

Instituto Superior das Ciências do Trabalho e da Empresa



STRATEGY TOOLS' USE IN THE LARGEST COMPANIES IN PORTUGAL

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ABSTRACT

Strategy as practice is an emergent view in strategy research that focuses on the practical things of strategy, that is, the practitioners, the practices and the *praxis*. In this perspective, strategy tools such as SWOT Analysis, Scenario Analysis or Balanced Scorecard are strategic practices around which strategic activities take place.

This dissertation departs from a practice perspective to examine the use of strategy tools in the largest companies in Portugal. The main goal is to find the most popular strategy tools and to describe their use in companies. This is relevant since it is reported in the literature that companies invest vast resources to acquire and implement these tools. Moreover, strategy tools are important vehicles to turn theories actionable in practice.

It was adopted a mixed method research that comprises the utilisation of two data collection techniques. Firstly, a questionnaire was applied to obtain a broad overview about the use of strategy tools. Secondly, seven interviews were done in different companies to better understand the questionnaire results and to get more detailed information about strategy tools' use.

In terms of results, we found that SWOT Analysis, Scenario Analysis and Brainstorming are the most popular strategy tools in the largest companies operating in Portugal. Regarding strategy tools choice, we detected that managers' prime concern is rationality and efficiency. In the deployment of strategy tools, we discovered that managers typically adapt them to their needs and challenges.

Finally, this research suggests a framework to analyse the use of strategy tools. Our model comprises four elements: strategy tools, strategy practitioners, context and *praxis*.

Keywords: strategy-as-practice, strategy tools, strategizing, practices

JEL Classification System: M10 and M19

RESUMO

A Estratégia enquanto prática é uma perspectiva emergente na investigação em estratégia que foca nas coisas práticas da estratégia, isto é, nos práticos, nas práticas e na *praxis*. Nesta perspectiva, ferramentas estratégicas como a Análise SWOT, a Análise de Cenários e o Balanced Scorecard são práticas estratégicas à volta das quais se desenvolvem actividades estratégicas.

Esta dissertação parte de uma perspectiva prática para examinar a utilização das ferramentas estratégicas nas maiores empresas em Portugal. O principal objectivo é a identificação das ferramentas estratégicas mais populares e a descrição da sua utilização nas empresas. Isto é relevante uma vez que é referido na literatura que as empresas investem vastos recursos para adquirir e implementar estas ferramentas. Para além disso, as ferramentas estratégicas são veículos importantes para tornar as teorias accionáveis na prática.

Foi adoptada uma metodologia de investigação mista que compreende a utilização de duas técnicas de recolha de dados. Em primeiro lugar, aplicou-se um questionário para obtermos uma perspectiva ampla sobre a utilização das ferramentas estratégicas. Em segundo lugar, realizou-se sete entrevistas em diferentes empresas para melhor compreendermos os resultados do questionário e para obtermos informação detalhada sobre a utilização das ferramentas estratégicas.

Em termos de resultados, verificou-se que a Análise SWOT, a Análise de Cenários e o Brainstorming são as ferramentas estratégicas mais populares nas maiores empresas a operar em Portugal. No que respeita à escolha das ferramentas estratégicas, detectou-se que a principal preocupação dos gestores é a racionalidade e a eficiência. Na utilização prática das ferramentas estratégicas, descobriu-se que os gestores tipicamente as adaptam às suas necessidades e desafios.

Finalmente, esta investigação sugere um quadro de referência para analisar a utilização das ferramentas estratégicas. O nosso modelo compreende quatro elementos: ferramentas estratégicas, práticos da estratégia, contexto e *praxis*.

Palavras-chave: estratégia-enquanto-prática, ferramentas estratégicas, strategizing, práticas

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LIST OF ABBREVIATIONS

CEO: Chief Executive Officer

NZ: New Zealand

PEST: Political, Economical, Social and Technological

SaP: Strategy as Practice

SMEs: Small and Medium Enterprises

SWOT: Strengths, Weaknesses, Opportunities and Threats

UK: United Kingdom

CHAPTER 1 - INTRODUCTION

1.1 The Introduction

Strategy has a vital role in the direction of the most powerful organizations on the planet (Whittington *et al.*, 2003; Whittington, 2004) and thus it is a central theme of our civilization (Rumelt *et al.*, 1994). In other words, strategy can be more or less explicit, more or less formal but it appears indubitable that without it people, organizations and the world would be inevitably worse, perhaps lost in multiple paths lacking a way out. This means it is natural that the word strategy abounds everywhere; we hear it several times in a single day, in different contexts, spelled out by distinct actors.

Furthermore, in the last decades we have observed an increasingly dynamic and turbulent environment, where change seems to be something unavoidable and ubiquitous. This scenario of permanent instability boosts strategy significance, since its object of study is the relationship between organizations and their environment (António, 2003).

This increased complexity agonises the limitations of human cognition (March and Simon, 1958; Simon, 1955) and the bias in strategic decisions. In this light, companies throughout the world search for strategic practices that enable them to handle the environment volatile conditions. Therefore, strategy tools (such as SWOT Analysis, Scenario Analysis or Balanced Scorecard), which are types of strategic practices that support strategy-making, have progressively gained importance in organizational life.

In fact, strategy tools are important to create a sense of organizational direction and to improve strategic thinking (Clark, 1997). Besides, companies usually invest vast amount of resources (e.g. time, money and intellectual capital) to acquire and implement these tools (Rigby and Gillies, 2000; Rigby, 2001).

Additionally, strategy tools are not only important for practitioners in their organizations but also relevant to academics, because they serve as a vehicle to turn theory actionable in practice (Jarzabkowski and Wilson, 2006).

Considering the growing importance of strategy tools in today's unpredictable environment, there is little research about these kinds of tools. More specifically, there is a lack of knowledge about strategy tools' use in companies. This view is sustained with the few researches in the literature that explicitly address this issue. Moreover, in Portugal, little attention has been expressly directed to this subject, what opens a fruitful avenue of research.

In addition, several authors claim that strategy research has been trapped in abstraction and has not focused on the real practice of strategy, that is, we know little about the practitioners, the practices and the practice of strategy (Hafsi and Thomas, 2005; Regnér, 2003; Thomas, 2006; Whittington, 2002). Hence, strategy as practice perspective (Jarzabkowski, 2005; Jarzabkowski *et al.*, 2007; Whittington, 2002; Whittington 2006) emerged to address these practical things of strategy. This approach can bring some interesting insights to strategy field and it highlights the importance of analysing strategy tools (a type of practices). For this reason, it makes sense to depart from this practice perspective to study strategy tools' use in companies. This approach can yield significant benefits.

Firstly, developing an improved comprehension about strategy tools may enable a greater understanding of strategy-making in today's organizations.

Secondly, addressing the problem of strategy tools' use may provide valorous insights to both academics and practitioners. The former's may create better tools, may design better teaching methods and may undertake deeper research to increase strategy tools' value. The latter's may augment their comprehension about these instruments and then use them in more effective and creative ways in order to reach superior organizational performance in highly unpredictable environments.

Thirdly, providing a better description of strategy tools' use may allow a greater level of abstraction and reflection that may also help consultants and consulting firms to improve their approaches.

On the bottom line, generating knowledge about strategy tools' use in companies may increase the effectiveness of strategy endeavours in organizations, especially by enhancing organizational vision, creativity and efficiency.

The picture depicted in the previous lines, kindled our interest about this topic and rose in our minds some initial questions that we would like to share: which tools are used by companies?; how companies have access to them?; why are they used?; what are the difficulties in their use?; how are they used?; what functions they perform?

The above interrogations express some of our concerns about the topic we want to study. Thus, we are eager to find some answers and insights to respond to these questions and others that may arise.

In this sense, our research intends to describe the use of strategy tools in the largest companies operating in Portugal. Our aim is to provide a general picture of strategy tools' use and to lay the foundations for an increased reflection, understanding and debate about their role in modern companies. We mainly direct our attention to strategy tools as a whole and not

to the detailed use of specific tools. This approach is taken because there is a need to describe and understand, in general terms, the role of these tools in strategy-making.

Our research approach is mainly descriptive and relies on a mixed method research. Firstly, a large-scale survey is employed to provide a panoramic view of strategy tools' use. Secondly, in depth interviews are conducted to get more detailed knowledge about the usage of those tools and to better comprehend their role and importance in today's organizations. This mixed approach is employed because using quantitative and qualitative techniques normally generates complementary data that allows an ample description of the subject under study.

At last, we would like to make clear that our research will not produce definite answers about the use of strategy tools. Instead, we expect to generate a rich description that lays the foundations for theory building in future research.

1.2 Considerations on the Dissertation Structure

This dissertation is structured in six chapters. It starts with the introduction (the present chapter) where the circumstances and the reasons behind the development of this research are contextualized.

The second chapter presents the literature review, and is divided in two main sections. The first section briefly discusses strategy field's fundamentals. It begins by approaching the strategic management concept and the diverse strategic thinking perspectives extant in the field. Then, we reflect upon the evolution of strategy research so that we can better frame and position this research. In the second section, we focus on the perspective that orients this dissertation. Firstly, some general ideas about practice theory are discussed. Secondly, the emergent field of strategy as practice (the framework that guides this research) is approached in detail. Thirdly, strategy tools' literature is examined. Finally, the last section of this second chapter summarises the observations made in the literature review, and explains how these shape the research questions formulated.

The third chapter put forward the methodology used in this dissertation. We begin by synthesising the main objective, the contributions and the research questions. Then, we discuss the strategy of enquiry adopted and we explain our methodological choices. Afterwards, we undertake a detailed description of the instruments and procedures applied. Since we employed two data collection techniques we divided this section into two (questionnaire and interview procedures). Before closing the methodology chapter, we briefly

discuss the role and experience of the researcher of this dissertation so that our readers can have information to judge how this can affect the research conducted. This chapter concludes with some final notes on the reliability and validity of the present research.

The fourth chapter presents the results and is divided in two sections. In the first, we begin with general considerations about the questionnaire employed. Then, we put forth the profile of the collected sample and afterwards we describe the results obtained. The second section also begins with general considerations about the interviews conducted and with the profile of the companies and executives interviewed. Subsequently, we briefly discuss the framework that oriented the analysis of the interview results. Finally, the interview results are provided.

The fifth chapter comprises the discussion of the results. We put together the findings obtained in each stage of our research and we undertake a discussion on the responses they bring to our initial research questions.

The last chapter contains the conclusions drawn, the limitations of the dissertation and the suggestions for future research.

CHAPTER 2 – LITERATURE REVIEW

2.1 Strategic Management Fundamentals

In this section, the fundamentals of strategic management are approached. This endeavour encloses total pertinacity because it is relevant to hold a macro view of the field in order to better frame this research.

2.1.1 Strategic Management Concept

It was only during the second half of the twentieth century that strategy concept was introduced in business (António, 2003; Ghemawat, 2002; Pettigrew *et al.*, 2002; Snow and Hambrick 1980). Thus, Chandler (1962) was probably the first to study strategy academically and to advance with a formal definition to the concept. The author defined strategy as “...the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals” (Chandler 1962: 13).

Since that time several other authors leaned over the study of strategic management adding a diversity of concepts, frameworks, perspectives and viewpoints. Hence, it is possible to identify different perspectives over the definition of strategy (Hofer and Schendel, 1978). On the one hand, there is a broader concept that usually includes both the ends (goal and objectives) and the means. On the other hand, there is a narrower perspective that only includes the means as part of strategy. This vitality has been interesting to the field advancement but may also be the reason for the lack of agreement on strategy concept (Bourgeois, 1980; Gluck e Kaufman, 1982; Hafsi and Thomas, 2005; Hambrick, 1980; Hofer and Schendel, 1978; Mintzberg, 1987).

Taking into account the scenario portrayed, it can be concluded that strategy is a multidimensional concept (Hambrick, 1980; Hax and Majluf, 1996) which can turn it complex to grasp and understand. For Mintzberg (1987), part of the bewildering in the field is rooted in ill-defined uses of the term. However, the “explicit recognition of multiple definitions can help practitioners and researchers alike to manoeuvre through the difficult field” (Mintzberg (1987: 11). For instance, the author presented five definitions of strategy: as a plan (a consciously intended course of action), a ploy (a manoeuvre intended to outwit an opponent or competitor), a pattern (consistency in behaviour whether intended or not), a

position (locating organization in the environment) and a perspective (ingrained way of perceiving the world).

Although the picture drawn illustrates a diversity of perspectives on strategic management concept, it is feasible to identify some areas of agreement: strategy embraces the relationship between the organization and its environment, strategy substance is complex, it affects the welfare of the organization, it involves both the content and process, it may be deliberate or emergent and it exists at different levels. Apart from these broad agreements it seems that divergence prevails (Chaffee, 1985).

To conclude, we cite Andrews (1971:18) in order to hold a more concise view of strategy concept. Thus, he conceived strategy as “the pattern of decisions in a company that determines and reveals its objectives, purposes, or goals, produces the principal policies and plans for achieving these goals, and the range of business the company is to pursue, the kind of economic and human organization it intends to be, and the nature of the economic and noneconomic contribution it intends to make to its shareholders, employees, customers and communities.”

2.1.2 Strategy Thinking Perspectives

Strategy is a diverse field where multiple perspectives were raised during the past decades. In fact, McKiernan (1996) outlined that strategy travelled through many disciplinary avenues which poses some difficulties to attain a common pathway. Hart (1992) also advocated that a diverse and extensive conceptual development occurred in strategy arena. This made strategy literature fragmented since the different streams only lean over a portion of the content.

Taking this into consideration, several authors sought to build up models to integrate the variety of viewpoints in the literature (Rosa and Teixeira, 2002). Chaffee (1985) provided three models of strategy (linear, adaptive and interpretative) based on what she found on the literature. Hart (1992) suggested five modes of strategy-making processes: command, symbolic, rational, transactive and generative, and McKiernan (1996) considered that strategy thinking could be partitioned into four schools: Planning and Practice, Learning, Positioning and Resource-Based.

Although the aforesaid authors made a noteworthy contribution to strategy field, Henry Mintzberg developed the most comprehensive and complete systematization of the different strategy perspectives (Mintzberg, 1990; Mintzberg *et al.*, 1998). In this respect, Rosa and Teixeira (2002) stood out that Mintzberg approach is the easiest to hold, and Tsoukas and

Knudsen (2002) observed that it covers almost all developments in strategic management. Mintzberg (1990) presented ten different strategy schools. He divided the schools into normative (design, planning and positioning) and descriptive (entrepreneurial, cognitive, learning, power, cultural, environmental and configuration).

According to the scenario portrayed, strategy field has become very eclectic and diversified as the time passed. Instead of accumulating knowledge under a central paradigm, the field has grown in different directions. Nonetheless, the theoretical pluralism is essential to foster the field development (Bowman *et al.*, 2002). Therefore, strategy needs to be framed in a multi-paradigmatic way because of the complexity and nature of the problems it intends to understand and explain. Additionally, in face of the globalization phenomenon and the rapid technological changes, the research questions in the field need to be examined through different theoretical lens. Put differently, strategy problems are too complex to be understood through a single set of assumptions or a dominant method of research. Thus, since clinging to a unique paradigm will not challenge many important issues and ideas, the field must embrace multiple theories, multiple methods and multiple data sources (Hoskisson *et al.*, 1999; Rumelt *et al.*, 1994). However, it is not easy to hold such a diverse set of theoretical perspectives. In this light, Gavetti and Levinthal (2004: 1309) advise “although this intellectual diversity is both appealing and a source of robustness, it also poses enormous challenges for the coherent development of strategy as a field, and may perhaps relegate strategy to a low paradigm status”. From our vantage point, it is possible to reap tremendous benefits from a pluralistic approach if some cautions are taken into consideration.

