducting a PCA with all variables included, the measure
“OWNE” got assigned a component with a loading of 0.539, which implies that the measure is a component on its own. Moreover, Michael Hammer (2007), considered this same variable as a dimension on the framework he developed on the recent HBR article “The Process Audit” (Hammer, 2007). “OWNE” got a score of 4.14, which shows that it is considered to be a very important factor on the development of goals. For these three reasons, having a goal setting process owner was considered to be a variable and a dimension to be considered.

Summarizing, an effective sales quotas development process requires an owner that facilitates the process of calculating sales quotas with the right infrastructure in place. Both hard data and business intelligence needs to be used by a team of competent people; this is brand teams with strong analytical skills and sales executives with strong sales management skills.

**5.10 Reliability**

The reliability of the three components identified was tested using the Cronbach’s alpha test. The results were as follows:

- Business Intelligence: 0.79; with 6 items.
- Infrastructure: 0.72; with 7 items.
- Calculating Sales Quotas: 0.68; with 8 items.

Only “Calculating Sales Quotas” fell below the recommended 0.7 but it is so close that this researcher decided to keep it in. Therefore, these three dimensions are reliable.

**5.11 Chapter summary**

The results of the analysis from the survey were presented in this chapter. Organisational capabilities were derived from the case study and the literature review. The initial SQD Model and the initial SQP Maturity Framework were developed and
refined through assigning relevance to the various organisational capabilities derived. This relevance was also contextualized looking at different typologies of pharmaceutical organisations. The organisational capabilities considered important by sales and sales operations executives were grouped under categories applying Principal Components Analysis. All the statistical analysis performed (including reliability), as well as the outcomes, were made explicit in the chapter.

The next chapter is the synthesis of the thesis and discusses the outcomes from the research. In particular, the attention is focused on those capabilities that were considered to be relevant in the survey and not considered before in the literature. Also, it focuses on those capabilities that were found to be irrelevant at the survey, while considered important in previous research work.
6 The development of the SQP Maturity Framework

6.1 Chapter introduction

The purpose of this chapter is to discuss organisational capabilities that are important for the process of developing effective sales quotas for pharmaceutical sales forces in Spain. The findings from the quantitative study are explained in the light of the existing research. These findings form the basis of the Sales Quotas Development Model - a conceptual model of the essential capabilities required by the process. From this conceptual model a maturity model was developed – The Sales Quotas Process Maturity Framework. This framework indicates the maturity of the process by assessing only those organisational capabilities that are considered to be critical, to sales and sales operations executives, for the development of sales quotas.

6.2 The sales quotas development process

The systematic literature review concluded that the sales quotas development process for sales forces is an underresearched field with relatively few researchers leading the field; namely Andy Zoltners, René Darmon, David Good, Robert Stone, Murali Mantrala and Prabhakant Sinha. There is a general lack of understanding on how to develop effective sales quotas for sales representatives, both from academic and practitioner perspectives. For instance, Zoltners et al. (2006) summarize what is important for the development of sales quotas for the sales force: “The best goal-setting processes typically rely on a combination of both data analysis and sales force input, with the relative importance of each being determined by the firm’s selling situation and analytical capabilities, as well as the availability and accuracy of sales territory-level data” (Zoltners et al., 2006:344). This observation stems from projects conducted by those researchers on the goal setting field; mostly carried out with pharmaceutical organisations across the world. Although this may be valid from a practitioners’ point of view, it needs to be validated empirically.
One seminal work often quoted in the literature is the research work done by Good and Stone (1991) on attitudes and applications of quotas by sales executives and sales managers. A survey was carried out with 119 industrial sales managers regarding their attitudes about sales quotas development and implementation. The questionnaire used by Good and Stone is similar to the one used by this thesis, in terms of design, scale used, objectives and theme. It was applied to sales managers in the US and across diverse industries. One of Good and Stone’s (1991) conclusions is that the most important elements for the development and implementation of sales quotas are the strategic parameters utilized. They claim that these parameters are outside the control of sales representatives and “probably” outside the sales manager’s control, with the exception of territory assignment (Good and Stone, 1991:53). The findings from this study contradict Good and Stone’s conclusions. This study found that fourteen of the sixteen critical capabilities for the effective development of sales quotas could be changed and influenced by sales managers - these elements are under their control in pharmaceutical organisations. The capabilities that are not at the hands of the sales managers are the development of challenging but achievable national sales forecasts and the development of strong analytical skills within marketing. While Good and Stone imply a passive role for sales managers in the process, this researcher believes they are instrumental in ensuring the process is mature enough and the right one to follow. Good and Stone’s (1991) conclusion that the only elements that are important are the strategic parameters is flawed, as the statements included did not consider most of the critical organisational capabilities uncovered on this thesis.

In the following sections, the organisational capabilities found to be critical from this study’s empirical data, for the process of developing sales quotas, are discussed on the light of the existing literature. The relevance of each capability, to sales and sales operations executives, is discussed in diverse contexts within the pharmaceutical sector in Spain.
6.3 The goal setting process owner

A goal setting process owner, accountable and responsible for the process’s outcomes is required to conduct the process throughout the year. Hammer (2007) argues that high performance processes cross functional boundaries and require supervision and support from a senior executive (Hammer, 2007). This person should have responsibility and authority to ensure that the process delivers its results. This process owner needs to identify and document the process as well as ensure it is communicated to all stakeholders (Hammer, 2007). Although this is intuitively appealing, he provides no evidence as to the importance of having a goal setting owner. While Hammer (2007) suggests the idea, there is little evidence of this in the literature. The relevance of having a goal setting process owner was asked to sales and sales operations executives in Spain to validate the construct. The respondents to the survey placed significant relevance on having a goal setting owner assigning a score of 4.14. However, this varies across firms; specialist-oriented organisations feel stronger (4.55) on the relevance of having a goal setting process owner than primary care-oriented firms (4.03). As the pharmaceutical market is being developed through the launch of new chemical entities associated with specialities, specialists-oriented organisations face a more challenging environment related to setting sales quotas. Setting sales quotas for new launches is more complex than doing so for in-line products, which are products already launched. This is so because, for the latter, there is a historical trend to follow and a good understanding of market dynamics. Specialist-oriented firms require leveraging all information available and getting support from functional teams in order to launch new products and estimate potential future sales. To summarize, having a goal setting owner is one of the critical organisational capabilities required to develop the sales quotas process for sales representatives, both for primary care and specialist-oriented firms.
Sales representatives’ participation in the sales quota development process is a widely discussed and controversial subject. Specifically, the effects on performance as a consequence of participation of sales representatives in the goal setting process have generated a dispute between two groups of researchers, namely Gary Latham and his team and Miriam Erez and her team. While Latham and his colleagues found that participation in decision making did not lead to enhanced performance, Erez and her colleagues arrived at the opposite conclusion (Locke and Latham, 2002). Working both together with the mediation of Locke, they concluded that if the rationale for the goals being set is explained to the subjects, participation on the development of the goal has no effect on performance. If the goal is imposed without explanation, then performance can be significantly lower (Latham et al., 1988). The main benefit of participation is cognitive rather than motivational in that it stimulates information interchange (Locke et al, 2002). Hollenbeck and Klein (1987) arrived at the conclusion that goals set participatively lead to higher performance only for educated workers (Hollenbeck and Klein, 1987). Wotruba and Thurlow (1976) found that “formal procedures for guiding salespeople (for forecasting and quota setting) appear to aid the accuracy of the results, and those procedures should incorporate giving the salesperson information regarding company plans as well as economic data and interpretations pertinent to each salesperson’s market” (Wotruba and Thurlow, 1976:16). The sales management of a firm can secure valuable information for quota setting purposes through involving the sales force; they could even get an asymmetry advantage on their side through complementing this information with other sources (Darmon, 1997). Involving the sales force in the sales quota development process requires careful consideration and the conditions under which this participation occurs need to be predefined to achieve the desired results.

A finding from an earlier part of this study shows that participation of sales representatives in the process was important to an effective sales quotas process. One potential explanation for this is that pharmaceutical sales representatives are a highly
educated group with most of them having degrees on pharmacy and medical science. However, the results show that involving sales representatives in the process is a challenge, as they are an interested party in the process of developing sales quotas. Therefore, this researcher included in the survey instrument sales representative participation as a potentially important aspect of the process to set sales force sales quotas to better understand sales managers’ perspectives. Wotruba and Thurlow (1976) view that sales forces participation is beneficial for forecasting reinforced the idea of including this construct. However, the results of the survey are very clear; respondents do not believe that sales force participation is beneficial for developing sales quotas (with a score of 3.09), which was completely unexpected and contradicts Wotruba and Thurlow (1976) and Erez and Hollenbeck (1987). It confirms the view of two of the three business unit managers interviewed at an earlier stage of this study.

Wotruba and Thurlow (1976) claim that sales force participation is beneficial for forecasting as they provide additional information otherwise unknown to sales and sales operations executives. However, the pharmaceutical industry, in particular, is characterised by the availability of sales data stemming from being a highly regulated sector. In this sense, sales force participation is not perceived by pharmaceutical executives as necessary. Also, difficulties regarding cost of sales force participation, reaching consensus and objectivity from sales representatives are discussed by Darmon and Zoltners in their work (Zoltners et al., 2006:331; Darmon, 2007: 244). These three elements, together with the availability of sales data in the pharmaceutical sector begin to explain why the respondents to the survey believe sales force participation is not critical for the development of sales quotas.

Both local and multinational pharmaceutical organisations are against allowing sales representatives to participate from the sales quotas development process. However, multinationals feel much stronger against this idea. Local organisations in Spain are typically managed as family organisations and are often smaller in terms of revenue and payroll than multinational organisations. They tend to be closer to the sales force as often the management of these organisations know each sales representative personally and know their contribution to the company. They can also easily implement the
required feedback process as they have fewer sales representatives than multinationals. The cost of integrating the sales force in the goal setting process is lower in organisations with fewer sales representatives, which implies that there might be a correlation between size of the firm and the benefits from sales force participation in the goal setting process; this need to be tested in further research work.

To summarize, allowing sales force participation in the sales quotas development process of pharmaceutical organisations in Spain is considered to be ineffective. This contradicts Wotruba and Thurlow (1976), Erez and Hollenbeck (1987) and it is explained by the specific context -the pharmaceutical sector- where sales data availability is very rich due to regulation. In this industry, data availability makes sales and sales operations executives to be less reliant on what sales representatives know and can contribute regarding future sales in each territory.

### 6.5 The provision of fairness

The provision of fairness –job equity- across the sales force, when developing sales quotas, is one of the most important tasks for sales managers as highlighted by many researchers (Zoltners et al, 2006; Zoltners et al., 2006:344; Darmon, 2001; Mantrala et al., 1994; Adams and Jacobsen, 1964). Darmon (2001), distinctively from the provision of fairness among peers, believes that “corporate equity” is very important and should be considered when defining sales quotas plans (Darmon, 2001 :89; Darmon, 1997). He refers to the comparison that sales representatives make between their own equity ratio and that of the firm; for example when they perceive the firm is not giving them a fair share of company welfare. Apart from job equity and corporate equity there is a third distinction made by Scholl et al. (1987), who found that achieving “occupational equity”, as they refer to it, is very important because as sales representatives perceive they are being treated unfairly, compared to their peers in other organisations, they might argue for a lower quota and a higher bonus. Moreover, it derives on a higher turnover (Darmon, 2001 :89; Scholl et al., 1987).
This study found that both corporate and occupational equity was unimportant for the development of sales quotas, which contradicts Darmon (2001) and Scholl et al. (1987). Both types of fairness were demonstrated to be relevant in the context of industrial settings. However, it seems that these two types of equity are not very relevant for pharmaceutical sales forces. This study determined that while job equity is believed to be important by sales executives with a score of 4.33, both occupational and “corporate” equity are not relevant in the context of setting goals for pharmaceutical sales forces with scores of 3.76 and 3.85 respectively.

Setting fair sales quotas does not ensure that fairness will remain across the year. Some executives adjust the sales quotas at the territory level as unforeseen market events emerge. The survey performed by Good and Stone (1991), found a neutral position from sales managers to changing the sales quotas assigned to sales representatives during the year (Good and Stone, 1991). The same measure of capability scored 3.96 on this study, meaning that sales managers do think that introducing that flexibility is important. These adjustments presumably contribute to re-establishing fairness, keeping motivation high. This contradiction with the literature can be explained by the nature of the pharmaceutical sector. The richness and timeliness of information available in the pharmaceutical industry allows supporting these changes on due time through the use of sales data at the sub-regional level. In particular, this study’s findings shows that high revenue size organisations place significantly more relevance to adjusting sales quotas as unforeseen market events emerge, with a score of 4.15 against 3.69 from smaller organisations. This could be explained by the higher access, these organisations have to sales data allowing them to make informed decisions.

To summarize, the provision of job equity among sales representatives is an important capability for the process that is used to define sales quotas. This is verified across all organisational contexts studied. However, both occupational and corporate equity do not need to be specifically considered for setting sales quotas, in the pharmaceutical sector, which contradicts Darmon (2001) and Scholl et al. (1987). Adjusting sales quotas when unforeseen market events arise is perceived to be important, to sales and sales operations executives, as a means to re-establishing job equity.
6.6 Special assignment of sales quotas to high performers

Assigning higher performing sales people with larger sales quotas than the sales allocation formula dictates is considered in the literature to be more effective than allocating sales people the share of sales based on the formula (Darmon, 2007). This is because higher performers often deliver against more challenging goals than low performers. The literature review supports this idea. A sales territory is more responsive to selling efforts when sales people are higher performers as it is when the environmental conditions are favourable (Darmon, 2007). This is supported by a survey conducted by Douthit (1976) where salespeople’s past performance was determined to be the second most important factor for the development of sales quotas according to sales directors (Douthit, 1976). In a survey carried out by Good and Stone (1991), among US sales managers from diverse industries, the importance of sales representatives’ past sales for determining sales quotas was between “neutral” and “agree” with a score of 2.56 on a scale from 1 to 5, where 1 represented “strongly agree” and 5 represented “strongly disagree” (Good and Stone, 1991).

The findings from this study do not concur with the literature. The idea of adjusting the sales quotas for higher performers was not positively embraced by the respondents to the study. The measure associated with the construct scored low; actually the lowest in the questionnaire (with a score of 2.42), where 1 means unimportant and 5 very important. This contradicts both Douthit (1976) and Good and Stone (1991). The respondents to the survey carried out as part of this thesis are not neutral against considering sales representatives past performance, as determined in the survey conducted by Good and Stone. They disagree on the consideration of this element when developing sales quotas. While both Douthit and Good and Stone have done their research in the US and in various industrial settings, the different results can be explained by the different populations studied.

To summarize, pharmaceutical sales and sales operations executives in Spain do not believe that introducing adjustments on sales quotas for past performance is beneficial.
This contradicts the findings from both Douthit (1976) and Good and Stone (1991) and can be explained by the different populations in which the studies were focused upon.

6.7 Territory alignment

Having balanced territories, that is, with a similar workload and sales potential, is highly desired to facilitate the operation of sales management control systems. It enables sales planning, co-promotions, forecasting and goal setting. Many researchers have highlighted the relevance of having balanced territories in terms of workload and potential to the development of sales force effectiveness (Zoltners and Lorimer, 2000; Skiera and Albers, 1998; Zoltners and Sinha, 1983; Lodish, 1975; Shanker et al., 1975; Talley, 1961). When territories are unbalanced too much effort is deployed towards low value accounts and not enough effort is devoted to high value prospects. Having balanced territories enhances customer coverage, increases sales, positively affects rewards and morale and reduce travel time. Zoltner et al. (2000) observed in a case study that the sales people with the highest incentive payouts were the people working on the highest potential territories so the company was rewarding the territory and not the person (Zoltners et al., 2000). The Good and Stone (1991) survey assigned highest importance to the territory assignment when developing sales quotas (Good and Stone, 1991).

While the survey conducted in this study considered having balanced territories in terms of potential to be highly relevant with a score of 4.20, having balanced territories in terms of workload only achieved 3.78 points. For the first time this study draws a distinction between balanced territories and workload in the context of the sales quotas development process. This implies that when defining sales quotas pharmaceutical organisations in Spain need to be careful to use only indexes associated to potential as considering an overall index of potential and workload might be misleading (Zoltners et al., 2004: 291). Looking at the sales representative workload is important for operational purposes but when it comes to defining potential future sales, the findings from this study suggests workload be removed from the equation. Moreover, the shift in
healthcare stakeholders’ power is making workload (in terms of number of accounts to visit) less relevant than before as it is not a matter of visiting a high number of physicians; the key is to focus on the few key stakeholders that can leverage prescriptions (Verdugo, 2008). Researchers agree that it is very difficult, in practice, to have balanced territories and maintain the balance in the long term; this is yet another reason as to why many pharmaceutical executives use sales quotas when defining goals for their sales forces (Mantrala et al., 1994). Mantrala et al. (1994) suggests that because it is difficult to have a perfect alignment of territories, management sets individual sales quotas for each territory instead of setting the same for all (Mantrala et al., 1994). Having specific sales quotas by territory allows adjusting the sales quota to the potential observed in the territory (Zoltners et al., 2004: 299).

In summary, having balanced territories is beneficial for the management of the sales organisation and facilitates the development of sales quotas to sales representatives. However, when developing sales quotas, the focus needs to be set on the sales potential from the territory instead of using a combination of workload and sales potential as frequently used and recommended in management books (Zoltners et al., 2001).

### 6.8 The development of sound national sales forecasts

Pharmaceutical organisations need to develop sound national sales forecasts; this is the starting point of any effective sales quotas development process. According to Zoltners et al. (2006), organisations face two risks when setting goals; first, the company’s national sales forecast is either too high or too low resulting in uniformly incorrect sales quotas at the sales territory level. The second risk organisations face is that the sales national goal is not properly allocated across the territories (Zoltners et al., 2006:314). Spanish pharmaceutical sales and sales operations executives believe setting reasonable national sales forecasts is the most important capability organisations need to acquire and develop. Local organisations scored this construct 5.0, which shows a unanimous local view on the importance of defining a challenging but achievable national sales goal. These organisations have a stronger grip over their destiny than multinationals. In
the latter, according to Turner et al. (2007), national sales forecasts are often driven by financial markets and analysts’ expectations and end up being a top down exercise enforced upon the sales force from the board room. Specifically, in the pharmaceutical industry, most sales targets are generated following a top-down approach (Turner et al., 2007). Most organisations tend to integrate top-down numbers, marketing forecast and sales force estimates to produce the final national forecast (Zoltners et al., 2006:334). Developing national sales forecasts that are challenging but achievable was found to be the most important organisational capability.

A perspective that has neither been considered nor explored in the literature is what happens when the organisation receives a national sales goal that is unrealistic. The literature frequently describes this situation, which raises the relevance of the subject (Zoltners et al., 2006:314). Once the organisation defines or receives its sales goals at the national level, there is a preference to share the fate (for the better or worse) among members of the sales force. Introducing adjustments in the sales quotas allocated to each sales representative, to make the goal more achievable, is not considered to be good practice; particularly among local organisations as the statistical analysis demonstrates. Multinational organisations gave the construct a score of 3.55, while local organisations assigned the construct a score of only 2.82.

Goal setting theory explains that goals need to be perceived to be achievable, otherwise most people think that it is not worth the effort and the level of motivation significantly drops. The theory is reinforced in a number of studies which show performance drops where people do not adopt goals (Locke, 2004; Hollenbeck and Klein, 1987). However, the results from this study show that Spanish pharmaceutical sales executives do not follow this principle; they do not adjust national sales forecasts when they perceived them to be unrealistic. Adjusting national sales forecast downwards does not resolve the issue as the difference of target will still be part of the country target. Global and regional headquarters need to be aware of the impact of setting unrealistic goals.

A key capability pharmaceutical organisations need to acquire and develop, according to this study, is the analytical skills required to develop challenging but realistic national
sales forecasts. The measure achieved a score of 4.34. This capability often resides on marketing and business intelligence departments. According to Zoltners et al. (2006), brand teams are one of the three major sources of information and analysis to develop national sales forecasts; the others are shareholders expectations and the input from the sales force. Brand teams need to use a myriad of forecasting methods and incorporate the input from both marketing and sales people. These techniques include econometrics, time-series analysis and Delphi forecasting among others. Organisations that are able to acquire good territory level market potential data along with strong analytical capabilities have many goal-setting options (Zoltners et al., 2006:332). The survey shows that sales force participation is not desired. However, defining formal feedback channels from the field, understanding sales causality and having strong analytical skills within marketing and strong selling skills at the sales management level is critical. From the three levels in which a sales quota development process can operate, determined in the literature review section and defined by Darmon (1997), it seems that while organisations have the desire to operate at a high level, organisations tend to operate somewhere between levels one and two, where management only considers readily available information such as past sales data and managerial judgments and perceptions. The lack of involvement of the sales force in the process, as discussed in previous sections, prevents organisations from moving towards level three.

In summary, developing national sales forecasts that are perceived to be challenging but achievable is important when developing sales quotas for pharmaceutical sales forces. In particular, in those cases when the forecast is well above expectations from sales managers, there is a strong preference to allocate those targets among sales representatives, regardless of the implications for sales force morale and motivation. Developing sound national sales forecasts requires strong analytical skills in marketing, understanding sales causality through developing feedback channels from the field and the use of appropriate data. Pharmaceutical organisations in Spain still operate at levels one and two of the sales quota development process.
6.9 The use of adequate information

Pharmaceutical organisations leverage historical information available in the marketplace when developing their sales forecasts. This information could be generated internally or acquired through external vendors. Moreover, the use of formulas to allocate sales quotas to the sales territories requires detailed information at the territory level. Sales quota setting procedures are efficient as long as management have adequate information (Darmon, 1997). Acquiring adequate information was rated highly by the respondents to the survey, which confirms the importance it has for the development of sales quotas. The pharmaceutical industry in Spain has been using territory level information for the last twenty years and this data availability determined some of the procedures frequently used in the commercial operations (IMS Health, 2008). Sales quota development is no exception; sales executives are used to incorporating third party data into the formulas used to drill down national sales forecasts as verified by the survey.

When information from third parties is unavailable, the intelligence that can be collected from the field through the sales force becomes critical (Zoltners et al., 2006:333). Sales representatives are closer to the field and in an enviable situation to collect information about factors affecting their client’s business, competitor’s actions, organisational changes in clients’ business. Pharmaceutical sales managers need to make good use of this information. Sales people need to process this information evaluating its accuracy, interpreting it, formatting it and sending it to their managers so they can integrate it at the national level (Darmon, 2007:125). Moreover, sales people are increasingly used to collecting and processing field intelligence. However, it seems that salespeople are deemed unreliable when transmitting unbiased information from the field (Chonko et al., 1991). LeBon and Merunka (2006) determined that under certain conditions salespeople become reliable sources of information. In particular, when they are motivated to become so as the activity fits their professional objectives of, for example, getting a promotion (LeBon and Merunka, 2006). They need to be recognized
for sharing this intelligence with the management (Wotruba and Mangone, 1979). This implies that using sales force feedback alone is only applicable to certain people. All these potential data collected from the field needs to be channelled throughout the organisation. For this reason, developing formal feedback channels from the field becomes critical. The respondents to the survey strongly supported the construct providing a score of 4.49. It is interesting to note that while sales executives are against sales force participation in the sales quotas development process, they are supportive of the use of feedback from the field to inform the process. As discussed earlier the measure of sales force participation achieved a score of 3.09, while the use of feedback from the field achieved a score of 4.49. This implies that while sales representatives are considered to be a source of information, their opinions do not count when developing targets.

In summary, the use of adequate information contributes to having a strong process for developing sales quotas. This information can be gathered from third parties but leveraging insights from the field, through the sales force, can enhance the process. This can be done through the development of formal feedback channels to facilitate gathering these insights. This feedback needs to be communicated from sales to marketing. However, this appears not to be an easy task, as there is often a divide between sales and marketing.

6.10 The divide between sales and marketing

There is an increasing body of literature exploring the divide between sales and marketing (Zoltners, 2005; Dawes and Massey, 2005; Dewsnop and Jobber, 2002; Kahn and Mentzer, 1998; Strahle et al., 1996). The cross functional relationship between sales and marketing is characterized by negative outcomes such as lack of cohesion, distrust, dissatisfaction and conflict (Dawes and Massey, 2005). Zoltners explains the divide between sales and marketing functions based on the different mind-sets they both have: (a) product versus customer; (b) analysis versus personal relationships; (c) sporadic projects versus continuous daily activity; (d) processes versus results and (e) short term
versus long term orientation (Zoltners, 2005). The specific relevance and impact that the sales and marketing divide has on the goal setting process has not been explored yet in the literature. According to the survey, sales and sales operations pharmaceutical executives in Spain place this capability among the top five capabilities, with a score of 4.51, which implies that despite the difficulties in getting sales and marketing to collaborate it is worth trying. Marketing teams require a strong understanding of market dynamics when developing the national sales forecasts that are allocated to each sales representative later in the process. As gathered in the survey, incorporating feedback from the field is deemed important to sales managers when developing targets. Marketing teams need to have access to this information as it is relevant for the development of the national sales forecast.

Local organisations feel stronger about the need to improve the way sales and marketing interact with each other and the benefits on the goal setting process with a score of 4.73 against 3.99 from multinational organisations. This implies that interactions between sales and marketing are significant for both types of organisations. The reasons behind these scores need to be investigated in further research work. It could be that the sales and marketing interactions process is more mature in multinational organisations than it is in local organisations and they have addressed it already globally. Presumably, local organisations have less structured processes, but this needs to be explored in future studies.

In summary, sales and marketing people need to interact and share information and insights from the field to be able to develop sound national sales forecasts, which will derive into sales quotas at the territory level.

6.11 The use of formulas to allocate sales quotas

After the national sales forecasts are defined, senior management often splits the national target using diverse allocation techniques (formulas) (Turner et al., 2007). Turner et al. suggest that the use of a formula or a market index together with software
tools facilitates reducing errors on the allocation of national sales forecasts to sales representatives (Turner et al., 2007). They suggest that this formula should be very simple and must align the interests of the individuals with the interests of the company. Formulas are critical to make the national sales forecast allocation to the territories objective, transparent and fair. The use of formulas becomes justified in those cases where there are a high number of customers and transactions and when history has a bigger impact on future sales; as in the pharmaceutical industry (Zoltners et al., 2006:344).

This study confirms, with a score achieved of 4.03, that having a simple formula to drill down the national sales forecast to the territories is very important. It needs to be simple enough that its outcomes can be communicated to the sales force and they can understand the rationale behind the results. The construct associated to sales representatives understanding of the formula achieved a score of 4.53, while the same construct associated to district managers achieved a score of 4.59. The formula has to include variables that are measurable. Pharmaceutical sales and sales operations executives in Spain ranked this capability as one of the three most important capabilities to acquire and develop to derive effective sales quotas with a score of 4.55.

Choosing the variables to be used in the formula for allocating sales quotas to the sales force requires careful thought (Turner et al., 2007). Having data to measure the variables that are representative of market potential is fundamental to the development of sales quotas (Zoltners et al., 2006:). Obtaining data on market potential is often difficult so defining the right trade off between variables to be used and information available becomes critical. Some variables frequently used are sales, increase on sales, market share and increase on market share (Zoltners et al., 2006:351; Turner et al., 2007; Good and Stone, 1991; Douthit, 1976). Creative approaches are often required to come up with surrogate measures of territory potential. Zoltners et al. (2006) proposes the following surrogate measures for the pharmaceutical industry: historical prescriptions written for a particular drug category in countries where pharmacy records are kept electronically (this is not the Spanish situation yet), physician size office, physician specialty, size of patient waiting area and patients demographics in countries.
where electronic records are not available (the case of Spain) (Zoltners et al., 2006: 341).

Pharmaceutical sales managers in Spain incorporate previous year’s sales (score of 4.08) and market share (score of 4.10) in the formula as well as other elements not specified in the survey (score of 4.16). They believe that every variable included in the formula needs to be objectively measured as the use of a formula to allocate targets is perceived to be the main way to provide objectivity to the sales quota development process (score of 4.03).

In summary, pharmaceutical sales managers in Spain have a strong preference for the use of formulas to allocate sales quotas to their sales force from the national sales forecasts. Formulas are perceived to be a means to ensure objectivity when developing sales targets. The variables included in the formula need to be measurable and the formula itself simple enough to be explained to sales people.

### 6.12 Sales management skills

The outcomes delivered by the formula need to be reviewed by sales managers to sense-check results. Sales managers need to be knowledgeable about sales management systems and need to understand sales people’s behaviours in general, and specifically, the behaviours and attitudes of each sales representative. They need to be able to assess how sales in a territory are likely to react to a change in the quantity or quality of effort assigned to it (Darmon, 2007: 145). This was confirmed to be very important with a score of 4.40, although it is more important in smaller organisations, with a score of 4.59, against 4.27 achieved in high revenue organisations. Sales managers in smaller organisations probably make a higher impact on the business as organisational structures tend to be simpler and teams smaller.

Sales managers have also to understand sales causality; this implies understanding the relation between effort and results under specific sales territorial conditions (sales
response curves). Sales response curves model, for example, the number of calls to be made on a physician to get a certain percentage of incremental sales of one product. Previous research on sales causality shows that there is some uncertainty, among sales managers, as to what generates sales and how much is being generated by whom at the territorial level (Mantrala et al., 1997). Management operates in an uncertain environment and this uncertainty hampers the manager’s ability to control sales force and sales planning activities (Mantrala et al., 1997). The difficulties to understand sales causality is shown as one of the key reasons for using individual sales quota-based bonus plans (Mantrala et al., 1994). The respondents to the survey believe understanding sales causality is critical to the development of sales quotas providing a score of 4.15. However, it seems unreasonable that sales representatives participation is not desired, which implies that the sales management is more inclined to have sales causality “objectively” measured.

In summary, although understanding sales causality is important for the development of sales quotas, it is very difficult to assess due to the uncertainty as to what generates sales at the territory level. For that reason, having sales managers with strong sales skills becomes important to sense-check the results coming out of the formula used to allocate sales targets. Darmon suggests that sales managers’ competencies are critical for the correct management of the sales force (Darmon, 2007:139). The study conducted as part of this thesis, clarifies that sales managers’ competencies are critical for the process of developing sales quotas.

### 6.13 Communicating the allocation of sales quotas

The allocation of sales quotas derived from the formula needs to be communicated to the different stakeholders. District managers and sales representatives need to fully understand how the formula operates and why they are getting their share of the targets. Sales quota bonus plans are frequently a source of dissatisfaction for sales people. The main reason for this is the poor vertical communication devoted to explain how sales quotas are derived. This tends to generate suspicion on the sales force that they might be
treated unfairly (Darmon, 1997). Vertical communication is critical in order to ensure acceptance of goals at the lower levels of the organisation (Tosi et al., 1970). Moreover, sales representatives need to share their insights with the rest of their peers on pre-defined meetings across the year. When sales quotas are defined, sales force commitment to these sales quotas is desired. Horizontal communication to peers in the organisation was found to facilitate commitment to goals. After the sales representative goals are public, abandoning them in midstream seems to be unattractive because it appears inconsistent (Hollenbeck and Klein, 1987). Having both vertical and horizontal communication was rated highly by the respondents to the survey with scores of 4.16 and 4.28 respectively. Sales managers as drivers from the sales quotas development process are responsible to ensure that communication flows in both directions. They also have to have similar management style and values to ensure sales teams are treated in a similar way. They need to be competent to be able to make a fair assessment on the quotas being set for each sales representative. They need to have firm and market specific knowledge as well as elementary and aggregate-level knowledge about their sales people. Darmon (2007) believes sales managers need to be competent managers having a good understanding of the sales management function and the limits that have been placed on their authority and initiative by upper management (Darmon, 2007: 139). This belief was confirmed by this study where having a homogeneous management style embedded in the culture of the organisation achieved a score of 4.30 and having strong sales management skills was rated at 4.40. However, having a homogeneous management style across the sales lines does not mean to have the same sales quota development process across sales teams. This construct was found to be less important than previously anticipated by this researcher, given the findings from the case study. The construct stem from the case study where there were two sales lines behaving in a completely different way; one was marketing-oriented and the other one sales-oriented and this was perceived as not optimal when defining goals.

It is curious that while job equity is perceived as very important, homogeneity of process is not so relevant. Shaw (2004), found a similar situation in her research in Microsoft. She found a lack of consistency in the goal setting process in different areas of the organisation: while some groups’ goals were assigned from the top with little or
no discussion, other areas had a bottom-up goal setting process with a great deal of discussion (Shaw, 2004). This study found that respondents do not make the connection between job equity and homogeneity of process and it could also be that the link does not exist at all. This needs to be further investigated in future studies.

In summary, properly communicating how sales quotas are developed is an essential part of the process. Horizontal communication is necessary to allow sales and marketing interactions to happen. Having a homogeneous management style, following the same principles and values, among the different sales lines is found to be important for the process of setting sales quotas.

### 6.14 Linking back to goal setting theory

As discussed in Chapter 2 Section 2.3, goal setting theory has been subject to continuous development and refinement since its emergence in 1935. Specific areas of development include the impact of self-efficacy on goal commitment and performance, the role of feedback, the impact of task complexity on strategies to attain goals, the effects of knowledge on results, goal conflict, financial incentives, the effect of participation on setting goals, goal acceptance and commitment, individual differences, situational constraints, evaluative contexts and attributional processes. However, there are many unexplored areas such as the methods most appropriate under different conditions, activities necessary to set goals, the scale and number of goals to set, goal integration and changes to goal (Locke, 2004). In particular, there is little research done on understanding organisational capabilities required for an effective sales quotas development process. This study contributes to the development of goal setting theory by introducing a set of organisational capabilities that are critical for the efficacy of this process.