Building on these foundations, our research aims to follow this tradition of pluralism by approaching strategy through a theoretical perspective that is relatively recent.

2.1.3 Research Evolution in Strategy Field

Before delving into the main subject of this research we bring to the surface the usual research questions addressed by strategy field and the common approaches and methods used. This endeavour is valorous because “before we as scholars determine what lens to use, we should have a good understanding of the terrain” (Prahalad and Hamel, 1994: 15).

Strategy research is concerned with the direction of organizations (Rumelt *et al.*, 1994; Tsoukas and Knudsen, 2002; Whittington *et al.*, 2003), with how they make choices and commitments (Markides, 1999; Porter, 1996; Tsoukas and Knudsen, 2002) and with creating competitive advantage (Tsoukas and Knudsen, 2002). In this regard, the typical questions are

why are some firms more successful than others? and how can we make a given firm more successful? (Bowman *et al.*, 2002). Besides, according to Rumelt *et al.* (1994) the fundamental questions in the field are: how do firms behave?; why are firms different?; what is the function of headquarters unit in a diversified firm?; what determines success or failure in international competition?;

To put it concisely, “the classic questions of strategy have been about the purposes, direction, choices, changes, governance, organization and performance of organizations in their industry, market and social, economic, political contexts” (Pettigrew *et al.*, 2002: 3).

We now direct our attention to strategic management research evolution. To begin with, the research methods used in the field were mainly “borrowed” from the more established social sciences like economics, sociology and psychology (Hafsi and Thomas, 2005). This may be one of the reasons for the growth of strategic management as a plural subject.

The primary works in the field were accomplished by authors like Chandler (1962), Ansoff (1965) and Learned *et al.* (1965). These studies were essentially very detailed case studies about the firms' internal processes and managers' role (Hoskisson *et al.*, 1999). The authors embraced inductive approaches that included historical analysis, comparative studies and detailed case studies (Bowman *et al.*, 2002; Hoskisson *et al.*, 1999; Rumelt *et al.*, 1994). Therefore, this first generation was characterized by in-depth research that lacked generalizations and scientific rigour.

During the 1970s and especially in the beginnings of the 1980s (with the rise of the positioning school), the field strongly embraced economic theory and moved from inductive case studies towards a more deductive approach based on large-scale statistical analysis intending to validate scientific hypothesis. Thus, the field adopted large-scale surveys and archival data, used sophisticated statistical analysis techniques and carried out more correlational and causal research. We witnessed a move from a research focus on the firm to a focus on the industry or group of firms. Apart from the strategy conduct performance paradigm (positioning school), other approaches like transaction cost economics and agency theory were used to enrich theory robustness (Rumelt *et al.*, 1994). In summary, this intermediate stage embraced a positivistic approach in search for generalizations and lifted the field to a more rigorous and scientific academic discipline (Hafsi and Thomas, 2005; Hoskisson *et al.*, 1999).

During the late 1980s and the 1990s, more plural research approaches emerged. The rise of resource based view brought back inductive case-based methods focused on a single firm or a small group of firms. They combined these inductive approaches with deductive ones based

on large scale surveys and data sets. Hence, the field focused on quantitative questionnaires, qualitative interviews and sophisticated case studies (Hoskisson *et al.*, 1999). During this period, the focus moved again from the external environment (industry) to the internal environment (firm).

Another line of research is the process approach (Bowman *et al.*, 2002; Pettigrew *et al.*, 2002). Although less sound than other streams in the field it made a contribution to break extant dichotomies (e.g. formulation and implementation, content and process). This approach focused on longitudinal (with retrospective and real-time analysis) and historical studies (Pettigrew *et al.*, 2002).

In a nutshell, Hoskisson *et al.* (1999) compared the evolution of strategic management research to a swing of a pendulum that was initially inwardly focused then moved outwards and then came back to focus inwards again. Each swing signalled new theoretical paradigms and methodological approaches, and helped the field to look towards an ample set of research questions. Thus, the swing of the pendulum helped to accumulate new theories and methodologies.

According to some authors strategy research evolution, especially after the 1970s, has been dominated by modernistic assumptions which are excessively enclosed in the notions of choice and rationality and focus almost exclusively on deductive and quantitative approaches (Hafsi and Thomas, 2005; Tsoukas and Knudsen, 2002). In particular, Furrer *et al.* (2005) provided evidence that Strategic Management Journal articles' have predominantly published quantitative based researches. Therefore, Tsoukas and Knudsen (2002: 414) concluded that "The dominant tradition in SM [strategic management] argues that the goal of strategic management is to find statistical associations between important variables in order to identify regularities, causal statements and even laws in firms' behaviours". For the aforementioned authors, this dominant approach has not been able to embrace endogenous change and creative action. Though, strategy research ought to lay more emphasis on process explanations, because this will help to embrace novelty, human agency and to bring closer thought and action. This is an important matter because several authors consider that strategy research has produced little practical knowledge (Baldrige *et al.*, 2004; Hafsi and Thomas, 2005; Jarzabkowski, 2004; Jarzabkowski and Wilson, 2006; Thomas, 2006; Whittington, 2002). Taking into consideration that strategy is grounded in practice (Rumelt *et al.*, 1994), it is vital for the field to pursue research that addresses the double hurdle of academic and practical relevance (Gopinath and Hoffman, 1995; Pettigrew *et al.*, 2002; Whittington *et al.*,

2003). Accordingly, strategy requires developing approaches and methods that bring together practice and theory, and that incorporates complexity (Hafsi and Thomas, 2005).

In face of the reported challenges, a range of authors advocate that strategy field is now going beyond its modernistic assumptions to embrace a more plural reality that will allow it to better address and explain its problems of interest (Pettigrew *et al.*, 2002; Tsoukas and Knudsen, 2002; Whittington *et al.*, 2003).

In line with these trends, this dissertation relies on an emerging view (strategy as practice) which departs from the social practices theories in order to explain strategy phenomena. From our standpoint, this perspective has the potential to deliver important and valorous insights to strategy field, increasing its richness as well as contributing to build a stronger and more robust theory of strategic management. Nonetheless, we do not diminish the relevance of any other perspectives in the field. We also do not think that the approach we will follow is superior to any other. We just believe that accepting and embracing pluralistic perspectives and methods enable us to answer different kinds of problems and this contributes to the field advancement. It is with this spirit and motivation that we conduct this research.

2.2 Strategy as Practice Perspective

In this section, the building blocks of the dissertation are addressed. Firstly, it is highlighted the practice turn in contemporary theory which is the genesis of our approach. Subsequently, the strategy as practice perspective is discussed. This emerging view lies on the social practice theory and applies its perspective to strategy field, purposing a different approach to the study of strategy. Finally, our attention centre in strategy tools which are the very focus of this research. We frame it under a practice perspective because strategy tools are an important kind of strategic practices that deserves empirical and theoretical attention. Furthermore, we feel that conceiving them as social practices hold the potential to break with traditional approaches and therefore provide a different angle that can be very insightful.

2.2.1. The Practice Turn in the Contemporary Theory

The paradigmatic turn towards practices has its philosophical background in the works of Ludwig Wittgenstein and Martin Heidegger (Reckwitz, 2002; Schatzki, 2001). It also celebrates the works of Bordieu, de Certeau, Foucault and Giddens (Whittington, 2006).

According to Turner (1994: 1) “Practices, it would appear, are the vanishing point of twentieth-century philosophy. The major philosophical achievements of the century are now widely interpreted as assertions about practices, even though they were not originally couched in this language”. In the same direction, Sztompka (1991) advocates that we have been witnessing a paradigm shift in sociology, which moves our focus from the social totalities towards human individuals and their actions. Besides, the references to practices have increased dramatically in several academic disciplines (Schatzki *et al.*, 2001). Therefore, we have been observing the emergence of practice theories, which have surfaced as alternatives to the modern and high modern social theories. This recent view fiercely opposes to the hyper rational and intellectualized picture of the human agency and the social world that was typical in past approaches. Indeed, practice theories lay emphasis on the everyday activities of the real world. Put differently, they conceive practices as the core of human life because actions are embedded in practices and human beings are constituted through them (Reckwitz, 2002; Schatzki *et al.*, 2001). Apart from this broad agreement there is no unifying paradigm about a theory of practice since there are multifarious and conflicting views. Put another way, there are diverse theories and approaches that have the label of practice theory (Reckwitz, 2002; Schatzki *et al.*, 2001).

The work of Reckwitz (2002) provides a rapid overview of practice theory. He systematized and proposed an idealized theory of social practices based on the theoretical ideas of various authors. Hence, practice theory is part of the cultural theories (such as mentalism, textualism and intersubjectivism), and in contrast with the long seated views of *homo economicus* (explains action through individual purposes, intents and interests) and *homo sociologicus* (explains action through collective norms and values), it builds on symbolic structures of meaning. Thus, cultural theories have recourse to different units of analysis to explain action (mentalism focus on mind, textualism on discourses, intersubjectivism on interactions and practice theory on practices). In fact, the very focus of practice theory is upon practices “...a routinized type of behaviour which consists of several elements, interconnected to one another: forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge” (Reckwitz, 2002: 249). In this vein, practice theory places the social in practices not in mind, discourse, interaction, purposes or norms. It defends that human beings are carriers of practice, that is, “...a carrier of patterns of bodily behaviour, but also of certain routinized ways of understanding, knowing how and desiring” (Reckwitz, 2002: 250).

This view advocates that the field of practices is the place to investigate such phenomena as agency, knowledge, language, ethics, power, and science (Schatzki *et al.*, 2001).

Although practice theory yet suffers from a lack of systematic analysis, it is undisputable that it brought something new to the social theory vocabulary and it provided the building blocks to look in a different angle towards the social phenomena. Furthermore, its vocabulary is strong enough to mould and change our self-understanding, that is, the way we define our position as human beings in the world.

In summary, this perspective brings a whole new way of looking to the social phenomena and it opens up several opportunities of research in a variety of academic fields. Hence, we will use its broad notions to have new sights over strategy. However, as Barnes (2001: 19) alerted “...any attempt to give a satisfactory description of social life must make reference to much else besides practice”. It is because of this awareness that we fiercely defend that pluralism approaches are needed in strategy research.

2.2.2. Strategy as Practice – A New Field in Strategic Management

Previously, the practice turn in contemporary theory was outlined (Schatzki *et al.*, 2001). This movement is now widely spread across several areas of knowledge including management research and more recently strategy research. In the next pages, the inner of the emergent field of strategy as practice (SaP) is approached. Firstly, some reasons and circumstances that created the conditions to SaP emergence are surfaced. Secondly, SaP concept and focus is discussed. Thirdly, the SaP core framework is presented. Fourthly, the SaP benefits and challenges are addressed. Finally, we direct our attentions towards SaP research agenda. Some empirical researches accomplished under this practice perspective are addressed and the methods employed are discussed. The main research opportunities and challenges are raised.

2.2.2.1 Strategy as Practice Emergence

In the first part of the dissertation, it was discussed the significant advancement in strategy field during the last four decades. Notwithstanding, for a number of authors strategy research has yet produced little concrete and actionable knowledge. This view is largely emphasized in the literature. Regnér (2003) advocated that we know little about the way managers do and create strategy and Whittington (2002) argue that we have little concrete knowledge about strategy work, strategy practitioners and strategy practices, in other words, we have modest

knowledge about the real world of strategy. Hafsi and Thomas (2005) recognize that most strategy research does not address issues of relevance for practitioners; Thomas (2006) observed that strategy discourse has produced little practical insights.

Several other authors questioned the relevance of strategy theory to practice saying that strategy knowledge is not actionable in practice (Baldrige *et al.*, 2004; Jarzabkowski 2004; Jarzabkowski and Wilson, 2006).

In fact, for some scholars, strategy research has been littered by a disproportionate focus on modernistic and positivistic assumptions that resulted in scientific detachment and excessive abstraction. Therefore, we are observing a diminishing faith and an increasing frustration in these rational and normative approaches which raise the need for alternative views (Clegg *et al.*, 2004; Jarzabkowski, 2005; Lowendahl and Revang, 2004; Whittington, 2004; Whittington *et al.*, 2004).

Indeed, there is an audible claim in the literature for a closer interconnectedness between theory and practice, between academics and practitioners so that a better understanding of the real problems can be achieved (Maclean and Macintosh, 2002; Tranfield and Starkey, 1998; Whittington, 2004).

Consistent with the above, there are also remarks that strategy research has been too concerned with the macro level and overlooked the micro level activities and processes. Consequently, the literature fails to explain how these micro processes really work and how important they are to broader levels. Accordingly, strategy research need to care about the micro level in order to grasp the field's real problems (Balogun *et al.*, 2003; Chia, 2004; Jarzabkowski *et al.*, 2007; Johnson *et al.*, 2003; Regnér, 2003; Thomas, 2006).

Furthermore, we nowadays live in an increasingly turbulent, complex and fast changing environment that creates everyday new challenges to deal with (Lowendahl and Revang, 2004). This reality of increasing pluralism (Jarzabkowski and Fenton, 2006), where the success relies on the detail, urges us towards new conceptions of strategy field (Johnson *et al.*, 2003; Whittington *et al.*, 2006). This view is reinforced by Jarzabkowski (2005: 2) who stated that we are already moving "...from static, parsimonious and generalized forms of theorizing to dynamic and complex explanations that reflect practice".

In a nutshell, all the circumstances above together, specifically, the call from practitioners and some academics for more concrete and useful research (focusing on the micro level), the broader practice turn in contemporary social theory, and the increasing complexity, turbulence and pace of the change of the environment created the appropriate context for the emergence of a new and strong perspective in strategic management field.

2.2.2.2 Strategy as Practice Concept and Focus

Strategy under the umbrella of strategy as practice is generally conceived as a situated and socially accomplished activity that arises from the actions and interactions of multiple actors (Jarzabkowski, 2005). Hence, for SaP scholars', strategy is something an organization and its people do, rather than the traditional perspective that views strategy as something an organization possesses (Jarzabkowski, 2005; Jarzabkowski *et al.*, 2007; Whittington *et al.*, 2004; Whittington 2006). Some authors use the gerund strategizing to emphasize the concept of strategy as a continuous flow of activity.

Building on these foundations, the field's main concern is the detailed aspects of strategy, that is, the messy realities of doing strategy, (Balogun *et al.*, 2003; Jarzabkowski, 2005; Johnson *et al.*, 2003). This implies paying much more attention to the practical craft of strategizing (Whittington *et al.*, 2006), looking to the work of people inside organizations (Whittington, 2003), focusing on the varying levels of the minutiae of strategizing (Chia and MacKay, 2007), and in individual and group activities (Johnson *et al.*, 2003). From this vantage point, SaP intends to shift the traditional focus on macro processes towards micro processes, people and their interactions (Chia and MacKay, 2007; Jarzabkowski, 2005; Johnson *et al.*, 2003; Wilson and Jarzabkowski, 2004). To sum up, "strategy as practice is thus concerned with the detailed aspects of strategizing; how strategists think, talk, reflect, act, interact, emote, embellish and politicize, what tools and technologies they use, and the implications of different forms of strategizing, for strategy as an organizational activity" (Jarzabkowski, 2005: 3)

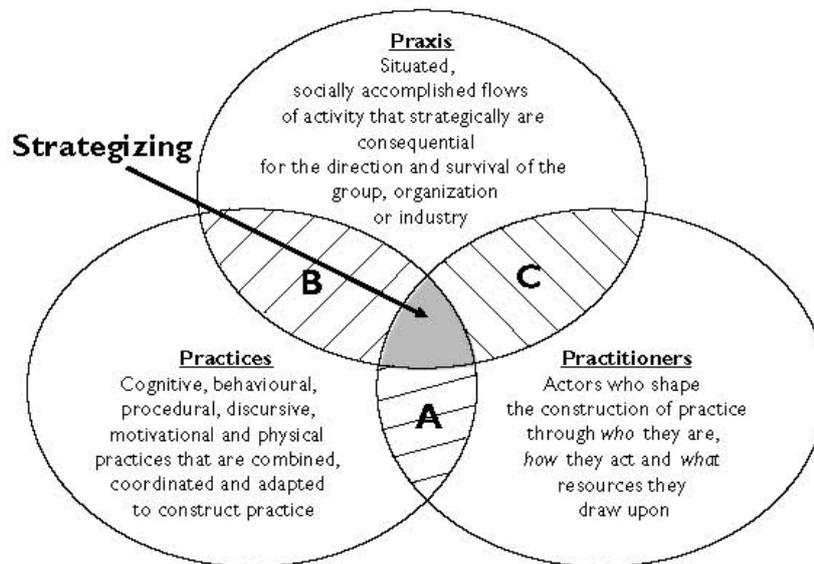
SaP has a broader scope that extends beyond the typical focus on organizational performance. Put differently, SaP embraces more dependent variables in their research endeavours (Hendry and Seidl, 2003; Whittington, 2002; Whittington, 2004; Whittington, 2006). According to Whittington (2006), SaP focus goes beyond organizational performance to consider episodes, practitioners, practices and practice as important units of analysis. Thus, Whittington (2004) identifies three levels of analysis as a matter of relevance for SaP: societal (concern for the impact of the broad field of strategy on the whole society), organizational (concern for firm performance), and managerial (concern for strategy practitioners and their work).

Armed with this understanding of the field, it is now pertinent to provide the theoretical framework that gives some consistence to this perspective.

2.2.2.3 Strategy as Practice Framework

The concern about the theoretical robustness of SaP is recurrent in the field. However, Jarzabkowski *et al.* (2007: 19) demystify this invoking "...strategy-as-practice as a field is characterized less by what theory is adopted than by what problem is explained". For them, the field can prove very useful by providing a framework (Figure 1) that enables to explore and answer problems using other theoretical lens.

Figure 1 – Strategy as Practice Framework



Source: Adapted from Jarzabkowski *et al.* (2007: 11)

SaP framework is formed by three vital elements: *praxis*, practitioners and practices (Jarzabkowski, 2005; Jarzabkowski *et al.*, 2007; Whittington, 2002; Whittington 2006). The interaction between them makes strategizing (the doing of strategy). Besides, these elements are highly interconnected and it is not possible to study one and not cover aspects of the others. Thus, any research under SaP framework will be connected to the three elements, although one may be the main focus. Following, the concept of each element of the framework is discussed.

Praxis is the whole human action (Reckwitz, 2002), is the result of what practitioners do and the activities they undertake in the deliberate orchestration of strategy (Whittington *et al.*, 2004). Additionally, for Jarzabkowski *et al.* (2007: 11) *praxis* are "situated, socially accomplished flows of activity that are strategically consequential for the direction and survival of the group, organization or industry". Whittington *et al.* (2006: 619) also adds

“...the domain of *praxis* is wide, embracing the routine and the non-routine, the formal and the informal, activities of the corporate centre and activities at the organization periphery”. They also posit that board meetings, team briefings, presentations, simple talks, management retreats are all episodes where *praxis* take place. Although they say that practitioners hold a strong responsibility for *praxis* effectiveness, they also advert that *praxis* can shape practitioners, and this is the kind of interactions and linkages that it is pertinent to grasp. Another matter of consideration is that *praxis* can originate new practices. In this regard, Morrison and Wensley (1991) carefully described how BCG matrix grew as a result of several years of work and interaction with several clients.

We now change our attention towards practitioners. They are the critical connection between practices and *praxis*, their actions affect *praxis* and they may also act on practices adapting them and creating new ones (Whittington *et al.*, 2004). In fact, practitioners' actions and interactions shape strategic activity (Jarzabkowski *et al.*, 2007). However, they are also subjected to *praxis* and practices influence. Hence, the characteristics of practices and their typical use can constrain human actors to act in a certain way. In the same vein, *praxis* episodes in an organization or environment can shape the way practitioners act (Jarzabkowski *et al.*, 2007; Whittington *et al.*, 2004).

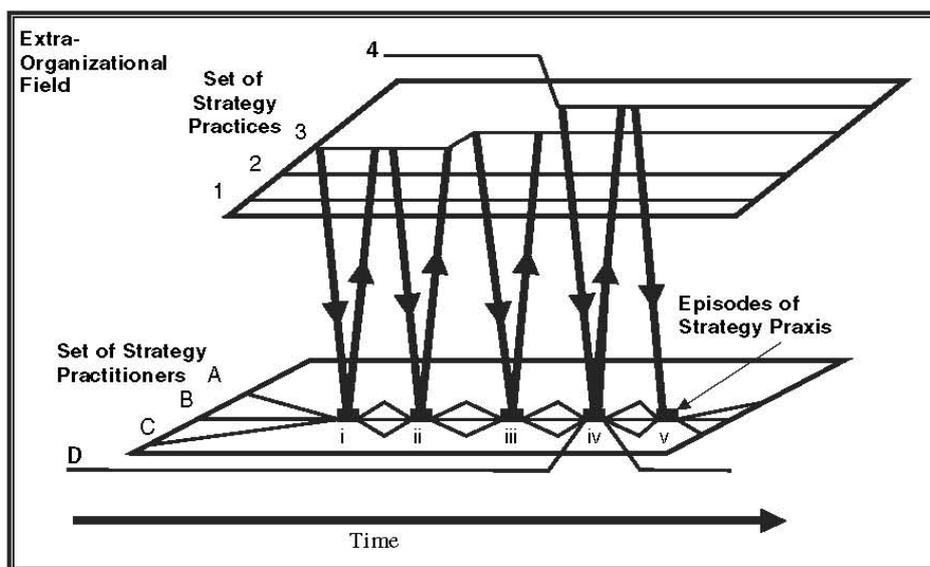
From SaP perspective, practitioners' activities are distributed, because complex social activities require the work, the knowledge and the competences of multiple actors (Jarzabkowski, 2005). Nevertheless, SaP acknowledges that top managers have greater influence in shaping strategy because they usually have more authority and more control over information. From this standpoint, SaP conceptualizes practitioners as a broad set of actors and not just top managers as is the case in traditional strategy theory (Jarzabkowski, 2005; Whittington, 2003; Whittington *et al.*, 2003). For Whittington (2003), strategy practitioners can be very diverse, including senior managers, middle managers, strategic planners, organization development experts, management consultants, communication specialists and even lawyers and investment bankers.

Regarding practices, Jarzabkowski (2003: 24) uttered “practices are those habits, artefacts, and socially-defined modes of acting through which the stream of strategic activity is constructed”. In this sense, practices are highly related to *praxis* because they are the source of the behavioural, cognitive, procedural, discursive and physical resources that provides the basis for the interaction of multiple actors in the accomplishment of the socially collective activity (Jarzabkowski *et al.*, 2007). Put succinctly, practices are those things used by practitioners to make *praxis* (Whittington, 2006). Hence, practices are very important because

their use and their characteristics can have huge effects (positive or negative) on *praxis*. An example of this was the impact of portfolio analysis and divisionalization practices in companies' strategy and performance (Whittington, 2006). This demonstrated the brunt that management fashion (Abrahamson, 1996) can have on companies if managers just rely on the fads of the moment without considering the real benefits of using certain practices. On this note, practices use is highly influenced by social structures, that is, the established practices and artefacts in a determined social setting (Jarzabkowski, 2004). These strategic practices can be determined by enterprise level (routines and formal procedures determined by corporate cultures and systems) and by societal level (influence of legislation, business schools, consulting firms or pioneer firms). In this context, practices' level of diffusion and the discourse associated with them in a specific moment of social evolution are elements that greatly influence the practices chosen by managers. Put another way, the dominant ideologies of society (what people are using and doing) highly influence practices used (Jarzabkowski, 2004).

Strategy workshops (Whittington *et al.*, 2006), board meetings and away days (Hendry and Seidl, 2003), formal operating procedures (Jarzabkowski, 2003), form filling and number crunching (Whittington, 1996), strategic tools such as swot analysis (Stenfors *et al.*, 2007) and strategy discourse (Samra-Fredericks, 2003) are all examples of strategic practices. Whittington (2006) provided a useful framework to display SaP dynamics (Figure 2).

Figure 2 – Strategy as Practice Framework – Displaying Dynamics



Source: Adapted from Whittington *et al.* (2006: 621)

It includes a set of practitioners (A to D), a set of practices (1 to 4) and a set of organizational *praxis* episodes (i-v). For example, we can observe that practitioners A, B and C (members of the organization) draw on a set of established (accepted as legitimate) intra-organizational practices (1 to 3) to make the *praxis* that constitutes episode i. If we look at episode ii, we observe that the same practitioners draw on the same practices to make *praxis*. However, as they do their *praxis* they are able to adapt (by improvisation or synthesis) practices (as in practice 3). They may also adopt and use a practice that comes from the world outside as is illustrated by practice 4 in episode iv. This new practice can be brought to the organization by an extra-organizational actor, as is shown in this episode (iv) by practitioner D (may be a consultant) that is outside the organization. We can also rely on this framework to illustrate a failure to introduce a new practice. We just need to signal that the practice outside of the organization failed to be absorbed and bounced back to the outside of the organization reality. To conclude, this framework is useful to display strategy practice dynamics and it is a foundation to understand and navigate through strategy as practice perspective. Therefore, it may be a useful starting point to address strategy field research questions.

2.2.2.4 Strategy as Practice Benefits and Challenges

According to Whittington (2006: 629) “The overarching promise of this practice approach to strategy is a societal shift towards better everyday *praxis*, empowered by more effective practices, and a deeper pool of skilled practitioners”. Besides, SaP focus on three fundamental and integrated elements of strategy-making which ultimately can lead to a superior understanding of the discipline. In this light, SaP research can strongly contribute to improve the performance of practitioners, organizations and even whole economies.

Thomas, (2006) remarked that SaP brings reality to a field traditionally littered by abstraction. By the same token, Jarzabkowski (2005) exhorted that SaP contributes to fade the traditional dichotomies such as content/process, intended/emergent, thinking/acting, and formulation/implementation. For Chia and Mackay (2007), SaP holds the potential to flatten the distinctions between micro and macro, by focusing on the promising field of social practices. Also, SaP promises to address traditional strategy questions and test existing theories. In this regard, Whittington (2003) pointed out that SaP can lead us to examine effectively how industry structure or resource-based view analysis are really performed on the ground. For him, strategy theory traditionally does not focus on what really happens and as a result we hold for years insufficiently tested theories and tools. In a more practical oriented

way, SaP may also illuminate how to better organize strategy episodes (Whittington, 2002). Although, this is the kind of work normally ignored in strategy theory and research it has a significant importance in the effectiveness of macro outcomes.

Briefly, SaP brings more intellectual progress, more units of analysis, more reality, an extended dependent variable, and the potential to widen our understanding of strategy field and to yield more palpable benefits (at several levels: managerial, organizational and societal) to strategy practice. In this respect, Johnson *et al.* (2003) claim that SaP findings' have the potential to be directly actionable in practice. Ultimately, understanding practice may lead to a better sophistication and application of theory (Jarzabkowski and Wilson, 2006).

We would not be sufficiently prepared to carry out a research under this perspective if we do not recognize the challenges it has to deal with. Hence, one of the biggest challenges faced by SaP is the micro/macro relation. The danger is that researchers enthusiasm with the micro activities entrap and detach them from the macro situations that they ultimately intend to explain (Chia and MacKay, 2007; Johnson *et al.*, 2003; Whittington, 2006; Whittington *et al.*, 2004; Wilson and Jarzabkowski, 2004). In particular, we have to be aware that micro activities are important because it is a myriad of such situations that build larger flows of activity, but we also must acknowledge that macro is relevant because it is institutionally embedded codes and rules that influence the interpretation and the actions at the micro level (Jarzabkowski, 2005). Consequently, we need to look towards the multiple interrelations between levels of analysis (Jarzabkowski *et al.*, 2007; Whittington, 2006; Wilson and Jarzabkowski, 2004). In order to address and eschew this dichotomy, it is important to seize an integrated view of strategy as practice field, by holding its framework that draws on the three fundamental elements approached before (Jarzabkowski, 2005; Jarzabkowski *et al.*, 2007; Whittington 2006).

Another important challenge is the difficulty to determine which of the myriad micro activities are strategically relevant (Chia and MacKay, 2007; Thomas, 2006). In this realm, Thomas (1996) described that although the focus of his research was on a formal strategic event arranged by the management director, the really important strategic activity occurred "behind the door" in an informal exchange of ideas in the corridor. This is the kind of situations that posit massive challenges for SaP research and strategy research in general.

Although acknowledging that important episodes and actions may occur in informal situations, Whittington *et al.* (2003) argue that the primary focus of SaP should be on the formal work of strategizing because this is generally associated with the investment of vast amounts of resources and it is also the kind of work that business schools teach and focus.

They defend that albeit some emergent and informal work is undeniably important a great deal of strategy work is formal, analytical and systematic. Conversely, Chia (2004) considers that looking only towards intentional and deliberate action is a contradiction with the logic of practice where SaP draws upon. By the same token, Chia and MacKay (2007) asserted that in general strategy-making occurs unconsciously and only occasionally it is deliberate. In this sense, SaP outcomes will be highly restrained by focusing only on human agency as the essential part of strategy-making. For them, SaP needs to focus on the internalized practices and their transmission because this is critical for strategy outcomes.

From our vantage point, both views can complement each other. Nevertheless, research towards internalized practices and unconscious actions has a higher degree of difficulty and it needs the development of appropriate research methods to face its challenges. The scenario portrayed in this section provided an enhanced understanding of the field which is helpful to better design this research.

2.2.2.5 Strategy as Practice Research

This section approaches strategy as practice research. Firstly, different empirical researches that have been conducted in the field are addressed. Subsequently, research challenges and methods to help the field advance further are discussed. Finally, the existing research opportunities are raised. This endeavour is important because it will ultimately influence our research choices.