The findings discussed earlier in this chapter led to further refinement of the SQD Model. The initial adjustments, found in chapter 5 Section 4, consisted of ensuring that all capabilities are mutually exclusive and collectively exhaustive. However, that
iteration had insufficient data to assess the relevance of each capability. Hence, the survey data showed that of the 27 organisational capabilities included in the instrument, only 16 were considered important by sales and sales operations executives. The SQD Model grouped these organisational capabilities into categories developed through the application of Principal Components Analysis. These categories include capabilities that are associated to similar themes. The categories that emerged from the analysis are: (a) having a sales quotas development process owner, (b) calculating sales quotas, (c) business intelligence and (d) infrastructure. The SQD Model is illustrated in table 6.1.

Table 6-1: Sales Quotas Development Model

<table>
<thead>
<tr>
<th>Organisational capabilities for an effective sales quotas development process</th>
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<tr>
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<td>7) Ensure there is a homogeneous management style embedded in the culture of the organization</td>
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<td>14) Promote excellent sales management skills in sales top executives</td>
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<td>15) Facilitate vertical communication</td>
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<td>16) Acquire and use adequate information</td>
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Source: originated by the author

The sales quotas development process is critical to ensure effective quotas - that would allow implementing the company's strategy while keeping the sales force motivated and energised - are developed. A sales quotas development process owner is required to ensure the process is successful. This process owner, accountable and responsible for the process, is instrumental in managing many of the areas of attention of the goal
setting theory. He/She has to manage goal conflict, feedback requirements, goal commitment, self-efficacy, task complexity, performance and productivity improvement, financial incentives, participation on setting goals, goal acceptance and commitment and situational constraints. Not being explicit about who owns this process leads to shared responsibilities and nobody focused on improving the process. While this role is well documented and understood in the process literature, goal setting theory overlooks this role completely. The findings from this study suggest that goal setting theory be extended to include ownership of the sales quotas development process.

According to goal setting theory, goals need to be challenging but achievable to keep motivation levels high. Otherwise, as sales people realize that achieving the goal is highly unprobable, they give up the task. Sales quotas originate from a national sales forecast that needs to be challenging but achievable. If this is not the case, the study demonstrated that the whole national sales forecast is simply divided among each territory. Where the sales national forecast is unrealistic, sales quotas at the sales representative level become also unrealistic. The development of adequate national sales forecasts requires having a good understanding of market dynamics and future changes. This can only be achieved through being capable of understanding and measuring the market through using appropriate metrics combined in a transparent way. Strong analytical and sales management skills were found to be critical in ensuring that market dynamics and sales causality are captured in the sales quota development process.

A significant problem, identified in the literature, is the treatment of territorial differences when developing sales quotas. While previous research has set the focus on creating mathematical formulas to predict future sales, this study found that having balanced sales territories, developing feedback channels and facilitating horizontal and vertical communication can further improve the effectiveness of the process on this respect. Treating territorial differences in an adequate manner ensures that the sales quotas assigned to sales representatives are perceived as fair. This study highlighted the importance of ensuring that the sales quotas delivered to each sales representative are perceived to be as challenging as the sales quotas allocated to the rest of the sales force.
Comparisons made across functions and outside the company were found to be less relevant when setting sales quotas.

An effective sales quotas development process requires an owner that facilitates the process of calculating sales quotas with the right infrastructure in place. Both hard data and business intelligence needs to be used by a team of competent people. These people need to have strong analytical and sales management skills to ensure gathering and interpretation of appropriate market intelligence.

Goal setting theory has not focused on organisational capabilities to improve the process of setting sales quotas. Many organisational capabilities included in the SQD Model were previously ignored or were not analysed in the sales management context. In a similar vein, some organisational capabilities that were previously considered to be relevant for the development of sales quotas were contradicted through this study. These were not included in the model. The set of organisational capabilities identified was missing from the goal setting theory and their inclusion contributes to advancing this body of knowledge.

One explanation for organisational capabilities being underplayed is the way in which the sales quota setting process is conceived in the literature. As discussed in Chapter 2 Section 2.3.5, this process is determined as sequential standard activities to be performed. However, this study has found that performing these activities is insufficient to satisfy stakeholders’ expectations. Although activities might be performed as prescribed in manuals and operating procedures, stakeholders’ expectations could be overlooked and not met by the process. Moreover, these unmet expectations were found to be associated to critical organisational capabilities that were missing. Therefore, understanding the sales quotas development process as activities that satisfy stakeholders’ expectations minimizes the risks of conducting an ineffective process.

The literature review showed that there is a general lack of understanding on how to develop sales quotas for sales representatives (Turner et al., 2007; Schwepker Jr. and Good, 2004). Moreover, contemporary sales managers believe that improving the quota
development process is critically important (Marchetti and Brewer, 2000). From a methods point of view, there is a lack of survey research on managers’ attitudes regarding quotas and a significant void in the general understanding and research about sales quotas (Good and Stone, 1991). The SQD Model develops goal setting theory regarding what is required to implement an effective sales quotas process for sales forces. For the first time, a set of 16 organisational capabilities that facilitate this process is developed. This new way of looking at the sales quota development process, in terms of activities satisfying stakeholders’ expectations, contributes to two bodies of literature: goal setting theory and processes.

6.15 The Sales Quotas Process Maturity Framework

The Sales Quotas Process (SQP) Maturity Framework is derived from the SQD Model and provides a tool to assess organisational capability maturity that facilitates the process of developing sales quotas for pharmaceutical sales representatives. Through the framework, sales executives can assess the level of maturity of different organisational capabilities and decide upon acquiring and/or developing those capabilities that are less developed. Once the assessment is performed, executives are able to conduct, for example, cost-benefit analyses to decide which organisational capabilities are worthy of investment. Moreover, they need to determine what organisational routines will allow the organisation to move from one level of maturity to the next.

This study shows that different organisational capabilities are important in diverse organisational contexts. For example, high-revenue pharmaceutical organisations give significantly more relevance than smaller organisations on allowing flexibility to change sales quotas as unforeseen market events arise. In a similar vein, smaller pharmaceutical organisations feel stronger than high-revenue organisations about: (a) trying to reach consensus among district managers on the sales quotas assigned; (b) having sales directors with strong sales management skills; (c) sharing localised insights among sales people and marketing people; (d) understanding sales causality at the
territorial level; (e) providing transparency and clarity from the sales directors to their sales representatives on the rationale as to why they are getting their sales quotas; and (f) having independent territories. This implies that for high-revenue pharmaceutical firms sales causality and vertical communication are not part of the list of important capabilities while being flexible with changing quotas throughout the year as unforeseen market events emerge is part of the most important capabilities. For medium and small pharmaceutical organisations reaching consensus needs to be included as an important organisational capability for the development of effective goals.

Multinational organisations place more relevance than local organisations on allowing flexibility when the national sales forecast is unachievable to adjust and provide a more realistic sales quota to sales representatives so they keep motivated to achieving their goals. Local pharmaceutical organisations feel stronger than multinational organisations about: (a) allowing sales representatives to participate from the sales quotas development process; (b) promoting a culture of solidarity and cooperation among sales representatives; (c) getting marketing and sales to meet up at least twice a year on the context of the goal setting process; (d) using market share as a proxy for market potential; and (e) ensuring that national sales forecasts are challenging but achievable. This implies that for local pharmaceutical organisations having a culture of solidarity and collaboration needs to be considered as an important organisational capability for the development of effective goals.

Specialist-oriented pharmaceutical organisations feel stronger than primary care-oriented firms on the relevance of having sales quotas setting process owners and having balanced territories in terms of future market sales. There were no significant differences found between generic organisations and branded organisations.

The framework considers different levels of maturity capabilities can reach starting with “repeatable” and ending with “optimised” as explained in Chapter 2 Section 2.3.4. For each capability there is a description of generic elements that need to be in place to allow organisational capabilities to move to the next level of maturity. For example, the initial phase is characterized for the ad-hoc nature of the process and the existing chaos.
in the execution while at the optimizing level processes are documented, predictable and there is an ongoing effort for improvement through innovation. A detailed description of each level of maturity for each capability is provided in Section 5.3. Table 6.2 illustrates the framework and the complete SQP Maturity Framework is presented in Appendix M.

Those organisations that are able to improve the presence and state of development of these capabilities are more likely to have an effective sales quotas process that derives in setting effective sales quotas. Sales managers use sales quotas to motivate and control their sales force and they set incentives, in the form of financial rewards, based on the attainment of those quotas. A poorly developed sales quotas development process leads to increased staff turnover and low morale and thus lower sales force performance.

Table 6-2: Sales Quotas Development Maturity Framework

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<tr>
<th>Organisational capabilities</th>
<th>Initial</th>
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<th>Managed</th>
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Source: originated by the author

Previous studies show that organisations conduct their sales quotas development processes at three different levels. At level one, management considers readily available
information and quotas are mostly based on sales from previous years. At level two, sales representatives’ responses are incorporated into the process. At level three, market feedback is considered as well as people preferences. Organisations typically operate at levels one and two. Organisations willing to operate at levels two and three require a higher level of maturity than what is required if operating at level one. This is because the complexity of tasks involved at those levels is significantly higher and processes need to be well-defined, documented, communicated and embedded among the different stakeholders. While having a highly mature process is strongly desired for organisations operating at level one and two, it is critical for organisations willing to operate at level three.

This framework contributes to the practice of sales management by providing practitioners with a tool to work on improving their goal setting process. Practitioners can focus on critical organisational capabilities that will allow them to develop a stronger sales quotas development process. The framework may be applicable across geographies within the pharmaceutical sector as this industry operates under a similar business and regulatory model across the globe. The extent to which this framework is applicable to other sectors is untested and remains to be seen. The framework is more likely to be applicable in sectors where: (a) the sales of products are largely dependant on the promotional effort from the sales force; (b) there is a repetitive buying environment involving short purchase and sales calling cycles, typically between three and five in the year; (c) there is promotion of a limited number of products with a fairly complex message to deliver; (d) sales representatives are geographically specialised, which means that each representative could sell all of the products to clients in a specific geographical area; and (e) there are a large number of customers and each one of them could use one or more of the products offered. The applicability of the SQP Framework to different geographies and sectors needs to be explored in further research studies.
6.16 Chapter summary

This chapter discussed the organisational capabilities found to be critical for the effective development of sales quotas for pharmaceutical sales forces. For each capability there is a review of the literature and areas of conceptual difference between the findings from this study and the literature are discussed. The SQD Model and the SQP Maturity Framework are further refined and explained. The contribution of the capabilities to goal setting theory and the ways in which the practices of quota setting can be enhanced through an understanding of the maturity of the process is established in this chapter.

The next chapter concludes the thesis recapping the work conducted and the essential contributions to theory and the implications for the practice of management. Limitations and opportunities for future research are highlighted.
7 Concluding remarks

7.1 Chapter introduction

This chapter concludes the research work performed summarizing the most important outcomes and discussing the contribution to the goal setting theory and processes fields of research as well as the contribution to practice. It also highlights the limitations of the research and those areas that, while not being included in the scope of this thesis, require further research.

There are seven sections in this chapter. Following this introduction, there is a summary of the research. Next, the most critical findings of the research are presented. In the forth section, the contribution of this research to the body of knowledge is discussed. Next, the contribution to practice is discussed. In the sixth section the limitations to the research and the opportunities for further research are presented. The final section is an epilogue to this research.

7.2 Summary of the research

The goal setting theory continues to emerge, with wide areas still significantly underdeveloped. One of those underresearched areas is the process of developing sales quotas for sales representatives and, specifically, the organisational capabilities that would allow companies to improve the process by which they allocate sales targets to their sales force. This research has focused on three main areas. First, understanding what is the sales quotas development process for a pharmaceutical organisation, in terms of activities satisfying stakeholders’ expectations. Second, this research has focused on the determination of a set of critical organisational capabilities – the “Sales Quotas Development Model”- for the development of effective sales quotas. Third, this research developed a diagnostic tool of organisational capability maturity - the “Sales Quotas Process Maturity Framework”.
A literature review was conducted following the principles of the systematic approach to review the different bodies of literature involved and understand and further refine the gap in knowledge. The areas of interest were the goal setting theory, processes and sales management. At a different level, the pharmaceutical sector was also considered as a focal area. The intersection of all of these areas is the sales quotas development process for pharmaceutical sales forces, which was the unit of analysis.

In the past, several researchers focused on the mechanics of calculating sales quotas, on the motivational aspects of setting goals, on how to develop processes or even on how to assess organisational capabilities but almost no one has focused on the process of developing sales quotas and what is required to make this process effective. Moreover, practitioners are vocal on the lack of understanding as to how to develop sales quotas. Therefore, a clear gap was identified both from a theoretical and practical perspective: the need to understand and assess organisational capabilities that can improve the process for developing sales quotas for pharmaceutical sales representatives.

While reviewing the literature, it became clear that most studies related to the subject applied quantitative techniques on pre-defined capabilities and few had an exploratory phase where capabilities could be uncovered. This might have hindered the identification and understanding of many critical elements associated with the implementation of a sales quotas development process. For that reason, this research started with a case study of a typical mid-size pharmaceutical organisation in Spain. The sales quotas development process was defined in terms of activities satisfying stakeholders’ expectations. Barriers to the process were uncovered through the development of second order constructs derived from the comments of stakeholders’ to the process (first order constructs). Some of the barriers identified were not captured in detail in the initial literature review so there was a need to reexamine the literature to better understand prior knowledge about these barriers. Organisational capabilities were derived from the barriers and the literature review conducted. These organisational capabilities were, at this stage, presumably important and needed to overcome the barriers identified.
The initial SQD Model was developed including a set of thirty-five organisational capabilities that are important for the process of developing sales quotas. The initial SQP Maturity Framework, that facilitates the effective development of sales quotas, was created based on the initial SQD Model and a framework developed by the Software Engineering Institute of Carnegie Mellon University in 1986. It allows for the assessment of the presence and maturity of capabilities in any organisation and includes five standard levels of maturity: 1) Initial, 2) Repeatability, 3) Defined, 4) Managed and 5) Optimizing. The different levels described represent different levels to be reached in the journey to improving capabilities. The SQD Model and the SQP Maturity Framework were refined to ensure that capabilities were mutually exclusive and collectively exhaustive. The refinement process included a focus group and interactions with ten specialized consultants on sales quotas development for pharmaceutical sales forces and input from two academics. From the original thirty-five organisational capabilities identified, seven were eliminated and two were merged into a new one, ending up having only twenty-seven valid capabilities. Not all these twenty-seven capabilities are at the same level of importance. While some of them are relevant, some others are critically important.

After refining the list of organisational capabilities, a survey was conducted to understand which capabilities were more critical than others on different organisational contexts. An instrument was developed, considering measures of capabilities from the refined twenty-seven capabilities (constructs) to determine those key organisational capabilities to acquire or develop. A pilot test was carried out with 20 sales executives and the instrument was adjusted when deemed necessary through incorporating their feedback. The questionnaire was sent to 230 sales and sales operations pharmaceutical executives from 100 organisations based in Spain. 80 valid questionnaires from 49 different organisations were received back. From the twenty-seven refined capabilities only sixteen were considered to be important by the respondents.

Principal Components Analysis was performed on the most important measures of capability to develop dimensions of capabilities that would allow synthesising and structuring capabilities to facilitate understanding. Four dimensions were created:
“Business Intelligence”, “Infrastructure”, “Calculating Sales Quotas” and having a “Sales Quotas Development Process Owner”. The reliability of the components was tested using the Cronbach’s alpha test.

With the top sixteen organisational capabilities grouped into the dimensions developed, the initial SQD Model and the initial SQP Maturity Framework were further adjusted focusing only on critical capabilities. The SQD Model is a set of sixteen organisational capabilities that are critical for the development of sales quotas for pharmaceutical sales forces organised in four dimensions. The SQP Maturity Framework considers the different level of maturity these capabilities can reach. It allows organisations to assess their current level of maturity of the sales quotas development process and decide on what capabilities to acquire or further develop. The relevance of capabilities varies by organisational contexts and needs to be considered when managers decide what capabilities are worthy of investment.

### 7.3 Research findings

The research produced interesting results from the literature review, the case study and the survey. This section is organised in these three areas.