2.2.2.5.1 Strategy as Practice Empirical Research

In order to hold a more accurate picture of SaP research endeavours, we briefly focus our attention in the empirical research that has been developed in the field. This is important to enhance our understanding about the types of research conducted and the methods employed. Table 1 summarises the empirical researches reviewed. The majority addressed micro activities or the detailed “doings” of practitioners. They focused on the different elements of SaP framework (practices, *praxis* and practitioners). Moreover, the methods used were generally fully comprehensive or descriptive in nature, relying most on case studies or ethnographies. Indeed, five out of the nine researches reviewed are in depth case studies (four of them of the longitudinal type).

Table 1 – Empirical Research under Strategy as Practice Perspective

Research Authors	Research Focus	Research Methodology
Hodgkinson and Wright, 2002	Strategy workshop failure	Case study
Jarzabkowski, 2003	Strategic practices	Longitudinal case studies
Maitlis and Lawrence, 2003	Failure of a symphony orchestra to build an artistic strategy	Longitudinal case study
Regnér, 2003	How managers create and develop strategy	Longitudinal case studies
Samra-Fredericks, 2003	Strategic linguistic skills	Ethnography
Vaara <i>et al.</i> , 2004	Strategy talk on the airline industry	Critical discourse analysis
Rouleau, 2005	How middle managers interpret and sell change	Ethnographic case study
Hodgkinson <i>et al.</i> , 2006	Strategy workshops	Large scale survey
Whittington <i>et al.</i> , 2006	Strategic practices (workshops, strategic change projects and symbolic artefacts)	Longitudinal case study

We also found two ethnographies among the nine, one discourse analysis and one large scale survey. This is in line with the appeal formalized by Johnson *et al.* (2003) that urged strategy researchers to embrace strategy practice perspective by focusing on micro activities and processes through minutely and real-time studies. Though, recently, there have been several voices of concern on a possible over focus on the micro activities with a consequent failure to make the links to macro outcomes. In this light, Whittington *et al.* (2004) suggest that we also need to draw on other methods not typical in the field. Following this reasoning, in the next section, SaP research methods and challenges are discussed.

2.2.2.5.2 Strategy as Practice Research Challenges and Methods

SaP research usually posits huge challenges because it often focuses on tacit, embedded and difficult to observe kinds of knowledge and activity (Balogun *et al.*, 2003). In order to address this situation, researchers should actively involve practitioners in the research process (Balogun *et al.*, 2003; Jarzabkowski, 2005; Johnson *et al.*, 2003). For instance, it can be a good idea to let practitioners cooperate in the definition of what is strategic (Jarzabkowski, 2005). However, Balogun *et al.* (2003) advert that researchers must deliver some benefits to practitioners in order to have their attention and collaboration.

Of equal importance is the need to undertake research that ensures a closer engagement with practice, in other words, researchers ought to immerse in practitioners' realities to grasp their activities. In this perspective, researchers have to maintain their minds wide open and hold a

research sensitivity that allows them to understand the social life complex phenomena. This is not to say that reported research does not hold value, it simply means that a more real-time approach can enrich outcomes (Chia and Mackay, 2007; Johnson *et al.*, 2003).

By the same token, connections between the micro and the macro level of analysis must be established. Hence, when a research under SaP is undertaken one has to clearly define the level of analysis, that is, how micro or macro the focus will be and how by studying what is intended we will provide insights to other levels (Wilson and Jarzabkowski, 2004). From this stance, we have to end with the micro/macro dichotomy and simply look at them as interrelated realities.

We now move on to discuss the research methods required to address SaP research questions. According to Balogun *et al.* (2003), the typical used methods to carry out research under SaP have been detailed case studies and ethnography. Moreover, the usual data collecting techniques have been interview, observation and documentation. This kind of approach is not suffice to answer the field problems (Balogun *et al.*, 2003). By the same token, Whittington (2004) asks for methodological pluralism in the field as a way to foster its progress and development. In this regard, Balogun *et al.* (2003) challenged researchers to increase practitioners' involvement and self-reflection. They suggested three new methods to approach strategy practice, namely interactive discussion groups (interactions episodes between practitioners), self-report methods (from unstructured questionnaires to diaries) and practitioner research (research undertaken by practitioners themselves). Although these are interesting suggestions, we need to go further and employ different research designs (Jarzabkowski *et al.*, 2007). In the same line of thinking, Whittington *et al.* (2004) express that SaP researchers must enlarge their methods of research otherwise the discipline may advance towards a dangerous detachment on micro activities. For them, SaP research will continue to rely mostly on intimate research approaches such as ethnography, practitioner reports and interactive discussion groups, but it also needs to expand its research methods in order to link micro and macro outcomes. Considering this, there is a need to undertake research using larger samples and quantitative approaches. In particular, it is relevant to establish simple demographics about practices' diffusion (using simple surveys) and to undertake case studies involving an increased number of cases (Whittington *et al.* 2004).

2.2.2.5.3 Strategy as Practice Research Opportunities

Comparing the suggestions of various authors in the field with the empirical research already conducted, it is possible to uncover several research opportunities under SaP. In the next lines, we rely on the SaP framework (practitioners, *praxis* and practices) to display the opportunities identified.

In the practitioners' realm, SaP needs to focus on: what strategy practitioners do; how and why they engage certain types of activities; how practitioners use and apply practices; who are the practitioners who perform strategy work; and how the different actors involved work together. Thus, practitioners' identities, personal experiences, career paths, education, emotions and social dynamics are a matter of importance to grasp how strategy activity is shaped (Jarzabkowski *et al.*, 2007; Whittington, 2003). Additionally, it is pertinent to investigate which type of practitioners more often engage in innovative activities (Whittington, 2006). It is also significant to identify what kinds of skills effective practitioners necessitate and how they can acquire those skills (Whittington, 2002; Whittington, 2003; Whittington, 2004; Whittington, 2006). This reinforces the opportunity to generate research that tracks the course of practitioners over time. Indeed, SaP should embrace researches that focus on a wider range of practitioners than simply top managers (Jarzabkowski *et al.*, 2007; Whittington, 2002). From this stance, there is room to provide more detailed research on other actors such as middle managers, line managers, business schools, consultants, regulators, shareholders and consumers (Jarzabkowski *et al.*, 2007). All these actors may be part of strategy process and may shape strategic activity.

In the *praxis* domain, SaP opens the opportunity to focus on concrete activities, on where and how strategizing work is done (Whittington, 2003). SaP should also embark on the detailed study of strategic episodes such as board meetings, strategy talk, key committees and strategic planning processes (Whittington, 2002). These episodes can be very insightful to understand what really happens on the ground.

Concerning practices, it makes sense to investigate who have been the main disseminators of practices and how this process occurs. Put differently, we need to know with more detail what has been the role of business schools, consulting firms, business press, among others in the dissemination of practices (Whittington, 2002). It is also pertinent to know what are the key strategy concepts, techniques and tools embedded in our societies. In this regard, several authors considered relevant to unfurl the diffusion of practices such as strategic planning,

strategy tools, project management or away days (Jarzabkowski, 2005; Jarzabkowski and Wilson, 2006; Whittington, 2002; Whittington *et al.*, 2004).

After some reflection on the opportunities found, we decided to explore strategy tools' use in companies, because these instruments are an important part of companies' strategy. Besides, companies throughout the world invest vast amounts of resources (e.g. time, money and intellectual capital) in acquiring and implementing these kinds of tools (Rigby and Gillies, 2000; Rigby, 2001). Moreover, the use of these tools has blown up on the last dozen years (Rigby and Bilodeau, 2005) and it is suggested that they play an important role in strategy decision making (Clark and Scott, 1999). Finally, the literature about strategy tools is really scant and scattered (Clark, 1997; Gunn and Williams, 2007; Stenfors, 2007a), which is a profound reason to pursue more research in this area.

Consistent with the above, we will give predominant attention to the strategic practices element of the SaP framework. Therefore, in the following section of the dissertation we take a closer look on strategy tools.

2.2.3. Strategy Tools

This section starts with a discussion on strategy tools concept. Secondly, it is approached the strategy tools extant in the literature and the most common strategy tools presented in strategy manuals. Thirdly, the strategy tools used in companies are examined. Fourthly, strategy tools' creators and disseminators are discussed. Fifthly, the particularities of strategy tools' use are uncovered. Sixthly, the reasons and challenges of strategy tools' use are approached. Finally, some empirical work about strategy tools is reviewed.

2.2.3.1 Strategy Tools Concept

In his work about management tools, Rigby (2001: 139) defined them as "...a set of concepts, processes, exercises and analytical frameworks". By the same token, Clark and Scott (1999: 36) in a study about strategic tools considered a tool "...as a generic name for any methods, models, techniques, tools, frameworks, methodologies and approaches which provide decision support". In the light of this, we notice that the term tool in management is broad in scope. Thus, "strategy tools can be conceptual, such as those employed in strategy design, they can be process tools such as project management techniques, and they can be physical tools such as computers and documents" (Stenfors, 2007a: 3).

The aforementioned showed that a vast array of “things” can be called a tool. However, to understand the concept better we need to grasp what a tool is supposed to do. According to Bechky (2003), a tool is an artefact around which activity and organizing takes place. Therefore, a tool is a means to an end (Eilon, 1980), a mediator of activity that establishes the connection between practitioners and *praxis* (Jarzabkowski, 2003). From this stance “...tools are conceptualized as boundary objects that mediate the initiation and implementation of strategic initiatives across boundaries within the organization” (Kaplan and Jarzabkowski, 2006: 2).

In a nutshell, a strategy tool is a knowledge artefact produced with the aim of turning theories actionable in practice (Jarzabkowski and Wilson, 2006), in other words, a tool enables the release of knowledge in a practical and contextual way that supports more effective strategizing (Stenfors and Tanner, 2007).

For the purposes of this research, we consider strategy tools as any artefact (conceptual, process oriented or physical) that is used by managers to engage in some kind of strategy work (e.g. planning, analysing, presenting or debating).

2.2.3.2 Strategy Tools in the Literature

There are hundreds of strategy tools in the literature (Stenfors, 2007b) and it is possible to categorize them according to the goals they enable to achieve. Doz and Prahalad (1981) suggested three different groups, namely data management tools, managers’ management tools (allow managers to focus, e.g. SWOT Analysis) and conflict resolution tools. Stenfors (2007b) also proposed a fourth group to include creativity and innovation tools.

Table 2 illustrates the variety of strategy tools available in the academic literature. In face of such diversity, we have to focus our attention in order to match our research ambitions with the existing resources. Although we will not avoid any type of strategy tools (according to definition provided before), we will give special attention to the tools that are more easily accessible to managers and students of management. Therefore, we reviewed several strategy text manuals with the aim of uncovering which tools are more available to them. Nevertheless, it is important to underline that we did not intend to review all the strategy manuals available, we just reviewed the ones that we had access. Albeit this may be a limitation, the list reviewed gives a good sense of what tools are available in strategy manuals and books.

Table 2 – Glossary of Strategy Tools

Strategy Tools	
Balanced Scorecard	Internal Factor Evaluation Matrix (IFE)
Benchmarking	Key Success Factors
Brainstorming	Learning Curves
Breakeven Analysis	Life Cycle Concepts
Business Definition	Management Profiles
Business Process Re-engineering	Market Opportunity Analysis
Company Capability Profile/Analysis	MCC Decisions Matrix
Competitor Analysis	Net Present Value
Competitor Profiling	Nominal Group Techniques
Core Competencies	Pest Analysis
Corporate Social Performance Matrix	PIMS
Cost-Benefit Analysis	Portfolio Analysis
Corporate Modelling	Process Modelling
Critical Skills Analysis	Product/Market Matrix
Critical Success Factors	Profits Graph
Decision Trees	Quality Analysis
Delphi Technique	Risk Analysis
Discounted Cash Flow	Risk Matrix
Discount Rate of Return	Risk-Return Matrix
Diversification Matrix	ROI Chart
Du Pont Chart	Scenario Planning
Economic Model	Segmentation Strategic
Environmental Assessment: facing up to change	Sensitivity Analysis
Environmental Assessment: Neubauer and Solomon	SOFT
Environmental Turbulence Matrices	Spreadsheets
Equilibrium Analysis	Strategic Audit (Analysis)
Experience Curve	Strategic Group Mapping
External Factor Evaluation Matrix (EFE)	Strategy Cube
Financial Ratio Analysis	Strategic Position and Action Evaluation
Gap Analysis	SWOT
Generic Strategy Matrix	Synergy Matrix
Global Strategy	Technology-Based Resource Allocation
Group Competitive Intensity Map	Technology Grid
Growth Analysis	Tows Matrix
Growth Vector Analysis	Trends Projection
Historical Analogy	Value-Based Strategy
Industry Analysis	Value Chains
Industry Attractiveness Analysis	Variance Analysis
Industry Mapping	V Matrix
Industry Structure Analysis (Porter's 5-Factor Model)	Vulnerability Analysis

Source: Adapted from Frost (2003: 54)

In the next lines, we put forward two tables, one that presents all the books reviewed (Table 3) and other that lists the tools identified in those books as well as their frequencies (Table 4).

Table 3 – List of Strategy Manuals Reviewed

Authors	Title of the Book
Jauch and Glueck, 1988	Business Policy and Strategic Management
Montanari, Morgan and Bracker, 1991	Strategic Management - A Choice Approach
Wheelen and Hunger, 1991	Strategic Management and Business Policy
Stahl, and Grigsby, 1992	Strategic Management for decision Making
Dess and Miller, 1993	Strategic Management
Johnson and Scholes, 1993	Exploring Corporate Strategy
Freire, 1999	Estratégia, Sucesso em Portugal
David, F., 2005	Strategic Management, Concepts and Cases
Grant, 2005	Contemporary Strategy Analysis
Johnson, Scholes and Whittington, 2005	Exploring Corporate Strategy
Wheelen and Hunger, 2005	Strategic Management and Business Policy

This table shows that eleven different strategy manuals were reviewed. The older one is from 1988 and the most recent one is from 2005.

Table 4 –Strategy Tools Found in Strategy Manuals (Frequencies)

Strategy Tools	Freq.	Strategy Tools	Freq.
Growth Share Matrix (BCG)	11	Benchmarking	3
Five Forces Framework	11	Brainstorming	3
Generic Strategies	10	Delphi T.	3
Life Cycle Analysis	9	Real Options	3
PEST Analysis	9	Sensitivity Analysis	3
SWOT Analysis	9	TOWS Matrix	3
McKinsey/GE Matrix	8	Comparing Industry Norms	2
Strategic Groups	8	Competitive Profile Matrix	2
Value Chain Analysis	8	Cost-Benefit Analysis	2
Resources/ Core Competencies	7	Decision Matrices	2
Scenario Analysis	7	Historical Analyses	2
Product/Market Evolution Matrix	6	PIMS Analysis	2
Experience Curve	5	Stakeholder Analysis	2
Key/Critical Success Factors	5	Statistic Modelling	2
Balanced Scorecard	4	Trend Extrapolation	2
7's Framework	3	Risk Analysis	1

According to the above table, the most commonly referred tools in strategy manuals are the Growth Share Matrix and the Five Forces Framework. The number of tools found in our review is considerably less compared to the glossary presented earlier. This shows that through traditional strategy books and manuals managers have access to less strategy tools than the extant in the literature as a whole. The exercise undertaken gave us an idea of the tools that are widely spread through strategic management literature. From this stance, it may

be interesting to compare the tools most presented in strategy manuals with the ones used by companies.