At the literature research stage it became clear that the goal setting process for sales representatives is an under researched area that requires more attention. There is strong interest both in the academic community and among practitioners on understanding what is required to implement an effective sales quotas development process. While there is a group of researchers focusing on the goal setting theory and others focusing on sales management and processes, there is little interaction and connection among them and they are clearly engaged in different conversations. This thesis attempts to build a bridge between these three communities and hopes to bring together some of these researchers and engage on this new conversation; the sales quotas development process for sales forces.
The case study performed at Alpha Pharmaceuticals provided a set of barriers to the sales quotas development process which are not captured by the extant literature. Some of these barriers were not associated with the sales quotas development process at all. Exemplars of these barriers include the interaction between sales and marketing, the level of centralisation, flexibility to change sales quotas, communication flows, lack of a process owner, the existence of fiefdoms, different managerial styles, existence of shared sales territories, lack of homogeneity in the process and having unbalanced territories. Alpha Pharmaceuticals applied the sales quotas development process as represented in management books with a set of generic sequential activities. The research found that although Alpha was following what could be found in management books, some stakeholders’ expectations were not being satisfied by the process implying that the process was ineffective. The following expectations were not met by the standard process used: (a) the tool used for drilling down the sales quotas to the field is expected to be dynamic and sensitive; (b) the sales quotas development process is expected to allow participation from the different stakeholders; (c) the sales quotas development process is expected to be unchangeable within the year; (d) the sales quotas development process is expected to consider the competition; (e) the sales quotas development process is expected to respect the initial input from stakeholders; (f) the sales quotas development process is expected to be communication driven; (g) the sales quotas development process is expected to allow everybody to achieve their goals; (h) the sales quotas development process is expected to consider qualitative goals as well as quantitative ones. Evidently, not all of these expectations need to be met by the process. People have expectations and some of them are reasonable and some are not. On this particular case and after understanding the relevance of certain organisational capabilities it became clear that apart from expectations (c), (g) and (h), the others are all very important.

The management of the company was not conscious about this situation and was actually highly satisfied with the process as it was. This came across in a meeting with the general manager and the commercial director. After the case study was analysed, the report was discussed with both of them and agreed on improvements to be made on capabilities that were missing. They made explicit that because they were following the
standard steps, prescribed in management books, they assumed the process was effective. This implies that applying the sales quotas development process as prescribed in the books is not enough to develop an effective sales quotas process. The process needs to be developed in terms of activities satisfying stakeholders’ expectations and based on a set of critical organisational capabilities.

Another interesting observation from the case study is that many barriers identified have to do with people and the way they behave and relate to each other. Aspects such as communication, level of stakeholders’ involvement in the process, available skills and accountability proved to be essential for the implementation of the sales quotas development process. The process literature has examined and reviewed many of these issues as critical in diverse contexts. However, within the goal setting theory and sales management fields, most of the research conducted so far is highly quantitative, looking at how to calculate sales quotas rather than focusing on how to implement the process once the national sales forecasts is defined. Most researchers took a strong positivist perspective on the subject and this might have prevented them from uncovering softer elements that are fundamental for the implementation of the sales quotas development process. This researcher takes an interdisciplinary approach to bridge these three bodies of knowledge.

The survey carried out among sales and sales operations executives allowed to determine a set of organisational capabilities that are critical for the development of sales quotas, as described in Table 6-1. Those are integrated in the SQD Model and in the SQP Maturity Framework that allows assessing the current state of an organisation and define what capabilities need to be acquired and/or developed. The SQP Maturity Framework includes four categories under which organisational capabilities are organised upon, as described in Table 6-2. Each of these capabilities is discussed at the light of the existing theory in Chapter 6. Significant differences were found by size and nature of organisations while only minor differences were identified by orientation or type. There were not significant differences found between generic organisations and branded organisations.
7.4 Contribution to knowledge

This thesis has covered the existing gap in knowledge regarding what facilitates the implementation of an effective sales quotas development process for pharmaceutical sales representatives developing a model of organisational capabilities. This study contributes to two bodies of knowledge: goal setting theory and processes.

7.4.1 Contribution to the goal setting theory

Goal setting theory has made significant progress in the last four decades advancing knowledge in many relevant aspects. However, there is little research on understanding the sales quotas development process and what organisational capabilities are required to run this process effectively.

This study contributes to the development of goal setting theory by introducing a set of sixteen organisational capabilities that are critical for the effectiveness of the sales quotas development process. This study identified capabilities for the first time ever in the context of the goal setting process. Specifically, these are: (a) the need for a goal setting process owner, (b) sales and marketing interactions, (c) sales management and analytical skills present in the organisation, (d) formal feedback channels from the field implemented, (e) the introduction of flexibility as unforeseen market events emerge, (f) having balanced territories in terms of sales potential, (g) the use of a formula that is easy to understand and includes variables that are measurable and (h) sharing the overall national sales forecast across the board, even when it seems to be unachievable.

The findings of this study departed from current theoretical understanding. The extant literature highlights certain capabilities as being important for the goal setting process. However, the empirical evidence suggests that these are less important, in the context of the pharmaceutical sector, than put forward by theoreticians whose studies have lacked data. These capabilities are (a) sales force participation in the goal setting process, (b)
the provision of occupational and corporate equity and (c) the assignment to high performing sales representatives of a higher share of sales.

Through adopting these capabilities, organisations are able to set better goals for their sales forces. They can do this by putting in place a sales quotas development process that takes into account the Sales Quotas Development Model. Goal setting theory can lead these organisations to set more effective goals with the capabilities introduced in this study.

7.4.2 Contribution to processes: a new way to look at the sales quotas development process

This study demonstrates that the sales quotas development process as it is prescribed in management books is ineffective. While a company could be following each and every activity prescribed, it might not be satisfying some key stakeholders’ expectations that are critical for an effective sales quotas development process, as discussed in Chapter 4. This research provides a novel way to look at the sales quota development process in terms of activities satisfying stakeholders’ expectations. The sales quota development process was examined for a mid-sized pharmaceutical company and barriers to the process were determined following a realist perspective. The use of this perspective allowed gathering different points of view from employees involved in the process on similar subjects. This permitted uncovering barriers and organisational capabilities associated to them that, otherwise, could not have been identified.

7.5 Contribution to practice

This research closes the gap in terms of the continuous neglect from well-reputed organisations and practitioners of basic goal setting principles. As exposed in the literature review section, there is a lack of understanding as to what is required to develop sound sales quotas to the sales force.
The SQP Maturity Framework was developed in response to this need and is a practical tool that allows sales and sales operation managers to assess their current state of development regarding organisational capabilities that are critical for an effective sales quotas development process. The Framework can be adjusted to the specific context being studied through adding organisational capabilities that might not be critical in general but interesting for the manager on his/her particular environment. It allows identifying those organisational capabilities that need to be acquired or further developed to close the gap between current and desired states.

### 7.6 Implications for research and practice

Researchers have overlooked developing goal setting theory from the perspective of organisational capabilities and sales management. In particular, little attention has been paid to understanding how to improve the sales quotas development process for sales forces. Setting sales quotas has proved to be problematic for organisations and in particular for sales managers. According to current researchers, the challenges of setting sales quotas includes the granularity of the data required, the complexity of the IT systems utilized, the difficulties on estimating future sales at the territory level and implementation issues contribute to. Practitioners face significant challenges when implementing goal setting processes in their organisation. These implementation issues include lack of leadership and ownership of the process, lack of communication, inadequate information being used, lack of transparency on the way in which the national sales forecast is allocated to the territories, lack of analytical skills among others discussed in this thesis.

The SQD Model provides a theoretical structure to discuss organisational capabilities that are required to enhance the sales quotas development process. For the first time, goal setting theory has a set of capabilities that are necessary for the efficacy of the theory. Moreover, there is a broader discussion that needs to be addressed by the goal setting theory, processes and sales management communities. This is around organisational capabilities that are required to enhance the goal setting process in
The SQD Model attempts to be the first building block that kicks off this discussion.

The sales quotas development process, as described in the literature, is ineffective in practice. Following the sequential activities prescribed in the literature is simply inadequate, not least because expectations from stakeholders differ from one organisation to the next and need to be recognised and addressed for the process to be effective. Through the novel way of looking at processes introduced in this thesis, in terms of activities that satisfy stakeholders’ expectations, sales managers are able to define and/or assess their sales quotas development process. They can ensure that those expectations associated to organisational capabilities that are critical are met by the activities in the process.

Sales managers can assess the presence and state of development of organisational capabilities that are important for the development of an effective sales quotas development process. For practitioners, the SQP Maturity Framework can be applied by sales managers in their organisation to determine in which organisational capabilities are worth investing to improve the sales quotas development process. Once the assessment is finalized, organisational routines that allow acquiring and further developing these capabilities need to be developed.

This research allows sales and sales operations executives to be much better equipped to implement a sound sales quota development process and understand what needs to be done to conduct an effective sales quotas development process for pharmaceutical sales representatives. The new way of looking at sales quotas development processes introduced in this study and the SQD Model will help academics and practitioners understand why sales quotas development processes’ outcomes are unsatisfactory despite sales managers applying the extant research in the area. Getting a better understanding of the sales quotas development process together with the SQD Model and the SQP Maturity Framework will help to understand what the current state is and how to evolve towards an enhanced state.
7.7 Limitations to the research and opportunities to further research

The main limitation of this study is that it is based on a single case. Developing more case studies was positively evaluated but precluded because of time and resource availability. Carrying out the survey to understand relevance of capabilities was prioritised. Developing more cases and the survey was deemed unfeasible. Further research can focus on conducting more case studies to identify more organisational capabilities that facilitate an effective sales quota development process.

Another limitation of the research is that, while the case study focused on many stakeholders to the sales quotas development process, the organisational capabilities uncovered and assessed are those capabilities that are important for sales and sales operations executives, who actually define and control the process. Sales representatives could rate capabilities in a complete different way as highlighted in the second order constructs derived from the case study conducted. Further research could replicate the approach taken on this research but focusing on different stakeholders of the process.

The SQP Maturity Framework allows the assessment of the current state of development of capabilities of an organisation. However, it does not provide insights as to how to move the organisation forward through acquiring and developing capabilities. Future research could focus on identifying organisational routines that can facilitate moving an organisation towards the optimized level of maturity.

The interpretation of stakeholder’s expectations and barriers to the process, through the use of first and second order constructs in the case study, is subjective in nature. Interpreting data depends on the researcher’s previous experiences, stock of knowledge and “common sense” applied and there are probably as many interpretations of a situation as researchers working on it. For that reason, these constructs were disclosed to build a trail of evidence any researcher could follow to understand the decisions made by this researcher.
7.8 Dissemination of the research

Disseminating the findings and conclusions of this study is of paramount importance to ensure the contribution achieves a sufficient level of awareness among academics and practitioners. The research has not yet been disseminated to its full potential. An article on barriers to the goal setting process for pharmaceutical sales forces was accepted and presented at the American Academy of Management conference in August 2007 (Morelli and Braganza, 2007). The paper received favourable feedback from the anonymous reviewers and the audience. The research was discussed in a colloquium at Cranfield School of Management in 2007 and feedback was gathered and incorporated into the thesis. The SQP Maturity Framework has been successfully piloted in one pharmaceutical organisation and is being piloted in another.

A dissemination plan has been developed for three articles to be ready by the end of Q4 2009, Q1 2010 and Q2 2010 respectively. Article 1 is targeted at the Academy of Management Review and explores the literature on goal setting theory, developing a conceptual model of organisational capabilities. Article 2 is targeted at the Academy of Management Journal and its focus is on the quantitative study conducted as part of this thesis. Article 3 focuses on the case study conducted at Alpha Pharmaceuticals and uncovers barriers to the goal setting process. This paper will be targeted to the British Journal of Management.

There is a possibility of converting the thesis into a book and a search is currently underway to find a suitable publishing house. The intention is to start the book project by Summer 2010.

7.9 Closing remarks

Implementing an effective sales quotas development process for pharmaceutical sales forces is not an easy endeavour. In the last forty years, researchers and practitioners alike have heavily focused their efforts on understanding how to calculate accurate
sales quotas and, therefore, many mathematical models were developed. However, little attention has been paid to the implementation of the process that facilitates the development of these sales quotas. There are many important aspects that were overlooked in the past. Most of them have to do with people and the way in which they behave and relate to each other. These softer elements were not considered to be relevant in the past although critical for the effective development of sales quotas. Executives tend to follow the guidelines prescribed on management books or even what their peers in other organisations are doing; the so called “best practice”. In underresearched areas, like goal setting theory, following these principles leads organisations down the wrong paths.

Organisations are social systems, filled with people, which have expectations that ideally should be met. Therefore, and effective sales quotas development process is one that meets as many of those expectations stakeholders have as possible; at least those that are deemed critical by sales and sales operations executives. For this reason, conducting a process that focuses on developing activities that satisfy stakeholders’ expectations is better than just following a set of generic sequential activities ignoring what stakeholders believe is good for the business. By understanding which organisational capabilities are critical for implementing this process, there is a higher chance of implementing and effective sales quotas development process. This research assists pharmaceutical executives to assess if their organisations are ready to implement an effective sales quotas development process for their sales forces and if not, understand what organisational capabilities are required for them to succeed.
Appendices

A) Terms initially developed to build the search strings for the literature review

Agency theory, characteristics, compensation, Data Envelopment Analysis, differences, district managers, effectiveness, endogamy, equity, evaluation, fairness, goal setting, goal setting theory, goals, incentives, indicators, inertia, input, institutionalization, management, marketing, measurement, measures, methods, motivation, munificence, non-financial, objective, output, performance, pharmaceuticals, plans, process, quotas, regional managers, response, sales, sales management, sales force, subjective, territorial, territory, variables, weights, representatives, Reps, delegates, setting, efficiency, relative, salesperson, coverage, targets, potential, workload, profiling, segmentation, market share, share of voice, carry over, physician, prescriber, doctors, hospitals, ability, plans, planning, supervisor, competition, reporting, activity, commission, bonus, earnings, salesmanship, behavior, behaviour, goal achievement, development, sales calls, frequency, reach, message quality, attainment, attain, selling effort, quota-setting, self-efficacy, quota achievement, quota-reward system, system, compensation systems, scorecard, territory richness, strategy, size, structure, resource, allocation, control, aggregate measures, behavioral decision theory, and rewards.
## B) Results from the literature search

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| 30 | 1791 |   | 31 | 9618 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 32 | 2888 |   | 33 | 100000 | X X X X X | 34 | 100000 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 35 | 12983 | X X X X X | 36 | 5467 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 37 | 40479 |   | 38 | 43481 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
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C) The management of the researcher-consultant relationship

Before starting each interview the following text was read to the participants:

"Thanks for allowing this interview. It will take between one hour and a half to two hours. First, I would like to reassure you that all the information provided will be confidential and I will not use any names or elements that might lead a third party to identify your organisation within this research study. Please also note that in this occasion I am here as a researcher and not as a consultant. This means that I will need to be careful not to influence your comments in any possible way so my tone and line of enquiry will be different to what you are used to. It might be the case that some things that are normally considered obvious will not be so for me. Two weeks after the interview I will send you a summary of the interview including my interpretation of your comments for you to agree upon or make any additional comments or amendments you might think necessary to reflect your views. Would you mind if I digitally record our interview? As I said before, the information will be treated under the data protection law and you could at any time withdraw from the study. Many thanks for your collaboration."
D) Expectations: first order constructs

Professional, accurate, reliable and punctual

First order constructs

“...of course I would expect professionalism, that things are being conducted appropriately. It is critical...truthfulness, professionalism and accuracy. However, accuracy depends on people's capabilities. Obviously, we all know that accuracy and reliability does not mean the same for all people.” (Sales operations manager)

“I would expect to have a good planning process that would allow, at the end, the goal setting to be accurate and with minimum margins of error on both sides. Not reaching the objective would be as negative as exceeding it by far. The exercise conducted then would be worthless. In general, it is important to be aggressive when setting goals.” (Finance controller)

“It varies a lot. In fact, there have been occasions where the information was received more than two months later and currently they are being received 20 or 30 days later. I truly believe that the data is reliable, specially the evolution. Something that does not make much sense is the way sales vary from one month to another.” (Sales representative)

Fairness

First order constructs

“As a strength, I believe it is a fair system.” (Business unit manager 1)

“My business line has a small hospital sales force, which has three sales representatives in Barcelona and three in Madrid. They only visit big hospitals and consequently their sales incentives were different from what the rest of the people got. As other sales representatives were following the matrix method at 100%, they were going at a 50% and had other qualitative objectives such as product introduction in the hospital, development of workshops, penetration, etc, so they were not in the same ‘system’ and ‘intensity’ than the rest of the people. Therefore, Madrid and Barcelona were the slowest growing cities. Not sure if it was due to this but those were the cities with the lowest performance.” (Business unit manager 2)

“I would expect the system to be fair in the allocation of goals; this is what we are looking for, fairness. Then, if the objective is reachable or not could depend.” (Business intelligence analyst)

“When launching a new product I believe it should be treated as a separate element and not within the matrix. The change of incentives this year due to adding Product X in the incentives matrix and changing them at the middle of the year was an absolute disaster. We are launching a product next September and we hope will be separately considered.” (Product manager 1)
“If you look at the different teams you will find areas where they have underachieved objectives for years. The reason is they have a weak team because of the huge turnover of sales representatives they had in those areas. Zaragoza could not be assigned a lower goal than Burgos (obvious), so you keep on dragging the results you have already got. Do we consider this? Not sure to what degree we do.” (Product manager 2)

“At the moment, many of us are doing a vacant territory. We are 9 and should be 10. Consequently, the vacant territory is being covered by 3 sales representatives. I have one territory and one third of a territory.” (Sales representative)

“As far as I can see, it was more unfair before. Now, we do it in a fairer way.” (District manager 1)

“No, no ... but problems arise ... the budgets we had last year...also this year...it is not just the launches...we couldn’t change anything on them. ‘They’ have sent them to us and there we have them, ...this is where the problems arise as it is a product that according to market share or market potential could be budgeted ‘X’, considering the number of sales representatives available and quality of the territories that you can and cannot reach. However, the budget is unachievable, it is impossible, what sales representatives could achieve could be 60%, 70%, an 80% but not a 100%.” (District manager 2)

**Continuous improvement**

**First order constructs**

“The strength of the process right now is that it represents a major improvement from where we previously were. It works. It is fairly the same for everyone. In the past we had a lot of 'nepotism', meaning, 'to this friend I will reduce the goals, to this one I will increase this goals or for this one I don't care and what I really want is to get rid of him.” (Business unit manager 1)

“They all had the suspicion that the goals for the next quarter were being fixed based on the previous one. Also, there weren't any mathematical systems behind; simply put, each business unit manager used to develop the goals in a subjective way. We have moved away from that system into one where we sold the stakeholders the application of a formula. People feel much more involved when they received the criteria and the weights and it is much easier for the district managers to drill them down into their people. That's the reason why people don't complain; people feel that the system had significantly improved, being more transparent now than in the past.” (Business unit manager 2)

“When I joined, there weren't any procedures; not even for the expenses. 'Go out and sell; they would pay for everything; spend all that you want. When the money to invest is over, you come to me and I will give you more'. Now, we know how much we have for investments and how much you are spending on a monthly basis so you could control yourself in some way and manage your money. Before, you did not know what you had!” (Sales operations manager)
“The numbers involved in the incentive scheme seem to be right and well established. Sales representatives tend to complain about other things. The fact that now the sales representatives are able to know everything there is to know about their goals, have a good follow-up of how they are doing in general is a very good improvement compared to the past.” (Finance controller)

“Years ago, we didn’t do all of these things. There were neither percentages nor weights.” (District manager)

Drill-down tool to be dynamic and sensitive

First order constructs

“The system is too inflexible; it is not flexible. Although it is transparent, you practically cannot make changes…” (Business unit manager)

“Oh, apart from ‘the rule’, there is the logic and ‘the common sense’. Last year, I haven’t had business unit manager as my boss was promoted so he asked me to have a look at the goal setting for the sales representatives to see how to set them this year. I have spent many hours in front of the computer. I have never done it before. Apart from the headache, I have found that despite the changes I introduced into the system, despite the market share or weights, a hundred, zero or a 25-25-25-25, one fourth of potential was giving me one number to sell. If I did 35-15-25-25, it changed only slightly. It only changed when I considered a 100, for instance, in potential, a zero in Sales Representatives and a zero in market share. Then, it changed.” (Sales operations manager 1)

“It is not inflexible, that is the point. The benefit of the actual system is that it is not inflexible, it is flexible. However, that flexibility could be improved; certainly. It is flexible; it is not inflexible at all. That it has some moments when it gets inflexible? I am sure that if we develop any other system, it will come a time where it will get inflexible; I am sure.” (Sales operations manager 2)

“The system is static; not dynamic. It is mainly a financial system. That is the weakness. It is also fairly conservative. All of these are weaknesses; it is static, starts with a financial ratio and it is a top-down process.” (Business intelligence director)

Transparency

First order constructs

“According to me, a goal setting system has to be mainly transparent.” (Business unit manager 1)

“I believe one of the strengths (of the goal setting process) is that it is fairly transparent. That means that there is no subjectivity coming from my side.” (Business unit manager 2)
Flexibility

First order constructs

“If sales are on budget everything is ok. If there is a sales representative that is below the sales budget, a plan of action (as we call it) is triggered. The district manager does a personal interview with the sales representative asking for explanations; 'let's have a look at your sales as they are not doing great; on this product you are at 80%; let's analyze together what are the causes; let's work together the next three days to analyze the causes'. When this phase is over, the district manager has to draw conclusions and agree to develop an action plan with the sales representative. 'Look, there are things that need to be changed in the way you call on physicians; you are not properly closing your calls or you need training on this or you are not properly targeting physicians'. The district manager identifies the weaknesses and puts together an action plan to improve them. Sometimes it is a sales objective that is different from the one that originally had. Example: let's imagine that at the end of the first quarter there is a sales representative that is far below objectives at 60-70%. Maybe, they give him/her an action plan for the next three months and apart from doing all the activities included in the plan (three meetings with physicians at the hospital, etc., they would expect the sales representative to achieve at least 85% of the goal for the second quarter. The official objective regarding incentives remains the same but if the sales representative is too far away from the number is better to fix a more achievable goal to get him/her motivated.”

(Business unit manager 1)

“There were two sales representatives that were not getting their incentives for special circumstances regarding a product. Finally, they were given an extraordinary compensation at the end of December to compensate. As an example, last year in Sevilla, we had 4 sales representatives, 3 changed, one left, we had to lay off another one and then after a long time something else happened to another one (I don't remember). So, we had 3 new sales representatives in one year! The oldest sales representative sharing the territory realized that sales weren't good enough and that he was not going to get incentives. An option was then to tell him ‘don't worry, keep on driving, if you do a good job we will compensate you at the end of the year’”. (Business unit manager 2)

“You need to see how we are at the end of the year, you could have great salespersons with great evolutions and at the end of the year you find out that you have to make 2,3,4,5,6 exceptions.” (Sales operations manager 1)

“There are some things that must be improved. When you are thinking of launching a product at a certain date and then it gets delayed and launched later on, it should be considered. It is not the same to sell 10 from January than....However, if you don't get approval, which does not depend on you at all nor on the sales force...it happens that in September you already have a gap since the beginning of the year...or you don't get the price that you expected and you get negative figures across the year and you get very angry...and what is really happening is that there are a lot of external elements on play, which you cannot control. This is something that must be considered.” (Product manager 1)
“We do the sales budget and the expenses budget. However for the expenses, we have a number that is a ‘given’ that could be debatable to a certain extent. That means that we intervene in the expense budget but we have low power to decide as the company have already decided that there is this amount of money to spend and this is what we have available. However, we could always discuss and argue but with a small chance to change things”…“It depends on the circumstances; if you have problems with one particular product for whatever reason, you could adjust it. Maybe there are problems with a very important wholesaler in the area and the sales are not in line with IMS's because in that area there were five sales representatives but two were on 'leave', one left; so the budget suffers. I know that these special circumstances are contemplated.” (Product manager 2)

Logical

First order constructs
“I believe that a logical path is being followed. The national level forecast is developed in a logical way. The drill down to the sales representatives appears to me as logical as well with more or less information available, more or less flexibility. It seems logical to me as well.” (Business intelligence analyst)

“Apart from ‘the rule’, there is the logic and ‘the common sense’.” (Sales operations manager)

“We used to take away some things from some people and gave them to some other people because we believed at that time that a particular territory had more potential, but always following a logical criterion to make up for the things taken away.” (District manager)

Participative

First order constructs
“It takes more or less into account the opinion of the stakeholders. The weakness of the process is that people do not participate in the development of their own objectives.” (Business unit manager 1)

“Sales Representatives provide anecdotes from the field. These anecdotes do not have a lot of value as the sales representatives are not prepared to capture them.” (Business unit manager 2)

“Product managers develop the national sales forecasts for each product and they do so working with each of the business unit managers, although (as we are talking about a top-down process) many times the figures are ‘a given’ fixed by the business unit manager and given to them by the general manager.” (Business intelligence director)

“We do not always agree with the objectives that are being set; at least those of us closer to the field. The objectives for a launch are set based on criterion defined by the company and we don't have a say there; not the sales representative or the district managers. They do not ask for our opinion. They are being set by the company,
delivered to us and full stop. Probably there are mistakes being made, not only by product but also by geographical areas.” (District manager 1)

“No, no ... but problems arise ... the budgets we had last year...also this year...it is not just the launches...we couldn’t change anything on them. ‘They’ have sent them to us and there we have them, ...this is where the problems arise as it is a product that according to market share or market potential could be budgeted ‘X’, considering the number of sales representatives available and quality of the territories that you can and cannot reach. However, the budget is unachievable, it is impossible, what sales representatives could achieve could be 60%, 70%, an 80% but not a 100%.” (District manager 2)

**Unchangeable within the year**

**First order constructs**

“When launching a new product I believe it should be treated as a separate element and not within the matrix. The change of incentives this year due to adding Product X in the incentives matrix and changing them at the middle of the year was an absolute disaster. We are launching a product next September and we hope will be separately considered.” (Product manager 1)

**Objectivity**

**First order constructs**

“I believe one of the strengths (of the goal setting process) is that it is fairly transparent. That means that there is no subjectivity coming from my side.” (Business unit manager 2)

“Sales Representatives know that it was developed (the goal setting process) in a professional way using objective criterion without any personal preferences.” (Business Unit manager 2)

“I believe the allocation of goals is conducted in an objective manner; there are many parameters being studied in a scientific way. Also, as it happens in life, it is necessary to step back and make some considerations; 'look, I am the only one left in the area or this is a new area to me’. This is also considered, but this is maybe a little bit more ‘qualitative'; 'I am going through a bad personal moment', so you just hold on and get what you get based on the worksheets although sometimes there are a number of considerations.” (Product manager)

**Take the human factor into consideration**

**First order constructs**

“When you have been doing it; apart from the conclusion that the tool is not sensible; what other conclusion did you draw? The human component. What about it? The tool does not consider it, but I do. I adjust the results upwards or downwards for this concept.” (Sales operations manager)
“More important than the tool are the people.” (Business intelligence analyst)

**Less bureaucratic**

**First order constructs**
“...process is bit too bureaucratic. The same thing that happened to me in my last company is happening again.” (Sales operations manager)

**Linked to investments**

**First order constructs**
“So, they tell you, 'this is what you have to sell'. Who provides the investment money for the sales representatives? 1,000 Euros or 1,500 Euros; how much there is in the national budget? They just split it in equal parts.” (Sales operations manager)

“From my point of view, it is linked but not completely. We believe there are differences between products that can’t be captured. We have sort of an investment budget for all of the products that is not linked to each product but to the market.” (District manager)

“No. We all have the same amount of money to invest. My colleagues have the same amount of money to spend with different objectives.” (Sales representative)

**Allow performance control**

**First order constructs**
“It allows me to monitor the performance of the sales representatives (letting external factors that might influence aside). I can monitor their performance.” (Business unit manager 1)

“The general manager is the one that has goals defined by headquarters on sales, increase in sales and profitability. He has to control the results and any deviations that might be happening.” (Business unit manager 2)

**Consider competition**

**First order constructs**
“The important element is not what the physician does but what the competition does. However, we have much more information on the physicians than on the competition. I would love to know what my competitors are planning in the next few months.” (Business unit manager)

“That is not being considered in my objectives, the budget that I am being assigned, in theory, has nothing to do with the competition. They compare my performance with the other commercial name of the molecule but as I’ve said to you, it is not being taken into account for goal setting purposes. Also, if the competitor has a new sales representative in one territory and does not know the specialists and I do, it is easier to get a higher
performance than when the competition is present for long. That is not being taken into consideration when developing the goals.” (Sales representative)

**Respect for the initial input**

**First order constructs**

“Their (Product Managers) expectation is that everything that has come out from the team is respected. There is a certain degree of frustration when they see that the final result is different from the one agreed.” (Business unit manager)

**Product proposals in-line with the “gameplan”**

**First order constructs**

“We have the expectation that the consolidation of proposals is in-line with the global strategy of the company.” (Sales operations manager)

**Buy-in from stakeholders**

**First order constructs**

“Once I receive all the budgets, approved at all levels in headquarters, my expectation is to get the buy-in for all the levels in the organisation.” (Business unit manager)

**Clear criteria**

**First order constructs**

“They all had the suspicion that the goals for the next quarter were being fixed based on the previous one. Also, there weren't any mathematical systems behind; simply put, each business unit manager used to develop the goals in a subjective way. We have moved away from that system into one where we sold the stakeholders the application of a formula. People feel much more involved when they received the criteria and the weights and it is much easier for the district managers to drill them down into their people. That's the reason why people don't complain; people feel that the system had significantly improved, being more transparent now than in the past.” (Business unit manager 2)

“I believe the allocation of goals is conducted in an objective manner; there are many parameters being studied in a scientific way.” (Product manager)

“I believe the system used (based on weights) is a good one. It takes into account historical sales, market share, and deviations with respect to market share. Those three elements are essential to develop the goals.” (District manager)

**Represent the sales potential on the sales territories**

**First order constructs**

“No, no. It levels the field a little bit. As an example, if in an area where you are selling a lot you keep on assigning challenging goals, you are exploiting the situation. The rationale is that if in one area we are doing good, then we must take advantage of this
situation. In reality, this generates a gap as you are asking a low performing area more sales. The gap gets increased with time because one sells a lot and the other doesn't’. (Business unit manager)

“Taking into account the existent differences at the Autonomous Regions is critical, as you might find that one particular product is an evil in one area or under attack from the local government, while maybe on the other side of Spain you might find out that for the same product you have a bit more flexibility.” (Sales operations manager)

“The SAS (Andalucía Health Authority) come up with a regulation that affects all of Andalucía, which is that all physicians should prescribe using their PCs; at some point in time a gap appears. You can see that reflected in the sales on a monthly basis. My product is not in the PC and has a market share of 2% and growing 1.5%. There is an element that I take into account and that is sales history.” (Business intelligence analyst)

“The company has 7 District Managers and sales quotas for those 7 areas are being allocated by market share or by any other decision on a 'launch product' and this is when the problem comes. If you select market share as the only criteria, there might be provinces selling 'x' and maybe 'x' is below the sales you are getting with a similar product in that region. This might be so because the sales representatives have a number of particular circumstances. I believe that something is missing; don't know what.” (District manager)

**Communication driven**

**First order constructs**

“The forecasting or the foreguesing…? That depends...We are launching a new product in 6 months. We will notice it in the other products as people will give more importance to the launch. Who is aware of this? The business unit manager and the commercial director...and nobody else...do you understand? 'Are we going to in-license or out-license a product'. I don't know about that...they do know it and based on this they set your objectives. To be honest, nobody knew that we were going to launch this product last summer and all the goals were changed on the fly. Nobody knew about this. The say that goes ‘who owns the information has the power’...although is not 100% certain. The real power is knowledge, which is what you do with the information.” (Sales operations manager)

“I believe that by using the same criterion for all of the sales representatives (you could generate fairness) and if possible we would like to know what variables are being used to develop the goals. They know things of the market that I just do not know. They work and deal with much more information than I do. Therefore, based on the data they have and the information available they set the goals, which will be as objective as possible. Otherwise, we would have to go back to the old discussion; based on what data are my sales being evaluated, IMS data.” (Sales representative 1)

“How sales are assessed, what is the reason why they are the way they are? Weird things always happen at particular and moments such as what happens at the end of the
year, at the end of a quarter, etc. This bothers us much. I would really love to know how things are being done.” (Sales representative 2)

“It varies a lot. In fact, there have been occasions where the information was received more than two months later and currently they are being received 20 or 30 days later. I truly believe that the data is reliable, specially the evolution. Something that does not make much sense is the way sales vary from one month to another.” (Sales representative)

Everybody achieves 100%

First order constructs
“I believe all the sales representatives have the same expectations; I would love to develop goals that everybody could achieve 100, 100, 100, and a 100. That would be my dream.” (Business intelligence analyst)

Qualitative goals to be considered

First order constructs
“Some observations from the field are sales representatives not preparing the call, not having a clear objective before entering the call; not taking notes after the call; not preparing a summary of the call. Variables to measure quality of a call: have you prepared the call? Have you had a clear objective? Have you done a sound plan? Have you prepared the materials to deliver? Qualitative stuff! During the call: did he ask the ‘open questions’? Did he listen? Have he got the materials required? After the call: Did he take notes? Did he reflect upon what to do next? Did he prepare a plan for the next time? Did he fix a date for the next visit? Look how many qualitative aspects we have been discussing!” (Sales operations manager)

“We need more detailed information; not only in a quantitative way but also in a qualitative way.” (Business intelligence analyst)

“I set not only quantitative objectives but qualitative as well. This is the way I want things to be done; what places to visit to achieve a better profitability, etc. There may be clients that can only be visited twice a year, and the question is: is it worth visiting them? It makes no sense to keep on visiting them and making updates of their personal data. These are the things that have to be taken into account, but it is quite difficult to notice them in advance. It is easier now, due to the state-of-the-art technology that is being used. In any case, different people work in different areas, with their particular way of doing things but it is your duty to assess the work of each individual and to change the percentages given to everyone whenever necessary.” (District manager)

Achievable
First order constructs

“Depending on perception the goals are reachable or not.” (Business unit manager)

“They are achievable and as a matter of fact we are achieving them today.” (Sales representative)

“This is where problems arise as it is a product that according to market share or market potential could be budgeted ‘X’, considering the number of sales representatives available and quality of the territories that you can and cannot reach. However, the budget is unachievable, it is impossible, what sales representatives could achieve could be 60%, 70%, an 80% but not a 100%.” (District manager 2)

Challenging

First order constructs

“I would expect to have a good planning process that would allow, at the end, the goal setting to be accurate and with minimum margins of error on both sides. Not reaching the objective would be as negative as exceeding it by far. The exercise conducted then would be worthless. In general, it is important to be aggressive when setting goals.” (Finance controller)

“I am surprised that to have challenging goals is not an expectation that came up spontaneously from the people on the field!” (Commercial director in a post meeting we had together).