2.2.3.3 Strategy Tools Used in Companies

After unveiling the strategy tools available in the academic literature and in strategy manuals, we now move our focus to the strategy tools used by companies. Hence, we present the results of the few empirical researches that focused on this subject.

Bain & Company applies regularly a large scale survey in four world regions (Asia, Europe, North America and South America) but they focus on management tools (Rigby; 1994; Rigby and Gillies; 2000, Rigby, 2003; Rigby and Billodeau, 2005; Rigby and Billodeau, 2007). In their last survey, they concluded that large companies tend to use more tools than smaller ones. They also found that companies in Europe and North America employ more tools than Asia and South America.

Concerning strategy tools' use properly saying, we found few researches which are scattered and have restricted geographical scope. Clark (1997) employed a research about strategy tools in United Kingdom (UK) and New Zealand (NZ). His approach was to identify the tools used by practitioners in different strategic tasks. With that aim he designed a strategy framework that comprises 3 phases (situation assessment, strategic analysis and strategic implementation) and 36 strategic tasks. He found that focus group was strongly present in all the 3 phases, SWOT analysis was dominant in situation assessment and strategic analysis phases, and budgeting was dominant in strategic implementation phase. Although these were the primary tools used he reported that several tools were employed in different strategic tasks. However, he also asserted that the most common tools used were the simple ones.

Frost (2003) followed the line of research employed by Clark (1997). Thus, he also used a similar strategy framework that included 36 strategic tasks and 6 phases (current direction, strategic audit, environmental analysis, environment, strategic analysis and strategic implementation and control). The goal was to find the tools used by practitioners in each strategic task. The study was applied to small and medium enterprises (SMEs) and replicated in Western Australia, Singapore, Malaysia and Hong Kong. He reported that compared to Clark's (1997) study, not only a narrower range of tools were used but also less tools were utilized in all task areas. In this research, the tools that hold a more dominant role were SWOT analysis (almost the prime tool in all phases), PEST analysis and budgeting. He

accounted that industry type was not correlated with tool usage. The author concluded that SMEs do a limited use of strategy tools.

Stenfors *et al.* (2007) employed a study directed to the 500 largest Finnish companies. In contrast with the researches undertaken by Clark (1997) and Frost (2003), they asked managers for the tools they used to support the major decisions of their company instead of asking them to point out the tools used in specific strategic tasks. They concluded that companies typically use an average of five tools and the most used ones are SWOT Analysis, Spreadsheet Applications, and Balanced Scorecard (Table 5 provides the results they achieved).

Table 5 – Strategy Tools Used by the Largest Finnish Companies

Support Tool Group	Frequency
SWOT Analysis	136
Spreadsheet Applications	120
Balanced Scorecard	104
Risk Analysis	66
Analysis of the Financial Statements or Investments	63
Quality Methods	51
Scenario Planning	46
Environment Analysis	40
Brainstorming	37
Statistical Analysis	33
Life Cycle Analysis	25
Optimization	23
Project Management Tools	20
Simulation	20
Value Chain Analysis	10
Human Resource Management Tools	7
Management Information Systems & Business Intelligence	7
Enterprise Resource Planning	7
Number of Tools Classified (94 %)	815

Source: Adapted from Stenfors et al. (2007: 932)

The authors accentuated that the two tools most used are flexible and easy to use. Put differently, the most common used tools are the simple ones. They also concluded that executives may only use tools conceptually but they actively use them in their work and they recognize their importance.

Gunn and Williams (2007) undertook a recent research on the competitiveness of organizations where they also have studied the use of strategy tools. They applied a self-administered questionnaire to companies of an economic region of the UK. They listed 15

strategy tools that they chose to include by reviewing previous researches (results provided in Table 6).

Table 6 – Strategy Tools Used by Companies in an Economic Region of the UK

Tool/Technique	Used (%)	Rank
SWOT	70	1
Benchmarking	60	2
Critical Success Factors	51	3
Competitor Analysis	38	4
Stakeholder Analysis	35	5
Core Competencies	32	6
Balanced Scorecard	30	7
Scenario Planning	28	8
Lifecycle Analysis	23	9
Culture Analysis	23	10
Stakeholder Mapping	22	11
Value Chain Analysis	20	12
Resource Capability Analysis	15	13
Industry Structural Analysis (Porter's 5 Forces)	13	14
McKinsey 7 S' Framework	11	15
Mean	30	

Source: Adapted from Gunn and Williams (2007: 207)

SWOT analysis was by far the most used tool. They also found that different types of managers may use different groups of tools. In this vein, they identified four groups of managers: academically trained managers (who may have learned the tools in training and educational programmes), professionally or applied trained managers (who may have built their knowledge through their experience), stakeholder aware managers (who use the tools to get a profound understanding of stakeholders) and competitor aware managers (who use the tools to assess competitor intelligence). They also concluded that the educational background of the respondents and the size of their organizations were not significantly correlated to any of the tools identified.

In summary, the researches that focused on the strategy tools used by companies concluded that managers prefer to use tools that are flexible, easy to learn and use, and that are well tested and established (Frost, 2003; Rigby and Bilodeau, 2005; Stenfors and Tanner, 2006; Stenfors *et al.*, 2007). In this respect, Jarzabkowski and Wilson (2006) claim that practitioners frequently use the tools they have at hand, the ones that hold more technical, cultural and linguistic legitimacy and that are easier to adapt to goals. Hence, this may be the reason why

managers stick to the classic tools like SWOT Analysis (the most used tool in all the empirical researches reviewed).

To conclude, we hold the idea that few researches have been directed to study the strategy tools used by companies. Furthermore, the existent researches used different methodologies and are restricted geographically. In this light, there is room for more research in this topic.

2.2.3.4 Strategy Tools' Creators and Disseminators

Strategy tools main creators seem to be the consulting firms and the academic institutions (Stenfors and Tanner, 2006). However, Mazza and Alvarez (2000) call the attention for the increased relevance of popular management literature. They remarked that popular literature have a massive influence due to the amount of readers they have and they are using that power to create themselves some tools and practical knowledge that are highly attractive to practitioners. Besides, we also cannot forget that managers have the ability to create and develop their own tools.

Concerning strategy tools' dissemination, there is some evidence that the most relevant players are business schools, consulting firms, strategy manuals, and popular management literature like magazines and newspapers (Clark, 1997; Jarzabkowski, 2004; Jarzabkowski and Wilson, 2006; Stenfors and Tanner, 2006; Stenfors and Tanner, 2007). Again, this is an interesting topic that warrants attention at the empirical level. In the same vein, it is relevant to understand the importance of external actors in strategy tools' implementation.

2.2.3.5 Strategy Tools' Use

2.2.3.5.1 Introduction

Strategy tools' use literature is typically scarce and dispersed which means that it does not form a precise and integrated section (Stenfors, 2007a). Moreover, little research has been exclusively focused on this important aspect of strategizing (Clark, 1997; Gunn and Williams, 2007; Knott, 2005; Stenfors *et al.*, 2007; Whittington, 2002; Whittington, 2003) which increases our desire to unfurl some insights. This gap in the literature is not consistent with the importance that strategy tools hold in companies. In other words, strategy tools' use is a complex social phenomenon that is highly relevant in strategy work and strategy decisions of companies throughout the world (Knott, 2005; Stenfors, 2007a). Furthermore, we should bear

in mind that tools are not passive objects. On the contrary, there are reports that tools affect practitioners' attitudes, emotions and choices (Korhonen *et al.*, 2007). Indeed, Bechara (2004) outlined that people decide at a gut feel or emotional level. Nevertheless, tools per se do not make and implement strategy, and do not achieve any results, because this is the work of human actors (Hussey, 1997; Rigby, 2001). From this standpoint, tools are just mechanisms to help managers to perform their strategizing activities, although this does not diminish their influential and important role.

2.2.3.5.2 Strategy Tools' Use Concept

Strategy tools' use is the consumption of the tools by human actors (Whittington, 2003). Besides, the use of a tool goes beyond the physical activity (e.g. annotations, calculations, pushing buttons) and also incorporates "...what each user 'makes' of the know-how offered by the tools" (Stenfors 2007a: 3).

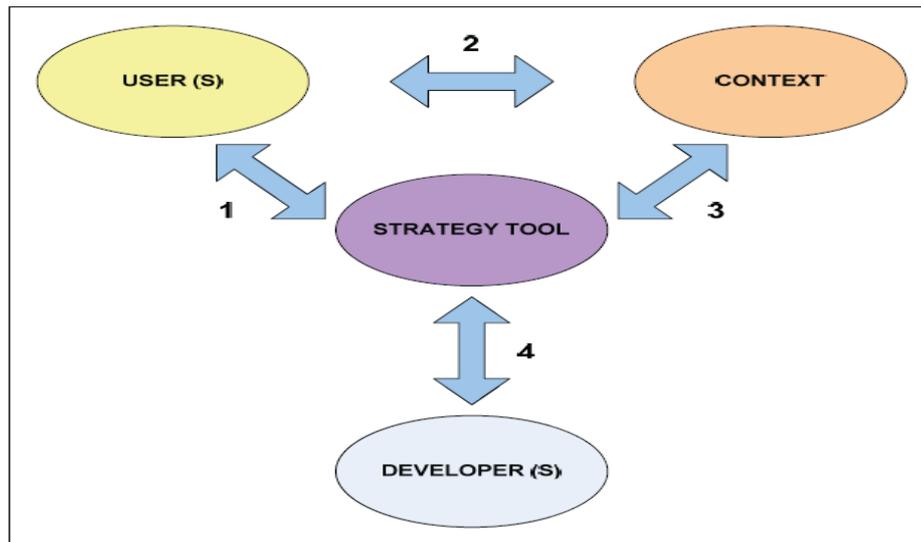
2.2.3.5.3 Strategy Tools' Use Model

Generally, it is difficult to outline the boundaries of strategy tools' use in practice since they are enmeshed in the daily routines. Indeed, managers usually work with a variety of tools' outputs such as figures, texts or numbers that make it hard to determine when the use of a tool begin and when it ends (Stenfors and Tanner, 2007). Thus, tools are used in complex systems of social interaction (Kaplan and Jarzabkowski, 2006), which includes social, political, technical and cultural factors that clearly affects the way they are used and interpreted.

Given the above, we need a framework to look into the important issues of strategy tools' use otherwise we will be puzzled and with little discernment to understand what really happens in practice. In this realm, Stenfors (2007a), in her doctoral thesis about strategy tools, suggested an interesting model that prompts us to focus on four overarching elements: strategy practitioners, strategy tools, context and tools' developers (Figure 3).

This model predicates the outputs of strategy tools' use as a set of mundane strategy work activities (as described by Jarzabkowski, 2005). Put differently, the *praxis* of strategy (Jarzabkowski *et al.*, 2007; Whittington, 2006) is a result of the interactions between the users (strategy practitioners), the tool and the context. Moreover, we cannot forget the importance of strategy tools' developers and promoters.

Figure 3 –Strategy Tools' Use Model



Source: Adapted from Stenfors (2007a: 14)

These relationships are a complicate interplay because they often include a multiplicity of users, an array of tools, a diversity of contexts and a variety of developers and promoters (Stenfors, 2007b). Following, the relations established between the different components of the model are examined.

Regarding the user-strategy tool interaction, it is relevant to hold that this is a bidirectional relationship. On the one hand, strategy tools impose their theoretical presuppositions and procedures on the users. On the other hand, the users employ the tools according to their very ways of thinking, making sense and performing. In other words, users may use the tools in innovative and creative ways that considerably alters their original assumptions.

Concerning the user-context interaction, we have to bear in mind that the users' ways of thinking and acting may modify contexts but also contexts have powerful forces that highly influences the ways the users do their *praxis*. For example, it is usually reported that issues such as organizational culture, industry rules and assumptions or broader environmental conditions have a strong effect in the ways practitioners make sense, think and act.

Respectively to the tool-context relationship, we should understand that generally this interaction will affect the set of tools available to an organization. Put another way, powerful institutional forces will highly influence the tools that companies are more prone to use and those that they will be more tempted to reject. On the other side of the coin, we should realize that tools also can produce different views on contexts and thus enabling their change and modification.

Finally, we should recognize that developers and promoters of strategy tools will also affect the tools available to users. On the other hand, they will be influenced by users, contexts and existing tools.

2.2.3.5.4 General Ways of Applying Strategy Tools in Practice

Apart from what managers really do in practice (e.g. activities performed or outcomes produced) we need to understand how managers apply strategy tools. In this light, the majority of the researches in strategy tools assume that they are used as prescribed (Gunn and Williams, 2007; Stenfors, 2007b). However, some authors fiercely dispute this view considering that tools are generally adapted by managers in practice. Put differently, managers seldom use the tools in the ways intended by the tools' developers because they have the need to adapt and use the parts of the tool that best serve the requirements of the situation they face (Kaplan and Jarzabkowski, 2005; Stenfors and Tanner, 2006; Stenfors and Tanner, 2007). Therefore, it is suggested that managers engage in bricolage activity (Baker *et al.*, 2003) to adjust the tools to the context of their use (Kaplan and Jarzabkowski, 2006). Knott (2005) reinforces this view and highlight that the drive for adaptation emerge from both the characteristics of the tool and the variety of business realities. Besides, he exhorted that the mode of application varies according to the firm's size and to the purpose of use (e.g. seek for inspiration or efficiency).

Jarzabkowski and Wilson (2006) averred that this adaptation dissociates the tool from its theoretical origin and that managers are not concerned with that. They argue that managers' ability to adapt tools is the main reason that justifies the use of some tools which are less adequate to fast changing and complex environments. For the above authors, tools from positioning school (e.g. BCG Matrix, Porter's Five Forces) and from early resource-based view (e.g. Resource Analysis) should not fit in today's uncertain and high competitive environment. Nonetheless, they keep being used because managers adapt them to their needs. In this regard, we can distinguish between a representational and a practical epistemology. The former is a view that knowledge artefacts carry out specific theoretical premises which to be successful needs to be used in the adequate contexts. In contrast, the latter view, defends that tools may be adapted irrespectively of their theoretical origins and presuppositions (Jarzabkowski and Wilson, 2006). For instance, Chesley and Wenger (1999) disclosed the adaptation of a Balanced Scorecard in practice. In their in-depth case study, they reported how both the tool and the company have changed in a co-evolution process.

Following the motion that we have been unfurling, we also should bear in mind that practitioners may create new tools from scratch or depart from established tools to create new ones that allow them to attain their goals (Kaplan and Jarzabkowski, 2006; Stenfors and Tanner, 2006). In this domain, Kaplan and Jarzabkowski (2006) described a situation where one manager created a tool in order to simplify the return on investment analysis procedure. To put it briefly, we can identify three main ways of applying strategy tools: following the rules prescribed by its developers, adapting the tools to their needs or creating new tools that are dramatically different from the ones prescribed by developers. We believe it is appealing and useful to identify, at the practical level, the prevalence of these ways of acting upon tools.