Motivating

First order constructs

“The official objective regarding incentives remains the same but if the sales representative is too far away from the number is better to fix a more achievable goal to get him/her motivated.” (Business unit manager 1)
E) Barriers: first order constructs

1) Us and them: field against office

First order constructs

“District managers are typically promoted sales representatives and they are in a complicated ‘sandwich’ position between the central office and their teams on the field. They have a much stronger relationship with the sales representatives than with the central office. They identify themselves more with the sales representatives than with the staff from the central office. What I mean is that sometimes district managers just re-transmit to the central office the complaints from the field without rationalizing them. Sales representatives already transmit the feedback from the field in an ‘extremely subjective’ way in order to achieve their goals; 'you are not giving me enough money to spend and my competitors are investing more than we do'; and then, we have the anecdotes. Nobody knows really what to do with them.” (Business unit manager 1)

“District managers play a very important role and we need to have them motivated; in our industry, this is essential; but they live in Sevilla or in Barcelona; they don't live here. I have been a district manager myself and I have had a very useful experience. We need to be closer to them. They are stuck in the middle. On one side you have the sales representatives seeing them as their bosses and on the other side the company telling them that they need to sell more and control expenses; get more results. It is important that we make them feel closer; they must participate from the criteria development. At the beginning when a sales representative is promoted to district manager he is typically very revolutionary.” (Business unit manager 2)

“They know things of the market that I just do not know. They work and deal with much more information than I do. Therefore, based on the data they have and the information available they set the goals, which will be as objective as possible. Otherwise, we would have to go back to the old discussion; based on what data are my sales being evaluated, IMS data.” (Sales representative 1)

“I just give up. I do understand the problem, and the way I see it is that the problem has been increased little by little to a point where the company is only concerned about the budget. I wish someone would come to me and explain the plan. I truly believe these things must be discussed. Before, I had more options. When IMS was not around, we had more options to speak up. Bosses used to come to us and tell us how much we were supposed to sell that particular year and you were able to tell him what you thought of that. I even recall the way we changed some of the numbers. If we had a good reason to change them, we would say it, and they would at least take a look at it.” (Sales representative 2)

“We do not really know how they set the goals. We describe to them the actual situation in our territories, warn them of the problems we encounter, tell them about new
opportunities we find. We all get this information, no matter the position we fill in the company. I suppose market studies, forecasting, etc, are carried out. We sometimes hear about these projects. The aim is to find the best alternative to pursue.” (Sales representative 3)

“We do not always agree with the objectives that are being set; at least those of us closer to the field. The objectives for a launch are set based on criterion defined by the company and we don't have a say there; not the sales representative or the district managers. They do not ask for our opinion. They are being set by the company, delivered to us and full stop. Probably there are mistakes being made, not only by product but also by geographical areas.” (District manager 1)

2) Sales Representatives not involved

First order constructs

“The Sales Representative from Cádiz (for instance) receives his goals without a chance to argue, and if he argues, it is the same because we are not changing the goals. I believe the lack of involvement of all stakeholders from the process is a weakness of the system that we must improve in the future. This process considers different internal phases without involving the sales force at all.” (Business unit manager)

“More than including the sales representatives, the district managers should be involved. At the end, the sales representative is a ‘sea’ where you could easily get lost in. In the actual system, somebody tries to assign you the highest possible objective and the sales representatives and the district managers will try to make them the lowest possible. It would be great to have a system where at least the district managers provide feedback. The previous commercial director, two years ago, was the one defining the potential of each area; very centralized. It is a matter of time to change; we are influenced by that way of proceeding.” (Sales operations manager)

“It depends, in some cases the goals are set by the business unit manager with the sales operations manager and it is unchangeable and sometimes (as I most like it), the district managers make a proposal to the business unit manager and sales operations manager and in the meeting in December they discuss it together.” (Business intelligence analyst)

“We need more field information; more information about a local territory, etc. There are times when you have international data that has nothing to do with the information you actually need to understand how the Spanish market behaves. It will help if it was a theoretical case, but when we are working on real cases it is not useful.” (Product manager)

“I just give up. I do understand the problem, and the way I see it is that the problem has been increased little by little to a point where the company is only concerned about the budget. I wish someone would come to me and explain the plan. I truly believe these
things must be discussed. Before, I had more options. When IMS was not around, we had more options to speak up. Bosses used to come to us and tell us how much we were supposed to sell that particular year and you were able to tell him what you thought of that. I even recall the way we changed some of the numbers. If we had a good reason to change them, we would say it, and they would at least take a look at it.” (Sales representative 2)

“I get involved but it is no my decision to make; to decide the goals. In this way, I am the one receiving the objectives. They are updated every year. From time to time, there are more, but they usually last a whole year. Some factors are considered only occasionally. It is not that these factors are never taken into account, but since all these factors are checked at all levels, when it is the turn for the sales representative to change it, he/she can do very little. Sales representatives feel that their opinions do not count. I do figure out what happens every year. Maybe there are weird things happening. I am respectful, but it does not mean that I do not want to know what it is happening and be heard. Sales objectives are currently like pyramids. District managers get together and then each district manager explain to each individual sales representative his/her objectives. We are not allowed to get involved.” (Sales representative 2)

“We do not always agree with the market they establish. We do not get involved in the decisions made regarding launch objectives, and they never ask us for our opinion. Maybe there is a big mistake in all of this.” (District manager)

3) Following historical performance

First order constructs

“This group works independently from the rest and the only reference point is what we did on the previous year and we then prepare a three-years forecast, based on that, to avoid being incoherent if there wasn’t any known event changing the assumptions. This would be the beginning.” (Business unit manager)

“The SAS (Andalucía Health Authority) come up with a regulation that affects all of Andalucía, which is that all physicians should prescribe using their PCs; at some point in time a gap appears. You can see that reflected in the sales on a monthly basis. My product is not in the PC and has a market share of 2% and growing 1.5%. There is an element that I take into account and that is sales history.” (Business intelligence analyst)

4) Top-down push

First order constructs

“There are goals and commitments at corporate level that our general manager gets pushed from headquarters and although they are more general than just each product they should all sum up at the end. It is fairly frustrating to develop a plan that starts with
the sales goals and resources allocated, prepare this within a team, and then receive an objective that has nothing to do with what you proposed, with the expenses that you proposed, etc. At the end, the process is bottom-up but what really happens is that it is a top-down push.” (Business unit manager 1)

“The budgets from headquarters are 'untouchable'; for the good and for the bad.” (Business unit manager 2)

“Investments are being almost pre-defined. We would all want to have more money to invest. I believe the goals are set from the general management to the commercial director with minor changes; they get them pre-defined.” (Sales operations manager)

“In June 2005, a forecast for the year is developed. The product manager sets the goals for his/her product at the national level. He/she works alongside with the business unit manager. There are times when the goals are set entirely by both business unit managers and the general manager.” (Business intelligence director)

“It depends, in some cases the goals are set by the business unit manager with the sales operations manager and it is unchangeable and sometimes (as I most like it), the district managers make a proposal to the business unit manager and sales operations manager and in the meeting in December they discuss it together.” (Business intelligence analyst)

“I wish the proposals made locally had more relevance. I am sure headquarters does not have full knowledge of the facts. They couldn’t know all there is to be known about the products, the sales force, the country, how the company works locally, etc. If they do not take all that into account they can very easily make mistakes. But the problem is that if goals are not achieved, it means that the incentives will be lower. This bothers people and makes them search for jobs in some other company.” (Product manager 1)

“They round it upwards; of course! Nobody will ever tell you that you will sell less than you say you will. Depending on the product and the way they think it will develop they adjust the goals a little later on. You just assume that they will give you less money and higher goals” (Product manager 2)

“The goals are established by headquarters. If you think that you are going to grow 10% and they think it is more than that, problems arise. It is a top-down process.” (Finance controller)

“However, if they just give me numbers and tell me this is it, I will agree or not.” (Sales representative)

We do not always agree with the market they establish. We do not get involved in the decisions made regarding launch objectives, and they never ask us for our opinion. Maybe there is a big mistake in all of this.” (District manager)
5) Inflexible

First order constructs

“The budgets from headquarters are ‘untouchable’; for the good and for the bad.” The system is too inflexible; it is not flexible. Although it is transparent, you cannot practically make changes.” (Business unit manager)

“I believe the goals are set from the general management to the commercial director with minor changes; they get them pre-defined.” (Sales operations manager 1)

“There is a debate, where district managers decide on the weights to be assigned to each variable in the formula and then, consensus must be reached; it is always a qualitative adjustment.” (Sales operations manager 2)

“You just have to go and cry to your boss. What sometimes had happen (and this is not bad) is that you don't change the tool, which is what you ought to do but you go to your boss and explain what had happened (although I believe it is unprofessional), 'I haven't reached the goal by 50% but the reason is that the government have reduced prices, etc. In any case I will be gaining market share and my position against competition is still good'. Then, the company gives like a 'dad's present' for the effort and under the understanding that causes away from your control were influencing the results.” (Business intelligence director)

“It is quite small (the adjustment). If there is a 50,000 € rise, maybe the sales representative that has just joined the company is the one that gets 45,000 € and the 5,000 € left are divided among the rest of the sales representatives. I do not know what would happen if in a district 80% of the Sales Representatives has just joined the company.” (Business intelligence analyst)

“I believe the allocation of goals is conducted in an objective manner; there are many parameters being studied in a scientific way. Also, as it happens in life, it is necessary to step back and make some considerations; 'look, I am the only one left in the area or this is a new area to me'. This is also considered, but this is maybe a little bit more ‘qualitative’; 'I am going through a bad personal moment', so you just hold on and get what you get based on the worksheets although sometimes there are a number of considerations.” (Product manager)

“It is the approval given from headquarters. Once it is approved, sales directors set the goals. This means that it is a flexible system. I have an example that explains this very well. A new product was launched, so the goals had to change. At the end of the year a variable payment was added to lessen the potential issues that could emerge.” (Finance controller)
“We do listen. But it is also true that during the last years, at least as far as my work as a manager (for the last two years) is concerned plus one more year as a team manager helping the former manager, every time we got the budget we changed some things. We used to take away some things from some people and gave them to some other people because we believed at that time that a particular territory had more potential, but always following a logical criterion to make up for the things taken away.” (District manager)

6) Lack of communication

First order constructs

“The forecasting or the forecasting…? That depends...We are launching a new product in 6 months. We will notice it in the other products as people will give more importance to the launch. Who is aware of this? The business unit manager and the commercial director...and nobody else...do you understand? 'Are we going to in-license or out-license a product’. I don't know about that...they do know it and based on this they set your objectives. To be honest, nobody knew that we were going to launch this product last summer and all the goals were changed on the fly. Nobody knew about this. The say that goes ‘who owns the information has the power’....although is not 100% certain. The real power is knowledge, which is what you do with the information.” (Sales operations manager)

“I believe that improvements to the process could be achieved through using the same criteria for each and every sales representative, and if it is possible, to know what variables are used to set the goals and budget. They know things about the market that I just do not know. They work and deal with much more information than the one I use.” (Sales representative 1)

“How sales are assessed, what is the reason why they are the way they are? Weird things always happen at particular and moments such as what happens at the end of the year, at the end of a quarter, etc. This bothers us much. I would really love to know how things are being done.” (Sales representative 2)

“Something that does not make much sense is the way sales vary from one month to another. IMS should explain in a better way the information. IMS information is just there, nobody explains what it means.” (Sales representative 3)

“Before setting the goals I do not know how to explain why objectives are as they are. If they are high it is because there are products that are very interesting for the company. But if they are too high, a throughout explanation must be given since questions arise at any moment.” (District manager)
7) Lack of process owner

First order constructs
“Somebody must be the process owner; I don't know.” (Sales operations manager 1)

“In this case it is each sales line. For the national number there has to be consensus with the general management. All stakeholders have their share of responsibility. If a problem arises, who will be held responsible? I would expect all of us depending on the role you have.” (Sales operations manager 2)

“Responsibility is shared by everyone. What you are supposed to do is to take a stand and defend your position. If you commit yourself to selling so much, you have to justify your position.” (Product manager)

“I believe that as a team, John as the commercial director along with the business unit manager, but maybe the business unit manager should own it more. In any case, this is a personal opinion. It is just what I think since I am not involved at all in all this.” (Sales representative)

8) Low quality of information

First order constructs

“We have a lot of information but it is standard; accessible to all the companies in the market. This means that it does not provide you with a competitive advantage. We should be using information that is more adjusted to our markets and clients.” (Business unit manager 1)

“There is when we have problems, when we have parallel exports, strange movements in the market, etc.” (Business unit manager 2)

“That used to happen in Asturias. IMS had only 90-80% of the total sales and then sales were extrapolated. But, since this was the usual way of elaborating the information there was not big differences from one year to another.” (Business intelligence analyst)

“It is logical for objectives to be on the same track. The last few days we have learnt about the huge gap that exists between internal sales and IMS sales. This last one is used by the sales representatives and district managers to assess their goals. Parallel trade has nothing to do in all of this.” (Finance controller)

“I worry a lot about that (information quality). I do not have any influence. I cannot go to every pharmacy to ask for the state of my sales. This is the only way to check the information given by IMS. We can only believe in the good faith of other people.” (Sales representative 1)

“Yes, there is something that even if it has nothing to do with what you are asking me, it has to do with sales. To me, IMS is a very obscure matter. How sales are assessed, what
is the reason why they are the way they are. Weird things always happen at particular
and moments such as what happens at the end of the year, at the end of a quarter, etc.
This bothers us much. I would really love to know how things are being done.” (Sales
representative 2)

“Something that does not make much sense is the way sales vary from one month to the
other. IMS should explain in a better way the information. IMS information is just there,
nobody explains what it means.” (Sales representative 3)

“Actually, I am very critical of IMS, I have always been this way, as a sales
representative, as a team manager and now as district manager. Before, a district
manager wouldn’t say anything. Sales representatives would complain a lot and the
district manager would get them out of the way, but now things have changed. District
managers assume their role. Sales representatives explain their position to the company,
the reasons why they do not agree and then IMS answers what they are supposed to
answer. This is a fairly difficult matter to deal with, since it is quite hard to assume and
convey.” (District manager)

9) Information not available

First order constructs

“There are some products, like Omega, that were launched only on Specialists,
Hospitals, Pain Units, Rheumatologists and Oncologists. That market was extremely
data-poor and available information had no value. We just split the sales by the number
of sales representatives.” (Business unit manager)

“If we had more information besides the one provided by IMS…” (Business
intelligence analyst)

“We need more field information; more information about a local territory, etc. There
are times when you have international data that has nothing to do with the information
you actually need to understand how the Spanish market behaves. It will help if it was a
theoretical case, but when we are working on real cases it is not useful.” (Product
manager)

10) Information not on time

First order constructs

“It is a very complex process to carry out. There are always delays in the delivery of
IMS data. Tony is in charge of all this. There is a lot of uncertainty involving changes in
resource allocation, new alignments, etc.” (Finance controller)

11) “Fiefdoms”

First order constructs

“Well, I know what happens in my sales line,…please understand me.” (Sales
Operations Manager)
“Every business line is different. What I dislike is the fact that there are three lines and that they are fiefdoms. I consider ‘Alpha Line’ as a sales line and ‘Beta Line’ as a marketing line. There are two points of view. On one hand Peter, who does not pay much attention to the budget and on the other John gets involved and discusses thoroughly the budget until a point where everything is very well tied up. I do not like one way better than the other.” (Business intelligence analyst)

“That is the problem. There is where it all starts. There are maybe people to whom you may be able to talk. On the other hand there are people that are just not reachable. I think the company should be more aware of what is happening.” (Sales representative)

12) Different Managerial styles

First order constructs

“There are two points of view. On one hand Peter, who does not pay much attention to the budget and on the other John gets involved and discusses thoroughly the budget until a point where everything is very well tied up. I do not like one way better than the other.” (Business intelligence analyst)

13) Lack of analytical capacity

First order constructs

“It is fairly standard, we take a therapeutical class based on the information provided by IMS, which is the usual source, although with a certain level of imprecision, and we go product by product, independently from the therapeutical class to which they belong, analyzing potential therapeutic overlaps; we develop our reference market. From there, we measure the evolution of our product within that market.” (Business unit manager 1)

“You know the potential based on the information provided by IMS and market research; the sales potential distribution in Spain. The information was available before but if you wanted to understand the performance in certain bricks, you couldn’t; the information wasn't structured and not linked...” (Business unit manager 2)

“I believe the main handicap is the way some people respond to changes in their working habits, analytical capacity, etc.” (Business intelligence director)

“They use the average market share of the nation, which is 10%. Madrid has 11% and Juan Carlos has 10.5%. I am above the average but below the market share of Madrid. They compare me with my colleagues of Madrid. I work hard to get a market share above the average. Even though, I earn a lot of money the point is that I am below my objectives. I could tell you just now how I am doing with the products I present compared to the work my colleagues are doing, and compared to the average of the nation.” (Sales representatives 1)
“What I mean by this is that many things are not being taken into account. Yes, there is something that even if it has nothing to do with what you are asking me, it has to do with sales. To me, IMS is a very dark matter.” (Sales Representatives 2)

“The company has 7 District Managers and sales quotas for those 7 areas are being allocated by market share or by any other decision on a 'launch product' and this is when the problem comes. If you select market share as the only criteria, there might be provinces selling 'x' and maybe 'x' is below the sales you are getting with a similar product in that region. This might be so because the sales representatives have a number of particular circumstances. I believe that something is missing; don't know what.” (District manager)

14) Lack of power from the district managers

First order constructs

“District managers work as team members in the development of strategies and activities but with relatively low influence on the goal setting.” (Business unit manager)

15) Introducing too many systems and new information too suddenly

First order constructs

“We have moved from having no systems to have a lot of different systems and people say 'so many systems?'; I mean, excess of information, which is as bad as not having information.” (Sales operation manager)

16) Age, new skills and resistance to change

First order constructs

“Putting up a lot of resistance to changes and also think that as long as I am fine I do not care much about anything else. It is the same problem all over again. Not everyone is able to implement it. First of all, sales representatives should understand it all and truly believe the change is for the best. A good idea would be to spend a day with one sales representative to explain doubts they may have. I truly believe the main factor is the way sales representatives put up a lot of resistance to changes. Starting from the top of the organisation downwards we all need to be extremely open-minded to cope with this change” (Business intelligence director)

“There is one thing to bear in mind, something that the company does not pay much attention to, and that is the knowledge we all have about computers. For me it is a big problem. Sometimes it gets to a point where I just do what I think it is right without giving it much thought. Sometimes I save things I am working on, and suddenly they are all gone. I try to look for them everywhere but I just can not find them. I wish I could go over everything before sending them, just to check but if I save them I may
lose them and be not able to find them. So I end up wasting lots of hours doing these tasks. For me, it would be better to spend those wasted hours calling on more doctors or calling with a higher frequency. The worse part of it is that the company does not care if you are good or not with computers.” (Sales representative)

**17) Difficult to reach consensus**

First order constructs

“The ones that complain are the ones that do not reach consensus as far as the proposal is concerned.” (Business intelligence analyst)

“However, if they just give me numbers and tell me this is it, I will agree or not.” (Sales representative)

“I do not know. I guess it is hard to agree. It is quite difficult to be always on the same page.” (District manager)

**18) Formal channels to gather insights not implemented**

First order constructs

“There are no adequate channels to consolidate the information and understand at some point in time if we need to change our strategy or not. Therefore, almost every thing our competitors do come as a surprise to us.” (Business unit manager 1)

“You know the potential based on the information provided by IMS and market research; the sales potential distribution in Spain. The information was available before but if you wanted to understand the performance in certain bricks, you couldn't; the information wasn't structured and not linked...” (Business unit manager 2)

“Sometimes I get mails saying things like ‘did you know that Lundbeck is currently inviting doctors they have selected and also giving them cheques?’ Sometimes we hear things like these through clients that tell us openly ‘did you know that Lundbeck has offered me x and y?’ We learn about these things through different channels.” (Product managers)

“I learned about a meeting our competitors were planning in Paris for the most representative doctors of Madrid. I sent an email to the product manager of XXX and I copied my district manager.” (Sales representatives)

**19) Shared territories**

First order constructs

“In theory, in almost all bricks there are 3 sales representatives but these 3 people don't share the same bricks all the time. Sometimes, a sales representative has to sell the sum of three people. In the brick that is shared by the three of us we have the same goals.
Co-promotions are evil, in some cases if you have 3 sales representatives that worked together well and they performed; then you don't have a problem. However, in other places, if there is one of them not performing well, the high performers might appear badly in the photograph”. (Business unit manager)

“Then you also hear about things that happen such as, I do not know if you are aware of the way they work, especially in big cities such as Madrid; 50% comes from the pool (the team work) and the other 50% comes from the individual work. But there will always be people that work more and some others that will work less.” (Sales representative 1)

20) **Not a homogeneous process**

First order constructs

“It depends, in some cases the goals are set by the Business Unit Manager with Sales Operations and it is non-changeable and sometimes (the way I like the most), the District Managers make a proposal to the Business Unit Manager and Sales Operations and in the meeting in December they discuss it together… I consider Alpha Line as a sales line and Beta Line as a marketing line. There are two points of view. On one hand, Peter, who does not pay much attention to the budget and on the other John who gets involved and discusses thoroughly the budget until a point where everything is very well tied up.” (Business intelligence analyst)

21) **National sales forecast unreasonable**

First order constructs

“It is not a matter of assigning more to one person than to another. Maybe they complain about the goals that are set at a national level.” (Business intelligence analyst)

“Before setting the goals I do not know how to explain why objectives are as they are. If they are high it is because there are products that are very interesting for the company. But if they are too high, a throughout explanation must be given since questions arise at any moment.” (District manager)

22) **Selfishness**

First order constructs

“It is due to selfishness, since people are actually putting at risk their money. The point is that it is quite complex to deal with. That is the reason why I like the system we have. It allows people to be able to reach a consensus.” (Business intelligence analyst)

“Sure, but then you are surprised with what you find. For instance, I have learnt that some of my colleagues have a lower budget, and they are complaining. I am not critical with them, but it surprises me a lot. And since mine is higher I am not able to comply with my duty, I think it is not fair.” (Sales representative)
23) Bureaucracy

First order constructs

"I believe it is a little bit bureaucratic...." (Sales operations manager)

24) The human factor

First order constructs

“The human component is not being considered by the tool but I do adjust the results upwards or downwards” (Sales operations manager)

“I believe the main handicap is the way some people respond to changes in their working habits, analytical capacity, etc.” (Business intelligence director)

25) Fairness

First order constructs

“One has a huge market; another person has one that is too small; in one, a new Sales Representative has just entered; on the other one all of the Sales Representatives are experienced. How can you define a plan that is fair with everybody? That is not possible. You can't do it! You could try to develop the best plan for all the Sales Representatives as a whole.” (Sales operations manager)

“I believe the allocation of goals is conducted in an objective manner; there are many parameters being studied in a scientific way. Also, as it happens in life, it is necessary to step back and make some considerations; 'look, I am the only one left in the area or this is a new area to me'. This is also considered, but this is maybe a little bit more 'qualitative'; 'I am going through a bad personal moment', so you just hold on and get what you get based on the worksheets although sometimes there are a number of considerations.” (Product manager)

“Yes, there are always differences because the territories are not all exactly the same. I may have bad luck and one of the best sales representatives from Pfizer might start working in the same area I am working in. That would affect me greatly.” (Sales representative)

26) Measuring the wrong variables

First order constructs

“There was a consultant telling us that what really matters is not the number of contacts done in a year but the number of 'agreements' closed. 'I do 15 calls a day multiplied by 22 days in a month and we do 3,500 impacts a year!' I don't care about the number of
impacts carried out by a sales representative. He closes an agreement for every 15 calls he makes.” (Sales operations manager)

“What I mean by this is that sometimes objectives are established in a general form not taking into account the possible differences that may exist among the sales representatives. There are many things that should be taken into account.” (Sales representative 1)

“There are factors that are not taken into account. Sometimes they are beard in mind, but only occasionally. It is not that they do not consider many things; it is just that when those objectives come to our hands, they have been checked so may times from so many people, that we can not do much to change them. The point is that the sales representative feels that his/her opinion does not count much.” (Sales representative 2)

“The company has 7 district managers and sales quotas for those 7 areas are being allocated by market share or by any other decision on a ‘launch product’; this is when the problem comes. If you select market share as the only criteria, there might be provinces selling ‘x’ and maybe ‘x’ is below the sales you are getting with a similar product in that region. This might be so because the sales representatives have a number of particular circumstances. I believe that something is missing; don't know what.” (District manager)

27) Not knowing how to deal with Sales Representatives judgment

First order constructs

“Sales Representatives provide anecdotes from the field. These anecdotes do not have a lot of value as sales representatives are not prepared to capture them.” (Business unit manager)

“I think they are fair (the goals) if you look back. When you look at them for the first time the first thing that comes to your mind is ‘they must be crazy if they think I can do all this’, but then as time goes by you find out that you were actually able to carry it all out.” (Sales representative)

28) Traveling prescriptions (sales causality difficult to track)

First order constructs

“I do not know, but when it comes to territory terms is different. I work in Madrid. The most important clients work there. Many of them work in private clinics such as San Camilo, La Paloma, El Rosario, La Beata, etc. People from every part of Madrid go to those places. But there are also people from the outskirts of Madrid who go there. However, the prescriptions that they may generate are not usually (delivered to the patients) in the area I work in, so some of my work is wasted.” (Sales representative)

29) Difficulties on measuring variables
First order constructs

“Maybe it is difficult to measure. The key thing we are talking about here is to get sales, sales and sales.” (Sales representative)

“Yes, maybe there are not tools to take this into account. Maybe there are things that are just not quantifiable.” (District manager)

30) Territories unbalanced

First order constructs

“I have right now 'x' provinces. I have a problem in Madrid. I need at least another sales representative to cover the area in a better way. It comes from a bad territory alignment. I have 3 sales representatives in Madrid out of a total of 9. They are overloaded with work. We try to do our best, but there are places that we just can not visit, such as some hospitals. If things like this happen, there is a problem, or maybe it is just that more sales representatives are needed.” (District manager)

31) Transparency and clarity

First order constructs

“I expect the system to be impartial and transparent and I believe the system is transparent due to the way in which it is built.” (Sales operations manager)

“The incentives system is pretty good in the sense that it is robust, at least when it comes to the calculations. Sales representatives complain for other things such as 'the sales goal did not take into account this or that, which really affects but they don't complain about the way in which it was calculated.” (Sales operations manger)

“I believe everyone knows what he/she is supposed to do. Things have been cleared out. There is no doubt about it.” (Finance controller)

“I think there is no nepotism.” (Sales representative)

32) Unforeseen events

First order constructs

“You just have to go and cry to your boss. What sometimes had happen (and this is not bad) is that you don't change the tool, which is what you ought to do but you go to your boss and explain what had happened (although I believe it is unprofessional), ' I haven't reached the goal by 50% but the reason is that the government have reduced prices, etc. In any case I will be gaining market share and my position against competition is still good'. Then, the company gives like a 'dad's present' for the effort and under the understanding that causes away from your control were influencing the results.” (Business intelligence director)
“There are some things that can be improved. Things like when a product is expected to be launched on a date but then its launch is delayed should be considered. Therefore, things apart from your own work and goals should be also considered.” (Product manager)

“That is the big issue; where it all starts. Things may change during the year, but those things are not taken into account when they set the goals. The Administration may allow you to go to visit physicians just three times, and the company asks you to call with a frequency of twelve times a year. What can you do about that? They do not give you a solution. It is you the one who has to figure out what to do.” (Sales representative)

33) Sales Representatives ‘gaming’

First order constructs

“At least it tries to be fair. The system does not work in this case. There are gaps in the orders coming from Pharmacies that work for Hospitals, clinics, and old people residences. So the ‘smart’ sales representative introduces an order at the end of December because those units are taken into account for the month so the system sometimes rewards bad behaviors and punishes people that are trying to do the right thing.” (Business intelligence director)

34) Changing sales quotas in the middle of the year

First order constructs

“I believe there will be changes that will affect many things, being one of those Product X. Sales representatives are prompted to believe that it is a good system and that many variables are taken into account to make it fairer. When there are things that are already assumed and suddenly are changed people are prone to think that it is unfair and are bothered by those changes. What does it bring in; uncertainty? That is the main problem; uncertainty; nuisance. It is curious for me that I work in the marketing department.” (Business intelligence analyst)

“When launching a new product I believe it should be treated as a separate element and not within the matrix. The change of incentives this year due to adding Product X in the incentives matrix and changing them at the middle of the year was an absolute disaster. We are launching a product next September and we hope will be separately considered.” (Product manager 1)

35) Complexity

First order constructs

“It is a very complex process to carry out. There are always delays in the delivery of IMS data. Tony is in charge of all this. There is a lot of uncertainty involving changes in resource allocation, new alignments, etc.” (Finance controller)
F) Clusters of researchers and research areas

Sales force performance

(Adkins, 1979; Anglin et al., 1990; Avila et al., 1988; Azofra et al., 2003; Behrman and Perreault, 1982; Berry, 1987; Boles et al., 1995; Bommer et al., 1995; Chonko et al., 2000; Churchill et al., 1985; Cocanougher and Ivancevich, 1978; Cotham and Cravens, 1969; Cravens et al., 1993; Cravens et al., 1972; Cron and Levy, 1987; Futrell, 1975; Futrell and Schul, 1978; Futrell et al., 1983; Hart et al., 1989; Heneman, 1986; Hise and Reid, 1994; Indjejikian, 1999; Ittner et al., 1997; Ittner and Larcker, 2002; Ittner and Larcker, 2003; Ittner et al., 2003; Jackson et al., 1983; Jackson et al., 1995; Jackson and Zedeck, 1982; Jaworski and Kohli, 1991; Levy and Sharma, 1993; Liden et al., 1996; Mowen et al., 1986; Muczyk and Gable, 1987; Pettijohn et al., 2001; Pettijohn et al., 2000; Pilling et al., 1999; Plank and Reid, 1994; Poon, 2000; Rich et al., 1999)

Motivation and performance

(Barling and Beattie, 1983; Brown and Peterson, 1994; Bagozzi, 1986; Bagozzi, 1980; Bagozzi, 1980; Bagozzi, 1978; Krishnan et al., 2002; Walker et al., 1977; Doyle and Shapiro, 1980)

Sales force compensation


Sales force compensation models

(Albers, 1996; Farley, 1964; Mantrala and Raman, 1990; Mantrala et al., 1994; Moynahan, 1980; Moynahan, 1983; Tallitsch and Moynahan, 1994; Rao, 1990; Farley and Weinberg, 1975; Basu and Kalyanaram, 1990; Basu et al., 1985; Darmon, 1982; Darmon, 1987; Darmon, 1993; Davis and Farley, 1971; Pullins, 2001)

Sales force systems

(Anderson and Oliver, 1987; Challagalla and Shervani, 1996; Challagalla and Shervani, 1997; Cravens et al., 1993; Cravens et al., 2004; Joshi and Randall, 2001; Krafft, 1999; Oliver and Anderson, 1995; Oliver and Anderson, 1994)

Sales force sizing

(Crisp, 1972; Horsky and Nelson, 1996; Jobber et al., 1993; Lambert, 1968; Meidan, 1982; Semlow, 1959)
Sales force management and effectiveness in general

(Babakus et al., 1996; Baldauf et al., 2001; Baldauf and Cravens, 1999; Churchill et al., 2000; Dubinsky and Hansen, 1981; Dubinsky, 1998; Dubinsky and Barry, 1982; Fudge and Lodish, 1977; Lidstone, 1990; Locander and Staples, 1978; Mayer and Greenberg, 1964; Meidan, 1980; Moncrief and Marshall, 2005; Moncrief et al., 2000; Parsons and Abeele, 1981; Neil Rackham, 1997; Rao and Turner, 1984; Schiff, 1983; Stanton et al., 1991; Still and Cundiff, 1969; Zoltners et al., 2001)

Sales territory design

(Claxton et al., 1990; Drexl and Haase, 1999; Grant et al., 2001; Lodish, 1974; Lodish, 1971; Lodish, 1975; Fudge and Lodish, 1977; Shanker et al., 1975; Skiera and Albers, 1998; Talley, 1961; Shanker et al, 1975; Zoltners and Lorimer, 2000; Zoltners and Sinha, 1983)

Sales force resource allocation

(LaForge et al., 1986; Lucas et al., 1975; Mantrala et al., 1992; McClure and Well, 1987; Parasuraman and Day, 1977; Ryans and Weinberg, 1987; Ryans and Weinberg, 1979; Smith, Jones et al, 2000; Zoltners and Sinha, 1980)

Goal setting

(Bobrow, 2000; Cummings et al., 1971; Douthit, 1976; Futrell et al., 1977; Good and Stone, 1991; Good and Schwepker, 2001; Ivancevich, 1977; Kim, 1984; Lorge, 1997; Mowen et al., 1981; Rich, 1966; Ross, 1991; Sands, 2000; Schwepker Jr. and Good, 2004; Seijts, 2001; Shaw, 2004; Winer Leon, 1973; Wotruba, 1989; Wotruba and Thurlow, 1976)