2.2.3.5.5 Strategy Tools' Use Dynamics

The choice of which strategy tools to use is an important one and affected by several issues. This fact gains increased relevance since one can find a wide variety of tools and all of them may be useful under the right circumstances, that is, managers need to select the appropriate tools to the situation at hand (Hussey, 1997; Rigby, 2001). Moreover, it might be appropriate to combine different tools to better achieve the desired outcomes and to have the information presented in different angles and perspectives. In this subject, Stenfors (2007b) highlights the importance of companies compiling a balanced set of strategy tools that meet their needs and enable them to undertake varied forms of strategy work. However, reported research revealed that, typically, strategy tools choice is less an outcome of rational behaviour (Stenfors, 2007b) and more a result of management fads and fashion (Abrahamson, 1996).

We also ought to bear in the mind that strategy tools are used in a certain context which exerts a powerful influence on the way that practitioners act (Stenfors and Tanner, 2007). That is to say that political, social and personal views influence the interactions established, the interpretations developed and the outcomes produced.

It is also pertinent to extol the importance of legitimacy in strategy tools' selection and use. Kaplan and Jarzabkowski (2006), in a detailed case-study, described how legitimacy plays a vital role to successfully implement a tool. If practitioners that use the tool do not perceive it as legitimate they will have difficulty in committing themselves to its use. In this particular, Mazza and Alvarez (2000) stated that a tool can be considered legitimate when it presents conformity with organization values, when it is adopted by large and pioneer firms, or when their use is highly spread throughout the business world. In addition, legitimacy can also be

achieved when those who will use the tool, actively participate and agree with the process of its adaptation or creation (Kaplan and Jarzabkowski, 2006).

In strategy tools' literature, we found little information about their practical use. Put another way, there are few accounts about the different behaviours, routines and activities that managers engage when they are employing a strategy tool. Stenfors and Tanner (2007) are an exception in this regard, since they studied strategy tools' use and unveiled a set of strategizing activities that they allow managers to undertake. According to them, strategy tools' uses are diverse and take cognitive, linguistic and collective forms. Furthermore, they identified twelve different types of strategizing activities and four different levels of social context where those activities take place (Table 7).

Table 7 – Strategizing Activities

Level of Social Context	Strategizing Activities
Individual	Planning efficiently
	Dealing with time
	Making sense and exploring new ideas
Interpersonal	Facilitating communication
	Motivating others and playing political games
Organizational	Enabling learning and innovation
	Leading, guiding and coordinating work
	Enacting organizational culture
Societal	Keeping up with competition, technological improvements and professional techniques
	Meeting industry standards, codes and laws
	Responding to political issues and power structures
	Creating stakeholder value

Source: Adapted from Stenfors and Tanner (2007: 11)

The above table shows that strategy tools enable practitioners to undertake strategizing activities at the following levels of social context: individual (activities performed alone), interpersonal (activities performed by two persons or small groups), organizational (activities that have an impact on the whole organization) and societal (activities that are connected with the entire social environment).

Apart from the previous research and some case-studies oriented to specific tools or environments (e.g. Kaplan and Jarzabkowski, 2006; Chesley and Wenger, 1999), we were unable to find empirical works that really focus on the practical use of strategy tools.

2.2.3.6 Reasons for Strategy Tools' Use

It seems that managers' main reason to use strategy tools is the search for more objectivity, rationality and efficiency in strategy decision making process (Kaplan and Jarzabkowski, 2006; Stenfors *et al.*, 2007). Notwithstanding, Kaplan and Jarzabkowski (2006) outlined that although managers seek quantitative, consistent and objective analysis, that set apart emotions, they end up finding that political and social issues arise in the process of using tools. In this vein, it is only a myth that tools can provide objective representations of reality (Kaplan and Jarzabkowski, 2006). Nevertheless, this fact does not diminish the value of tools in strategy-making.

Subsequently, other possible reasons for strategy tools' use in companies are approached (Table 8 summarises the main reasons found in the literature).

Table 8 - Reasons for Strategy Tools' Use

Facilitate the collection and analysis of information
Facilitate the planning process
Facilitate coordination and alignment of interests
Facilitate communication and generate dialogue
Understand reality and key strategic factors
Encourage new ideas and creative visions
Strengthen the team spirit and people commitment with organization
Make decisions more rational, objective and transparent
Clarify and justify difficult decisions
Clarify company's strategy
Support the implementation of strategy at all levels

Firstly, it is suggested that tools' use provide clarity and helps to structure the context. In this sense, tools are useful to present information in different angles and perspectives. They also enable to reduce complex information to simple diagrams that are easier to hold and interpret. Thus, tools facilitate the collection and analysis of information (Chesley and Wenger, 1999; Frost, 2003; Furrer and Thomas, 2000; Hussey, 1997; Kaplan and Jarzabkowski, 2006; Rigby, 2001), and the planning process (Stenfors and Tanner, 2007).

Secondly, tools offer a common vocabulary and common points of reference that creates social platforms and allow communication between individuals with different technical, cultural and functional backgrounds (Chesley and Wenger, 1999; Jarzabkowski and Wilson, 2006; Kaplan and Jarzabkowski, 2006; Stenfors and Tanner, 2007; Worren *et al.*, 2002). This assists the coordination and alignment of different interests inside the organization. Additionally, tools bring ideas to the surface, generate discussion, mediate interpersonal views and issues, and enable the construction of shared concepts and meanings (Hussey, 1997; Kaplan and Jarzabkowski, 2006; Stenfors and Tanner, 2006). This point of view was reinforced by Kaplan and Jarzabkowski (2006), who stated that it is easier to raise people's assumptions through a tool because they feel more free to say that the information presented is not correct than to say that other people are wrong.

Thirdly, tools force critical thinking and refine strategic reasoning because they require that managers not only describe the context but also develop a deeper understanding of the situations. Though, tools lead to more abstract levels of thinking that allow managers to better comprehend reality and to develop a greater understanding of the key strategic factors (Frost, 2003; Stenfors and Tanner, 2007; Webster *et al.*, 1989).

Fourthly, tools permit social interaction and this process creates the conditions to encourage new ideas and to foster creativity (Stenfors and Tanner, 2007). This may be an important characteristic because it gives the possibility to trigger innovation and development in companies. However, Stenfors and Tanner (2006) also reveal that managers, in general, use tools more to improve efficiency than creativity.

Fifthly, tools may contribute to create a sense of community by promoting communication, motivation and team spirit. Hence, tools hold the potential to enact organizational culture and promote high levels of commitment (Stenfors and Tanner, 2007). By the same token, Worren *et al.* (2002) emphasize that tools can be important in paradigm negotiation and framing, and thus creating shared meanings and shared concepts that may increase the sense of community and team spirit.

Sixthly, tools may make decisions more rigorous, disciplined, and transparent by enabling managers to focus on facts (Stenfors and Tanner, 2006; Webster *et al.*, 1989). Therefore, tools may be used to make decisions more objective and rational. By the same token, they may serve to clarify and justify difficult decisions since it is easier for managers to justify tough decisions (e.g. cutting jobs) with the rigorous and impartial outcomes of a tool rather than their own desires or interests (Kaplan and Jarzabkowski, 2006).

Seventhly, tools may help managers focusing on strategy and strategic decisions. Put differently, tools facilitate strategic activity and assist in clarifying company's strategy (Stenfors *et al.*, 2007; Stenfors and Tanner, 2006). In the same line of reasoning, tools provide better coordination and control and thus hold the potential to assist strategy implementation (Chesley and Wenger, 1999; Stenfors and Tanner, 2007).

Stenfors and Tanner (2006) identified the reasons pointed out by executives from the 500 largest Finnish companies (Table 9). The most prominent ones are “clarify company strategy”, “ease information collection and analysis”, and “aid budgeting and financial planning”.

Table 9 – Reasons for Strategy Tools' Use in the Largest Finnish Companies

Reasons for tool use	Percentage of the respondents that chose the reason
Clarify company strategy	74
Ease information collection and analysis	70
Aid budgeting and financial planning	70
Assist in implementing strategy throughout the	54
Help monitor and comprehend the environment	51
Generate dialogue	45
Encourage new ideas and creative visions	40
Strengthen commitment to the organization	39
Facilitate human resource and organization	24
Support marketing efforts	24
Other role (clarified by the respondent)	13
Number of respondents 182, amount of responses 915	

Source: Adapted from Stenfors and Tanner (2006: 227)

Previous table also shows that most of the reasons that Finnish executives pointed out are similar to the reasons we found in our review of the literature. Thus, it appears that when managers use tools they draw more attention to structure and analysis work than to communication, creativity or commitment.

We believe this topic deserves further exploration at the empirical level in order to identify which reasons are more important for managers.

2.2.3.7 Challenges of Strategy Tools' Use

One of the great challenges of strategy tools' use arises because the proper use of these instruments generally requires vast amounts of money, time and energy (Stenfors, *et al.*, 2007). Additionally, Stenfors and Tanner (2007) identified that some managers considered the

market of strategy tools confusing and thus the task of choosing the right tool a very tough one, since it is difficult to compare and analyse the various alternatives available. This may be the reason why managers generally rely upon tools that are well know, and that are easy to learn and use (Frost, 2003; Jarzabkowski and Wilson, 2006; Rigby and Bilodeau, 2005; Stenfors *et al.*, 2007; Stenfors and Tanner, 2006). Consequently, this also may explain why managers fall prey of fads that sometimes have damaging impacts on companies' confidence and performance.

Stenfors and Tanner (2006) reported that managers are generally concerned that tools may narrow and limit their thinking. However, this would not be a problem if managers hold an open mindset and if they combine different tools to let the information be presented in different angles and perspectives (Hussey, 1997). In this light, it makes sense to comment that many times the biggest challenge and the biggest cause of harm is the beliefs and attitudes of managers toward tools (Stenfors *et al.*, 2007). Table 10 sums up the difficulties identified by Stenfors *et al.* (2007) in an empirical study about the use of strategy tools in the largest Finnish companies.

Table 10 – Challenges Associated with the Search, Implementation and Use of Tools

Search for Tools		Implementation of Tools		Use of Tools	
Tool market is not buyer friendly	16	Underestimation of needed work, resources, and data	29	Form goes over substance	14
		Tools are complicated and heavy to master	22	Interpretation of the results is difficult	10
Prejudices and fear of stiffness, technical thinking, and loss of creativity	7	Lack of skills, learning demanding	15	Uncertainty and risk are not eliminated	9
		Change resistance and weakness of commitment throughout the organization	8	Blind belief in tools	8
Knowledge of tools is inadequate or inaccurate	6	Communication problems	6	Theory and practice do not meet	7
		Unlearning old procedures	5	Difficulties in deciding and using parameters	7
Need for an outside consultant	4	New vocabulary difficult to understand	3	Results do not lead to continuous or fast actions	7
				Burden of building, updating, and maintenance	6
Total price	3	Tools not suitable for company culture	3	Thinking is narrowed and limited	4
Total Sum (199)	36		91		72

Source: Adapted from Stenfors *et al.* (2007: 936)

We believe it is important to acknowledge in other contexts (beyond Finnish companies) which are the main difficulties faced in the use of strategy tools.

2.2.3.8 Strategy Tools Empirical Research

In this part of the dissertation, some of the empirical work about strategy tools is summarised. This will give an overview of the topics addressed and the methods employed. In this sense, this section will enable us to lay the foundations for our research design.

Clark (1997) employed a research about strategy tools' use by practitioners in the UK and NZ. His approach was to identify the tools used by practitioners in different strategic tasks. This research raised the deepness of the approach by linking tools' usage to specific strategic tasks. Regarding the methodological domain, the author used a mixed-method research design to collect descriptive and explanatory data. Therefore, he employed a postal questionnaire and semi-structured interviews and replicated the study in the UK and NZ. In order to analyse data, he used descriptive statistics, frequency result and confirmatory analysis.

Frost (2003) followed the line of research employed by Clark (1997). The goal was to find the tools used by practitioners in each strategic task. The study was applied to SMEs and replicated in Western Australia, Singapore, Malaysia and Hong Kong. The author undertook a descriptive approach and applied a mail questionnaire to randomly selected companies.

Chesley and Wenger (1999) employed a research to study the implementation of Balanced Scorecard in one company. This research used a different approach from the two presented previously, because it produced a fine-grained analysis that described the nuances associated with tools' use in practice. The methodology adopted was a longitudinal case-study.

Kaplan and Jarzabkowski (2006) undertook an in depth study to grasp the dynamics of tools' use in practice. The research focused on the study of two different tools that were being introduced by managers. One was a standard tool (aggregate project plan) generally taught in MBA courses and the other was a tool developed by one manager in order to simplify the return on investment analysis procedure. They used an ethnographic approach and relied on diverse data collection techniques such as observations of everyday activities, interviews and document analysis.

Stenfors (2007a) undertook a doctoral thesis that focused on strategy tools' use. She worked with different authors and used a multiplicity of methodologies in order to look at strategy tools from different angles. An outcome of this work was an article that studied the tools used by executives in strategic level decisions (Stenfors *et al.*, 2007). The study was directed to the 500 largest Finnish companies. In contrast with the researches undertaken by Clark (1997) and Frost (2003), they asked managers for the tools they used to support the major decisions of their company instead of asking them to point out the tools used to specific strategic tasks.

Hence, they collected the aggregate tools managers used to support their decisions. They employed a multi-method approach that relied on mail questionnaires and unstructured interviews. The data collected in the questionnaires consisted mostly of open-ended written descriptions provided by executives. They categorized all the responses.

Gunn and Williams (2007) undertook a recent research on the competitiveness of organizations where they also have studied strategy tools' use. They applied a self-administered questionnaire to organizations (public and private) from an economic region in the UK. In their questionnaire, they listed 15 strategy tools that they chose to include by reviewing previous researches. In order to analyse data, they used descriptive statistics, exploratory factor analysis and principle-component analysis.

2.3 Setting the Research Design Background – Research Questions

This section builds the foundations to the development of our research design. Thus, the reasons that lead to the statement of the research questions of this dissertation are briefly highlighted.

The opportunities of research detected under strategy as practice perspective (section 2.2.2.5.3) and the careful analysis of empirical research in strategy tools (section 2.2.3.8), demonstrated that there is room for more research about strategy tools' use. Our conviction is sustained by the fact that the previous researches focus on specific countries and are really a small part among the works in strategy field. Additionally, the majority of the researches in strategy tools narrow their focus to the strategy tools used in companies. However, there is also a need to understand other important issues such as the disseminators of strategy tools, the reasons and difficulties of their use or the way they are applied. Besides, in Portugal we were unable to find any research that focused exclusively on this subject.

Furthermore, few researches undertook a fine-grained analysis of strategy tools in order to get a more profound understanding of the dynamics of their use in practice. In this respect, Gunn and Williams (2007) said that the way managers use tools and the reasons for that are the most unexplored areas of strategy tools' research.