Quota determination

(Cowman, 1935; Mantrala, Raman et al, 1997; Mcfarland et al., 2002; Mitchell, 1979; Good and Stone, 1991; Herzog, 1961; Darmon, 2001; Darmon, 1979; Darmon, 1997; Easton, 1976)

Goal setting theory

Motivation within the goal setting business process

(Abelson, 1983; Badovick, 1990; Badovick et al., 1992; Bandura and Cervone, 1983; Brown et al., 1997; Brown et al., 1998; VandeWalle et al., 1999; Brown and Peterson, 1994; Chang and Lorenzi, 1983; Chowdhury, 1993; Dossett et al., 1979; Dosset and Greenberg, 1981; Erez and Zidon, 1984; Erez and Earley, 1987; Erez et al., 1985; Latham et al., 1988; Erez, 1977; Erez and Zidon, 1984; Garland, 1984; Stedey and Kay, 1966; Vroom, 1964; Renn and Fedor, 2001; Terborg and Miller, 1978)

Sales forces within Pharmaceuticals

(Blackshear and Plank, 1994; Douglass, 1993; Gonul, Carter et al, 2001; Montgomery et al., 1971)

General overlap

(Barrick et al., 1993; Morris et al., 1991; Piercy et al., 1999; Pritchard and Curtis, 1973)
G) Organisational capabilities

1. The ability of sales and marketing people to interact.
2. The ability to empower district managers to make sales quotas allocation decisions.
3. The ability to allow high participation of district managers and sales representatives in the development of sales quotas.
4. The ability to develop excellent analytical skills in the business intelligence and brand teams.
5. The ability to develop excellent sales management skills in sales top executives.
6. The ability to generate a homogeneous management style embedded in the culture of the organisation.
7. The ability to balance the amount of formal and informal communication being used.
8. The ability to facilitate excellent vertical communication.
9. The ability to facilitate excellent horizontal flows of communication.
10. The ability to be flexible to adapt sales force sales quotas as unforeseen market events emerge.
11. The ability to be flexible to adapt sales force sales quotas as unforeseen personal circumstances arises.
12. The ability to handle transparency on the formulae used for the development of sales quotas.
13. The ability to simplify the formula being used so people can easily understand how their sales quotas are being developed.
14. The ability to select the right variables to measure.
15. The ability to select variables that are measurable.
16. The ability to prepare and select a sales quotas development process owner.
17. The ability to develop a culture of collaboration and solidarity.
18. The ability to phase the introduction of new information and systems.
19. The ability to develop a resilient (to change) organisation.
20. The ability to build consensus.
21. The ability to develop formal feedback channels.
22. The ability to define independent territories for each sales representative.
23. The ability to develop a homogeneous sales quotas development process that does not vary by business unit or sales force.
24. The ability to produce reasonable national sales forecasts.
25. The ability to keep bureaucracy to the minimum.
26. The ability to capture the human side of sales quotas.
27. The ability to understand and track sales causality.
28. The ability to have balanced sales territories in terms of business opportunity.
29. The ability to keep the bulk of sales quotas initially defined unchanged throughout the year.
30. The ability to acquire high quality information.
31. The ability to acquire timely information.
32. The ability to acquire adequate information.
33. The ability to provide equity across the sales force.
34. The ability to provide equity for the sales force compared to the industry.
35. The ability to provide equity among functions.
H) Introductory email

Estimado XXX,

Como parte del doctorado en administración que estoy finalizando en Cranfield School of Management (UK), estoy realizando, a título personal, una investigación sobre cuáles son los factores que pueden ayudar a un desarrollo efectivo de cuotas de venta para delegados comerciales del sector farmacéutico. Esta es un área de especial relevancia y más ahora con los cambios que se están gestando en las dinámicas del mercado farmacéutico.

Su opinión es muy relevante para mi estudio por lo que le agradecería si pudiera completar un cuestionario muy simple (de múltiple opción) que adjunto al email y enviármelo de vuelta. Una vez integrados los resultados de todos los participantes le enviaré el consolidado de respuestas para que pueda comparar las suyas con lo que dicen los demás ejecutivos de la industria farmacéutica. También me pongo a vuestra disposición para debatir y aportar material y/o conocimientos acerca de cualquier tema relacionado con la efectividad de la fuerza de ventas, siendo esta área el foco principal del doctorado.

Toda la información será tratada siguiendo un protocolo de investigación muy estricto, establecido por Cranfield University, que asegura la confidencialidad de la información.

Desde ya muchas gracias por su contribución y me comprometo a enviarle los resultados de la encuesta en forma consolidada y por supuesto anónima.

Un saludo,

Gabriel Morelli
I) Questionnaire

Below are some elements that might contribute to an effective development of Sales Representatives’ sales quotas. These came as a result of a case study conducted in a Pharmaceutical organization. For each one of the terms, please indicate the extent of your agreement or disagreement as important elements that contribute to the development of effective sales quotas for Sales Representatives in your company.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>Uncertain</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Managers are able to change Sales Representatives’ (centrally allocated) sales quotas, keeping the overall regional sales quota unchanged</td>
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<tr>
<td>District Managers participate in the development of their Sales Representatives’ sales quotas through sharing their views at a regional/national sales meeting</td>
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<tr>
<td>Sales Representatives participate in the development of their own sales quotas through sharing their views at an area sales meeting</td>
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<tr>
<td>Sales Representatives’ sales quotas change, within the financial year, as unforeseen market events emerge</td>
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<tr>
<td>The sales quota development process for Sales Representatives is the same across all sales lines</td>
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<tr>
<td>The sales quota development process for Hospital sales lines is different to the process used for Primary Care sales lines</td>
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<tr>
<td>High performers get a higher share of sales quota than the one suggested by the formula</td>
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<tr>
<td>Sales quotas should be developed focusing on each sales territory independently from the Sales Representative responsible for it</td>
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<tr>
<td>Sales Representatives’ sales quotas are proportional to the business potential of their territories</td>
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<td>Sales Representatives’ goals are perceived to be as challenging as the goals of their peers in competing companies</td>
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<tr>
<td>Sales Representatives’ goals are perceived to be as challenging as the goals of their peers in other functions, such as Product Managers in Marketing</td>
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<td>Sales Directors exercise a similar management style to avoid having Sales Representatives from different sales lines being treated differently</td>
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<tr>
<td>The company put incentives in place to avoid ‘gaming’ among Sales Representatives when sales quotas are developed</td>
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<tr>
<td>The majority of District Managers agree with their sales quota allocation before it is finally approved</td>
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<tr>
<td>Brand teams develop their sales forecasts looking at potential number of patients, competition and future market events as opposed to only considering historical trends</td>
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<tr>
<td>Sales Directors understand the business environment so they are able to assess the reasonability of the sales quotas developed</td>
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<tr>
<td>There is one goal setting process owner</td>
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<tr>
<td>Sales and marketing people meet up at least on a quarterly basis to discuss market dynamics</td>
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<tr>
<td>Sales and marketing people meet up at least twice a year in the context of the goal setting process</td>
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<tr>
<td>Sales and marketing people share localized field insights on a quarterly basis</td>
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<tr>
<td>When Sales Directors perceive information to be inadequate, they introduce adjustments following their judgement</td>
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<tr>
<td>When Sales Directors perceive information to be inadequate, they consider Sales Representatives inputs to introduce adjustments</td>
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<tr>
<td>The goal setting process is not driven by information availability</td>
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<tr>
<td>When information is not on time Sales Directors use alternative methods to come up with sales quotas</td>
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<tr>
<td>The use of a formula to develop sales quotas is a good way to ensure objectivity in the sales quota allocation process</td>
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<tr>
<td>Sales Representatives understand the formula used to develop their sales quotas</td>
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<tr>
<td>District Managers understand the formula used to develop their sales quotas</td>
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<tr>
<td>The formula used to drill down the national sales forecasts into each territory considers “last year’s sales”</td>
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<tr>
<td>The formula used to drill down the national sales forecasts into each territory considers “actual market share”</td>
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<tr>
<td>The formula used to drill down the national sales forecasts into each territory considers other elements apart from “sales” and “market share”</td>
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<tr>
<td>Every variable included in the formula is objectively measurable</td>
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<tr>
<td>Sales Directors know the amount of sales developed exclusively by each Sales Representative</td>
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<tr>
<td>There are three formal meetings, at least, related to the goal setting process</td>
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<tr>
<td>Sales Directors explain the rationale behind the sales quotas developed, to their Sales Representatives</td>
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<tr>
<td>Sales Representatives voice their concerns if they disagree with the sales quotas received</td>
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<tr>
<td>Sales Representatives share their experiences on the field with their peers in at least one yearly meeting</td>
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<tr>
<td>Sales Representatives share their experiences on the field with the Product Managers in at least one yearly meeting</td>
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<tr>
<td>There is a formal process in place that allows capturing feedback from the field</td>
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<tr>
<td>Each Sales Representative works in an independent sales territory</td>
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<td>National sales forecasts are challenging but achievable</td>
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<tr>
<td>If national sales forecasts are unreasonable, Sales Directors introduce adjustments to ensure Sales Representatives still get a reasonable sales quota</td>
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<td>Sales territories have approximately the same size in terms of number of clients to be visited</td>
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<tr>
<td>Sales territories have approximately the same size in terms of market sales</td>
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<td>Factores que pueden contribuir al buen desarrollo de cuotas de ventas para delegados comerciales</td>
<td>Estoy muy de acuerdo</td>
<td>De acuerdo</td>
<td>En-medio</td>
<td>No estoy de acuerdo</td>
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<td>Que los Gerentes de Distrito puedan modificar las cuotas de ventas asignadas centralmente a sus delegados, manteniendo la cuota total de su distrito.</td>
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<tr>
<td>Que los Gerentes de Distrito participen en el desarrollo de las cuotas de ventas de sus delegados dando su opinión en una reunión comercial regional/nacional.</td>
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<tr>
<td>Que los delegados participen en el desarrollo de sus propias cuotas de ventas dando su opinión en una reunión comercial de su distrito.</td>
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<tr>
<td>Que las cuotas de ventas asignadas a los delegados puedan modificarse a lo largo del año en la medida en que ocurran eventos de mercado no previstos.</td>
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<tr>
<td>Que el proceso de desarrollo de cuotas para delegados sea idéntico para todas las líneas comerciales.</td>
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<tr>
<td>Que el proceso de desarrollo de cuotas para delegados hospitaleiros sea diferente al proceso utilizado para delegados de café.</td>
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<tr>
<td>Que los delegados no Hayes desempeñen una cuota de venta mayor que la que sugiere la fórmula de cálculo.</td>
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<tr>
<td>Que las cuotas de ventas asignadas a delegados se desarrollen en función del territorio independientemente del delegado responsable por el mismo.</td>
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<tr>
<td>Que las cuotas de ventas asignadas a delegados sean proporcionales al potencial de negocio de sus territorios.</td>
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<tr>
<td>Que los delegados perciban que sus cuotas de ventas son tan desfavorables como la de sus colegas en compañías competidoras.</td>
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<tr>
<td>Que los delegados perciban que sus objetivos son tan desfavorables como los de sus colegas en otras funciones de la compañía.</td>
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<tr>
<td>Que los Directores de Ventas tengan un estilo de gestión similar que asegure que todos los delegados son tratados de forma similar</td>
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<tr>
<td>Que la compañía cuente con un plan de incentivos que fomente la colaboración entre delegados a la hora de desarrollar las cuotas de ventas.</td>
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<tr>
<td>Que la mayoría de los Gerentes de Distrito esté de acuerdo con su asignación de cuota de ventas antes de que sea oficialmente aprobada.</td>
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<tr>
<td>Que los Gerentes de Producto elaboren los pronósticos de ventas basándose en potencial de pacientes, la competencia y eventos de mercado futuros, y, en el lugar de esto, consideren las tendencias históricas.</td>
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<tr>
<td>Que los Directores de Ventas comprendan el entorno de negocios de manera tal que sean capaces de evaluar la posibilidad de conseguir las cuotas de ventas asignadas a sus delegados.</td>
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<tr>
<td>Que exista un diseño del proceso de desarrollo de objetivos comerciales para la red de ventas.</td>
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<tr>
<td>Que los departamentos de Ventas y Marketing se reúnan por lo menos de forma trimestral a los efectos de discutir y comparar sus respectivos avances en los distintos mercados</td>
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<tr>
<td>Que los departamentos de Ventas y Marketing se reúnan de forma trimestral en el contexto del desarrollo de cuotas de ventas a asignar a los delegados.</td>
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<tr>
<td>Que los departamentos de Ventas y Marketing compartan inteligencia regional y específica de mercado de forma trimestral.</td>
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<tr>
<td>Que cuando los Directores de Ventas perciban que la información que reciben es inadecuada introduzcan ajustes en función de su juicio personal.</td>
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<tr>
<td>Que cuando los Directores de Ventas perciban que la información que reciben es inadecuada introduzcan ajustes basados en lo que los delegados les transmitan.</td>
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<tr>
<td>Que el desarrollo de cuotas de ventas para los delegados no esté dirigido por la información de cuál se dispone.</td>
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<tr>
<td>Que cuando la información que se utiliza para desarrollar cuotas de ventas a los delegados no llegue a tiempo, los Directores de Ventas utilicen métodos alternativos para desarrollar dichas cuotas.</td>
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<tr>
<td>La utilización de una fórmula matemática para desarrollar cuotas de ventas a delegados es una buena forma de asignar equitativamente la asignación de dichas cuotas.</td>
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<tr>
<td>Que los delegados comprendan la fórmula utilizada para calcular las cuotas de ventas asignadas en su territorio.</td>
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<tr>
<td>Que los Gerentes de Distrito comprendan la fórmula utilizada para calcular las cuotas de ventas asignadas en sus distritos.</td>
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<tr>
<td>Que la fórmula utilizada para calcular el pronóstico nacional de ventas a cada uno de los territorios considere las ventas del año anterior por territorio.</td>
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<tr>
<td>Que la fórmula utilizada para calcular el pronóstico nacional de ventas a cada uno de los territorios considere las ventas de mercado del año anterior por territorio.</td>
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<tr>
<td>Que la fórmula utilizada para calcular el pronóstico nacional de ventas a cada uno de los territorios considere otros elementos además de las ventas y la cuota de mercado del año anterior por territorio.</td>
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<td>Que los Directores de Ventas sean capaces de determinar exactamente que volumen de ventas es atribuible a cada uno de los delegados comerciales.</td>
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<td>Que haya por lo menos 3 formularios diferentes asociados al proceso de desarrollo de cuotas de ventas para los delegados.</td>
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<td>Que los Directores de Ventas expliquen los criterios y la lógica utilizada en el desarrollo de las cuotas de ventas a cada delegado.</td>
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<td>Que los Directores hagan un seguimiento cuando no está de acuerdo con la cuota de ventas que les fue asignada.</td>
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<td>Que los Directores compartan entre ellos sus experiencias en el campo al menos una vez al año en una reunión formal.</td>
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<td>Que los Directores compartan con los Gerentes de Producto sus experiencias en el campo al menos una vez al año en una reunión formal.</td>
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<td>Que haya un proceso formal de captura de información e inteligencia desde el campo.</td>
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<tr>
<td>Que cada delegado trabaje en un territorio geográficamente independiente, es decir que no haya territorios compartidos.</td>
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<td>Que los pronósticos nacionales de ventas sean desfavorables para a los delegados.</td>
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<td>Que cuando los pronósticos nacionales de venta no son razonables los Directores de Ventas introduzcan ajustes para que los delegados tengan unas cuotas de ventas razonables.</td>
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<td>Que los territorios de ventas tengan un tamaño similar en términos de número de clientes a atender.</td>
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<td>Que los territorios de ventas tengan tamaño similar en términos de potencial de ventas.</td>
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### J) Descriptive statistics

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### L) T-test on nature

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**Anmerkungen**:
- Die Tabelle enthält die Überschriften der Kapitel 1 bis 3.
- Die Seitenzahlen zeigen die entsprechenden Seiten an.
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<tr>
<td>Review of the Data</td>
<td>The data is reviewed to ensure accuracy and completeness.</td>
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<tr>
<td>Analysis of the Data</td>
<td>The data is analyzed to identify trends and patterns.</td>
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<tr>
<td>Decision Making</td>
<td>A decision is made based on the analysis.</td>
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<td>Action Taken</td>
<td>The appropriate action is taken based on the decision.</td>
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<td>Feedback</td>
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The process is designed to handle large volumes of data efficiently and effectively. The use of advanced analytics and machine learning algorithms helps to identify important patterns and trends, enabling more informed decision-making. The feedback loop is crucial for continuous improvement and adaptation to changing conditions.
References


26, pp. 413-418.


133. IMS Health (2008), IMS Health Financials, IMS Health, Madrid,


171. Lidstone, J. (1990), 'How to Plan the Sales Operation', Marketing Intelligence and Planning, Vol. 8, No. 4,