Therefore, in order to address the aforementioned gaps in the literature, we intend to describe the use of strategy tools in the largest companies operating in Portugal. For that purpose, we take the strategy as practice perspective, that is, we conceive strategy tools' use as a flow of social activity. This perspective enables us to look at strategy tools' use from a non-traditional

angle which may provide a different picture of reality. In fact, taking this perspective will allow a focus on the micro level activities and this can prove useful to discover important particularities about our subject of study. Besides, taking this approach holds the potential to break with traditional dichotomies in strategy research such as content and process, rationality and irrationality or intent and emergent.

Thus, in order to attain our goals this research departs from a strategy as practice perspective to investigate: 1) Which strategy tools are most popular in companies?; 2) How are strategy tools used? (a. How do companies select which strategy tools to use? b. How do companies deploy strategy tools? c. Which are the most important issues in strategy tools' use?).

We believe that answering these questions will provide us an enhanced understanding of strategy tools' use in companies. Moreover, this can make a contribution to develop a stronger knowledge base about the practical things of strategy and it can provide a basis for further research in the field.

On the bottom line, improving our understanding on strategy tools' use may be useful for strategy teaching, for strategy consulting and for strategy practitioners. Hence, this dissertation may be a small but important contribution to develop the quality of strategy work and boost the performance of companies throughout the world.

In this light, departing from our research questions and from the knowledge developed throughout the literature review, we describe our methodological choices in the following chapter.

CHAPTER 3 – METHODOLOGY

3.1 Research Objective

The general objective that will guide this dissertation is to analyse and describe the use of strategy tools in the largest companies operating in Portugal.

3.2 Research Contribution

Our main motivation in pursuing this goal is to contribute for a better understanding of strategy tools' use in companies in order to comprehend the role and importance of these practices in today's organizations. However, considering that strategy tools are an unexplored topic in the literature and the limited resources available at a master level, we think it would be a utopia to aim to achieve bold conclusions in this dissertation. Thus, it is more appropriate to expect this research to raise some interesting clues, ideas and insights about the use of strategy tools. Put differently, this dissertation can provide a solid background to develop stronger research designs in the future with the aim of attaining more definite conclusions.

3.3 Research Questions

With the intent of achieving the chief goal of this research we formulated two main research questions. We believe that obtaining information to answer these questions will allow us to achieve our main objective. Therefore, the research questions of this dissertation are:

1. Which strategy tools are most popular in companies?
2. How are strategy tools used in companies?
 - a. How do companies select which strategy tools to use?
 - b. How do companies deploy strategy tools?
 - c. Which are the most important issues in strategy tools' use?

3.4 Strategy of Inquiry

In order to accomplish the goals of this research and to answer the research questions that guide this study, we employed a descriptive strategy of inquiry. This is particularly useful to generate knowledge about the current status of a subject of study (Gay and Diehl, 1992). Hence, this gives us the opportunity to provide a rich description of strategy tools' use in the largest companies operating in Portugal.

We used a mixed method methodology, which is a relatively new approach in the social and human sciences and embraces both quantitative and qualitative data (Creswell, 2003). This methodology has been used by researchers under different terminology such as multi-method, multi-methodology, synthesis or integrating (Creswell, 2003). However, recent writing seems to favour the term mixed methods (Tashakkori and Teddlie, 2003).

In recent years, we have witnessed a growing interest in this type of approach, may be because researchers feel the need to expand their methodological tools in order to increase the effectiveness of their research (Creswell, 2003). Besides, this type of approach provides an holistic coverage of the subject under study (Brannen, 2003; Miles and Huberman, 1994) which is congruent with our goal of presenting an ample description of strategy tools' use. The choice of a mixed method approach is also aligned with a call in the literature to integrate quantitative and qualitative research in order to study strategy development issues (Hitt *et al.*, 1998). Though, this methodology also raises huge challenges, particularly due to the need for extensive data collection and complex analysing procedures. Additionally, using a mixed method holds the risk of obtaining contradictory results (Patton, 1987). Nonetheless, this is possible to overcome by performing intense analysis and reflection which in turn may generate richer understandings.

To sum up, we employed a mixed method in order to provide both a general picture of strategy tools' use and detailed information of their utilisation in practice.

3.5 Target Population

We intend to focus in the largest companies operating in Portugal. We believe this approach is the most adequate for the purposes of this research because, generally, it is the largest companies that invest more resources (time, money and intellectual capital) in acquiring, implementing and using strategy tools. Furthermore, considering the time span available for

this dissertation and the fact that we employed a mixed method research, it is more appropriate to focus on a smaller target population.

3.6 Instruments and Procedures

Since our research relies on a mixed method approach, we employed two different data collection techniques. Firstly, we applied a questionnaire to a large population in order to map the demographics of strategy tools' use. Secondly, we used in depth interviews to explore in more detail the information obtained and to uncover some relevant issues about strategy tools' use. In order to provide an integrated picture of our approach, following we summarise the research activities undertaken in this dissertation (Table 11).

Table 11 – Research Activities Timetable

	Research Activities	Duration
Questionnaire	Preparation	January 2007 - May 2007
	Data Collection	May 2007 - September 2007
	Data Analysis	September 2007 - October 2007
Interview	Preparation	October 2007
	Data Collection	November 2007 - December 2007
	Data Analysis	January 2008

Each data collection technique employed had three periods: preparation, data collection and data analysis. In the next lines, the procedures undertaken are described. For that purpose, we split this section into two parts: questionnaire procedures and interview procedures.

3.6.1 Stage 1: Questionnaire

We applied a self-administered questionnaire with the intent of gathering a general view about the use of strategy tools in the largest companies operating in Portugal. In this sense, we did not intend to use the questionnaire to test complex relationship between variables.

3.6.1.1 Sampling

Taking into account that our goal was to focus on the largest companies operating in Portugal we had reflected about various alternatives to find a sample procedure that met our research

goals. In particular, we considered the resources and the time span available to undertake this dissertation. Besides, we had also reviewed some literature about surveys and some researches about strategy tools with special emphasis on the one conducted by Stenfors *et al.* (2007). As a result of our reflection process, we chose the list entitled “The 1000 Largest Companies” (edition 2006) that come as supplement in the edition number 1773 of the newspaper Expresso. We should clarify that a company to be included in this list had to deliver its financial statements of the year 2005. This procedure may be an obstacle for the inclusion of some companies in the list, especially those that do not want to share their financial statements. However, companies generally want to be recognized in this type of publication, and therefore they have some incentives to collaborate. Moreover, we carefully analysed the list and observed that the majority of the largest companies in Portugal seem to be included. Finally, we also considered this list appropriate to attain our goals because the number of companies included was sufficiently large (1000). Nevertheless, we should clarify that we found some errors in the list and thus the final sample was composed by 993 companies.

Regarding the characteristics of the sample, the turnover (year 2005) vary from 7500 to 20.7 million Euros, the number of employees vary from 15938 to 1. Concerning sectors, we have companies from retail, services, building, tourism, electronics, metallurgies, chemistry, textiles, paper, wood, minerals, energy, transports and some others. Though, the list excludes holdings and financial institutions.

To conclude, we should add that although we deem the list used appropriate to address the goals of this dissertation, the fact that companies must deliver their financial statements to be included in the list may affect the desired representativeness. Taking this into account, we do not regard this list as a truthful replica of the largest companies operating in Portugal.

3.6.1.2 General Considerations about the Instrument

We chose to apply a self-administered questionnaire mainly because we intended to reach a widely dispersed sample. Furthermore, this approach is advantageous because the respondent does not have to directly share the answers with an interviewer and thus he/she may feel more comfortable to provide the information required. We also chose this instrument because it gives respondents time to provide thoughtful answers (Fowler, 1993). Nevertheless, we are aware that this data collection technique has its own limitations. For instance, the questions may be misunderstood by the respondents since the interviewer is not present to clarify any

doubts. Moreover, it is important to recognize that sometimes there are significant differences between what the respondents say and what they do (Foddy, 1996; Fowler, 1993). Hence, we have to consider these limitations when interpreting the results. Additionally, we have to bear in mind that the questionnaire usually provides superficial answers that do not have all the elements required to profoundly understand and comprehend the phenomenon under study (Quivy and Campenhoudt (2005). This was one of the reasons that lead us to apply follow-up interviews.

3.6.1.3 Selecting a Standard Instrument or Creating a New One

One of the most vital decisions a researcher has to make is between using a standard instrument or creating a new one. In our case, we opted to create a new questionnaire instead of using an existing one. Although at a master level it is usually more adequate to use standard questionnaires that are highly tested and validated, we took this critical decision for several reasons. Firstly, we made a thorough review of the literature and we found very few researches that addressed strategy tools and even fewer that used a questionnaire approach. Secondly, the researches that applied a questionnaire did not match our goals and intentions. In this regard, the questionnaire applied by Clarke (1997) and Frost (2003) were focused on identifying which tools were used in specific strategic tasks. Our approach was directed to a more general level of understanding, that is, we were focused in the use of strategy tools as whole. On the other hand, the research of Stenfors *et al.* (2007) used an open-ended questionnaire that included five general questions. Albeit their approach was much closer to our intentions we believe that using an open-ended approach was not adequate for us, mainly because of resource restrictions. This view is sustained by the fact that it is generally harder to get answers to open-ended questions in self-administered questionnaires. Besides, the data analysis process would have been much more extended and complex. Nevertheless, we used the questionnaire of Stenfors *et al.* (2007) as a basis to create our own questionnaire made mainly of closed-ended questions.

Thirdly, the fact that we did not intend to make complex relationships between variables turned the option of creating a new questionnaire more attractive and viable. Finally, it is important to highlight that we constructed this research with a long-term perspective, that is, we expect to improve it in the future and therefore this questionnaire is also being tested in order to be enhanced both in terms of validity and reliability.

3.6.1.4 Questionnaire Building Procedures

Since we opted to create new a questionnaire, it is critical to bring to the surface the procedures undertook with aim of minimizing bias and increasing the reliability and validity of the instrument of data collection. In this regard, we are fully aware for the need to take special attention to a set of procedures in order to ensure the quality of the instrument. Notwithstanding, it was not feasible to undertake a thorough and complex process of validation because that would exceed the time limit of this dissertation. Hence, we tried to stick rigorously to a set of highly recommended procedures in order to minimize bias. With this in mind, we made a comprehensive review of the literature related to survey research. Thus, based on the work of a variety of authors (Babbie, 1998; Foddy, 1996; Fowler, 1993; Ghiglione and Matalon, 2001; Hill and Hill, 2002; Quivy and Campenhoudt, 2005; Sudman and Bradburn, 1982) we gave special attention to the following recommendations:

- Make clear questions and relate them to respondents' background.
- Use universal words and clear descriptions, and avoid negative or abstract terms.
- Address the questionnaire to people who have the knowledge and experience to answer it.
- The order of questions matter. Generally it is recommended to start with soft questions and to increase progressively its scope and complexity.
- Prefer short items in a questionnaire rather than long and complex ones.
- The design of the questionnaire ought to be attractive

In a nutshell, with the aim of ensuring the needed scientific rigour we prepared our questionnaire bearing in mind the following issues: our research goals and questions; the recommended procedures mentioned previously; a thorough review of the literature related to our subject of study.

3.6.1.5 Questionnaire Validation Procedures

Albeit it was not feasible to undertake a full validation procedure, it was vital to minimize the bias in our instrument of data collection. Accordingly, we complemented the procedures described in the previous section with a set of validation procedures. Firstly, the initial questionnaire format was intensely discussed with 2 experts (Professor Nelson António¹ and Professor Álvaro Rosa²) in the field of strategy research.

¹ Nelson António, Full Professor in Instituto Superior das Ciências do Trabalho e da Empresa (ISCTE)

² Álvaro Rosa, Assistant Professor in Instituto Superior das Ciências do Trabalho e da Empresa (ISCTE)

In this step, careful attention was directed to ensure that the content of the questions matched our goals and that the questions were adequately formulated in terms of wording, order, clearness and conciseness. After these discussions some little improvements were made.

Secondly, we carried out a pre-test (to increase content validity), applying our initial questionnaire to five respondents from five different companies. In the pre-tests, we first requested the respondents to complete the questionnaire and after they finished we asked if they felt difficulties to answer any question. Additionally, we questioned if they have any suggestions to make and we made more detailed questions to ensure that they really had understood it. Thirdly, the data collected in the pre-tests were analysed and discussed with the two experts mentioned above.

Fourthly, considering the detailed reflection made on the pre-test sessions and the data collected we made some modifications to our questionnaire due to a number of reasons. Firstly, we found that some respondents had difficulties to understand some questions (for example they usually asked for the meaning of some of the listed tools). Secondly, the respondents made some suggestions that we considered highly pertinent. Thirdly, the conversations established with respondents showed that we could gather more information.

As a result of our pre-test, we added one question (asking for ordinal data) and decided to change one of the existent questions in order to gather ordinal data instead of nominal. Besides, we felt that our list of tools (in the first question) should be enlarged to increase the amplitude of our alternatives.

Considering that we did not aim to test any complex relationships between variables, we believe adequate procedures were undertaken to ensure the validity of the data collection instrument.

3.6.1.6 Questionnaire Questions Explanation

According to Sapsford (1999) when we build a new questionnaire we should carefully explain each question in order to make readers understand what we want to achieve. However, because of space restrictions, we only present a brief account of the questions formulated. Nonetheless, we provide a full explanation in Appendix A.

Based on the questionnaire building procedures (section 3.6.1.4) and the validation procedures (section 3.6.1.5), we built our final questionnaire (Appendix B). It comprises five close-ended questions and one open-ended. We chose this approach because we wanted to

receive standardized answers in the issues where more information was available in the literature and to receive richer answers in the issue where we found less information.

We began the questionnaire by asking some background data about the company and the respondent. Then, in the first question we asked for the strategy tools used in companies. We listed 13 strategy tools according to our review of strategy manuals (section 2.2.3.2) and to the results obtained by Stenfors *et al.* (2007). The second question was about the ways used by companies to access strategy tools (according to the literature review in section 2.2.3.4). The third question enquired respondents about strategy tools' implementation. The fourth question asked respondents to order the three main ways of using strategy tools (according to the literature review in section 2.2.3.5.4). The fifth question was about the reasons to use strategy tools. Respondents were asked to classify (in a scale between one and five) the importance of eleven reasons that we listed (according to the literature review in section 2.2.3.6). Finally, the sixth question enquired respondents about the difficulties in strategy tools' use. We made an open-ended question.

To conclude, we should note that we were mainly interested in factual information. In this sense, the three first closed-ended questions asked for nominal data. In the latter two, we asked for ordinal data (one with a categorical scale and other with a continuous scale). This is a superficial level of measurement but we think that it perfectly meets our goals.

3.6.1.7 Questionnaire Administration Procedures

Because of space restrictions, we opted to be brief in this section and to present a full description and explanation of the procedures employed in the Appendix section (Appendix E).

Our survey was conducted between May and September 2007. We decided to wait approximately four months after the sending date, because we deemed that this time length was adequate to give enough time for all the companies to answer our questionnaire. On the 7th of May, we sent the questionnaire to all the companies of our sample. We attached to the questionnaire a cover letter (Appendix C), addressed to the CEO, explaining the purposes of this research. Furthermore, we followed the recommendations of Babbie (1998) and sent a follow-up mail (Appendix D) to all the non-respondents. This occurred eight weeks after the initial mail sent. We also provided a site on the internet where the respondents could fill in the questionnaire. Considering the resources available, we made a determined attempt to ensure a high response rate.

3.6.1.8 Questionnaire Data Analysis

Our main goal was to provide a general picture of strategy tools' use and not to test complex relationships between variables. Therefore, we relied on descriptive statistics. Frequency results were drawn in tabular and graphical form to identify patterns and trends. We also used mean values for interval scale data (Alrech and Settle, 1985).

The last question of the questionnaire provided open answers in qualitative form. Thus, we applied content analysis. According to Krippendorff (2004: 18) "content analysis is a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the context of their use.". Additionally, we can distinguish between quantitative and qualitative content analysis. In the former, the researcher counts concepts as part of content analysis. In the latter, the researcher seeks to identify key concepts in order to examine the relationship between them (Bardin, 1977). To analyse the data produced in the last question of the questionnaire, we applied the principles of quantitative content analysis. This was appropriate because we wanted to uncover which difficulties of strategy tools' use were more frequent. Accordingly, we categorized each difficulty pointed into related themes and counted its appearance (Bardin, 1977).

3.6.2 Stage 2: Interview

We used the interview with the intent of gathering richer information about the use of strategy tools in the largest companies operating in Portugal. Our main goal was to enrich the results obtained with the questionnaire and to uncover relevant issues in the use of strategy tools in order to provide a more accurate description about them.

3.6.2.1 Sampling

Our sample derived from the respondents that answered the questionnaire since our goal was to complement the outcomes achieved. We did not employ any complex procedure in the selection of the companies interviewed. We simply looked carefully at the surveys received and took into consideration the following issues: the companies that have selected more tools (especially those that selected the most used tools in the survey); the companies that have provided more additional information (this could be an indicator that they were more prone to collaborate); the companies that were larger in size (because those were our main focus); the

companies that were headquartered in the region of Lisbon (because of the resources available). Based on those issues, we contacted fourteen companies and were able to interview seven of them (the others did not respond or said to be unavailable to collaborate). From our standpoint, the procedures employed were adequate to meet our goals since we did not intend to generalize the results obtained with the interviews.

3.6.2.2 General Considerations about the Instrument

We chose to apply a follow-up interview because this instrument of data collection is appropriate to provide rich information about a certain subject or situation. This occurs because interviews give ample flexibility for the interviewer to adjust to the frames of reference of the interviewees and it enables to clarify with more accuracy the meaning of questions and answers. Moreover, interviews allow a true interaction that often gives the possibility to increase trustworthiness (through rapport) and therefore the quality and validity of data (Gil, 1994; Quivy and Campenhoudt, 2005). However, we also know this technique has some limitations. For example, it is possible that in some situations what the interviewees say is not totally accurate with what they do or with what really happens (Foddy, 1996; Gil, 1994). Hence, we tried to minimize this situation by giving careful attention to nonverbal communication. Furthermore, we were also aware that the reactions of the interviewer (even nonverbal ones) to respondent's answers could affect the interview process. Consequently, we acted carefully in order to minimize any bias.

3.6.2.3 Selecting a Standard Instrument or Creating a New One

We have already approached this situation of choosing a standard instrument or creating a new one in the questionnaire section (3.6.1.3). Thus, we will now be succinct. We just want to clarify that we chose to create a new interview guide because we wanted to gather information that enriched the data collected through the questionnaire and therefore we considered that creating our own questions would be the most appropriate option.

3.6.2.4 Interview Building and Applying Procedures

We made a review of the literature about interview procedures in order to minimize bias in the development and application of our instrument. As result, based on the work of several

authors (Creswell, 2003; Denzin and Lincoln, 1994; Flick, 1998; Foddy, 1996; Gil, 1994; Patton, 1987; Quivy and Campenhoudt, 2005) we gave special attention to the following recommendations:

- Formulate clear questions and clarify any doubts.
- Adapt questions to the common language of the interviewee's.
- Formulate only one question at a time and ensure its neutrality.
- Use probes and follow-up questions to obtain richer responses and fulfil the goals (elaboration probes – keep interviewee talking; clarification probes – to clarify answers).
- Listen carefully (without making judgements) and hold in mind the goals of each question.
- Provide feedback and reinforcement to ensure interviewee motivation to collaborate.
- Establish rapport with the interviewee and show absolute interest in his words.

In the application of the interview, our goal was to create the adequate environment for the interviewee to freely express his/her perspectives and experiences since our main aspiration was to get rich information about the use of strategy tools. For this purpose, we applied a semi-structured interview since this type of approach provides more flexibility in the interview process. Thus, our concern was neither in formulating all the questions in our guide nor respecting any kind of order. Instead, our aim was to have available a set of questions with the intent of stimulating the interviewee to talk openly. Put differently, our questions were made to help ourselves in the task of ensuring that all the important topics were covered along the process. Indeed, some questions were only posited when we felt the need for more information.

3.6.2.5 Interview Validation Procedures

Although we did not have the resources to embark on a full validation procedure of the interview, we have complemented the recommended instructions presented previously with a set of validation procedures. The process followed was very similar to the one employed with the questionnaire (section 3.6.1.5).

In summary, we have first analysed the interview guide with the two experts mentioned previously (section 3.6.1.5) with the aim of ensuring clear and neutral questions that covered all the vital topics. Afterwards, we carried out two pre-tests in order to test if the instrument we had built met our purposes. In these pre-tests, we presented the goal of our research and intent of the interview and then formulated the questions. We carefully interrupted the

interview in different moments in order to ask our respondents if they had understood the question and if they needed further clarification. This procedure gave us an enhanced sensitivity about the clearness of the questions and the effectiveness of the interview guide. It was not always possible to formulate every question because, in some situations, the interviewee's had already answered them in other responses. Moreover, some probes and other questions were used when we felt the need to gather richer information or clarify any response.

After the pre-tests, we analysed the data collected and reflected upon the interview process. Based on the discussion with the two experts already mentioned we made slight improvements. We adjusted the wording of two questions and eliminated three questions that were redundant or not needed to achieve our goals. These procedures led to the final interview guide (Appendix F).

3.6.2.6 Interview Guide

As said, the interview guide was designed to improve our understanding of the questionnaire results and to obtain rich information about strategy tools' use. In order to achieve these goals the interview guide was divided into three sections. Firstly, respondents were enquired to provide some data about them and their company. Secondly, some questions were made to understand the use of strategy tools in general. Finally, the last group of questions were directed to understand the use of specific strategy tools (selected by the executives).

3.6.2.7 Interview Administration Procedures

Following, the procedures applied in the administration of the interview (a full description is provided in Appendix H) are briefly described. We sent by email a letter (Appendix G) to the selected executives (from our survey respondents) requesting an interview in a date, location and time convenient for them. We assured total confidentiality and obtained their authorization to audio record the interview (one executive did not authorize; we took notes). We begun the interview by clearly explaining its purpose and we informed the executives that they were free to ask for any clarification.

3.6.2.8 Data Analysis

The transcribed interviews were analysed through the principles of content analysis. Since we wanted to generate a better understanding of strategy tools' use, we considered qualitative content analysis the most appropriate technique. In this regard, we followed the procedures suggested by Bardin (1977). Therefore, we first read all the transcriptions in order to get a sense of the data. Then, based on the data we had, on the structure of the questionnaire and on the ideas from strategy as practice framework (section 2.2.2.3) and strategy tools' use model (2.2.3.5.3), we created a set of categories to analyse our data. Afterwards, we allocated the meaningful units of analysis to each category. Our units of analysis were based on thematic distinctions (Krippendorff, 2004). Subsequently, we carefully read the units in each category to start making sense of the possible relationships. In order to increase the validity of our data, we contacted by phone all the interviewee's (one refused to collaborate), as recommended by Creswell (2003). The duration of the phone calls varied between five to thirty minutes. This step was relevant to check the most important issues in the data collected and to clarify some doubts that arose during the data analysis. Finally, we organized our ideas and presented the results obtained. We used interviewee's statements to better illustrate our descriptions.

3.7 Researcher Role and Experience

Creswell (2003) suggests that researchers should be absolutely transparent about the bias they may bring to a research by expressing it clearly so that everyone can make their own judgements. We are totally aligned with this point of view and therefore we clarify the relationship of the researcher of this study with the subject of research and with the companies studied.

Concerning the subject of this dissertation, the researcher does not have much experience in the use of strategy tools in an organizational context. This situation has its advantages and disadvantages. On the one hand, it may provide more openness in analysing and interpreting data because the researcher does not hold a pre-conception about the use of strategy tools. On the other hand, it can be a limitation since the researcher has not experienced the dynamics of using strategy tools in organizations and thus does not hold those practical insights. Considering this, we explored the advantage of not having a previous conception in mind to

analyse data with total openness and we faced the limitation identified with an exhaustive theoretical preparation.

Another relevant issue to clarify is that the researcher of this study does not have any type of connection with any company included in this research.

As Creswell (2003) recommended, we provided background information about the researcher of this study so that our readers have the opportunity to judge on any possible bias that we may bring to this research.

3.8 Final Notes on the Reliability and Validity of this Research

Gay and Diehl (1992: 166) defined reliability as “...the degree to which a test consistently measures whatever it measures”. Since our instruments did not intended to test complex relationships between variables we did not undertook elaborated procedures to test reliability. Nonetheless, we made an extensive review of the literature to ensure that the adequate procedures were employed. Besides, we acted carefully in every stage of this research in order to avoid any mistakes that could diminish the reliability of the instruments created. Furthermore, in order to ensure the appropriate evaluation of the reliability of this research, it is provided in this chapter and in the documents attached in the Appendix section, a complete description of all the procedures employed. With this, we also want to guarantee that this study is fully replicable in the future.

Validity is also an important element in every research. Gay and Diehl (1992: 156) define validity as “...the degree to which a test measures what it is supposed to measure”. In this chapter, we explained the procedures undertook to ensure the validity of our instruments of data collection. To summarise, in the questionnaire, we undertook discussions with two specialists in strategy research and we carried out five pre-tests to improve content validity. In the interview, we also had discussions with two experts and we made two pre-tests. Moreover, we have checked the data collected by contacting our interviewees by phone (one did not collaborate).

In addition to the above procedures, the previous experience of the researcher of this study was clarified (section 3.7), in order to provide readers all the information to judge on any eventual bias that we can bring to this research.

Finally, the fact that we used two techniques of data collection enabled to cross-check some of the findings and that is important to improve the quality of the results.

CHAPTER 4 – RESULTS

4.1 Questionnaire Results

This section begins with some general considerations about the questionnaire. Afterwards, the profile of the collected sample is provided and the results obtained are presented.

4.1.1 General Considerations

We sent 993 questionnaires and they were collected between May and September 2007. The first mailing was sent in the beginning of May and the follow-up in the beginning of July. We received 140 responses until the follow-up mailing and 80 responses after. From this responses, 202 (91.8%) were received by mail and 18 (8.2%) through the website provided. In summary, we received a total of 220 responses which means a response rate of approximately 22.2%. However, one questionnaire was blank and another was considered invalid which means that our useful response rate is approximately 22% (218 responses). In this regard, a questionnaire was considered valid when the respondents answered correctly to the first question. Other questions were analysed individually according to the validity of answers. We employed this procedure because the first question is the background to all the others. Besides, other questions are quite independent and thus we should not invalidate the whole questionnaire when some errors were found in those questions (questions two, three, four, five and six). Consequently, in these last questions of the questionnaire, we present the valid response rate individually.

In order to make sense about the response rate obtained in this dissertation, we ought to compare it with other similar researches (that employed self-administered questionnaires) about strategy tools and management tools. Hence, we could find that Gunn and Williams (2007) achieved a useful response rate 18.6% (149 out of 800), Stenfors *et al.* (2007) obtained 36.4% (184 responses out of 500), Frost (2003) got a 42.5% response rate (155 out of 365) in Western Australia, 48.1% (76 out of 158) in Singapore, 33.8% (46 out of 136) in Malaysia and 43.5% (54 out of 124) in Hong Kong. In addition, we found that Rigby (2001), in his management tools' research, achieved a response rate of 1.8% (215 out 11824) while Clark (1997) obtained a 35% (138 out of 400) response rate in his NZ Survey and 13.4% (161 out of 1200) in his UK Survey. Taking into consideration the previous researches, our response rate

is not unusual and we are quite satisfied with the responses obtained. Furthermore, we notice in the aforementioned researches that the response rate tend do decrease with larger samples which were our case. Accordingly, we believe that the sample collected is appropriate to accomplish the goals of this research.

As said before, we used a set of alternative answers in five of the six questions of the questionnaire. This turns the data analysis easier and may increase reliability because all the readers have the same set of options. Nevertheless, this also may restrict the answers received because not all the respondents have the same willingness to provide additional data in the “others” category. Hence, when we observe that some respondents have provided similar additional information (in the “others” category) it may be wise to equate the possibility of that the event being more widely spread in our sample. As we said in the methodology section, we also expect this research to be a foundation for further improvements in our instruments of data collection. Therefore, we think that the additional information provided may be a signal that we should integrate some more alternative answers in future research.

4.1.2 Collected Sample Profile

4.1.2.1 Companies' Profile

In order to have some idea about the size of the companies of our sample, we asked them for the number of employees. We received a total of 206 responses about this item which means that 94.5% of the valid respondents provided this information. We used the European Union recommendation n° 2003/361 to categorize companies' size according to their number of employees (Table 12).

Table 12 – Collected Sample Characterisation by Number of Employees

Number of Employees	Frequency	Percentage
1-9 (Micro Enterprise)	2	0.97%
10-49 (Small Enterprise)	16	7.77%
50-249 (Medium Enterprise)	64	31.07%
>250 (Large Enterprise)	124	60.19%
Total of Valid Responses in this Question	206	94.50%
Total of Valid Responses in the Survey	218	100%

As we can see, the majority of the companies (91.26%) of our sample are considered medium or large enterprises. Additionally, we should bear in mind that all the companies of our survey had a turnover higher than 20 million Euros.

4.1.2.2 Respondents' Profile

Job Position

Concerning respondents' job position, we received a total of 205 responses which we classified into categories (Table 13).

Table 13 – Respondents' Job Position

Respondents Job Position	Frequency	Percentage
Administrator/Chief Executive Officer	91	44.39%
Chief Financial Officer	41	20.00%
Strategic Planning Director	9	4.39%
Controller	9	4.39%
Assessor	7	3.41%
Human Resources Manager	7	3.41%
Director	7	3.41%
Coordinator	4	1.95%
Marketing Manager	4	1.95%
Accounting manager	3	1.46%
Others	23	11.22%
Total of Valid Responses in this Question	205	94.04%
Total of Valid Responses in the Survey	218	100%

The above table shows that approximately 68.8% of the respondents were in high executive positions (administrator, CEO, CFO or strategic planning director) greatly associated with strategy matters. This was an important goal and the outcomes are quite satisfactory. This also may be a sign that executives are interested in this topic.

Education Level

We also have collected information about respondents' education level (Table 14). In this subject, we gathered a total of 204 responses.

Table 14 – Respondents' Education Level

Respondents Education Level	Frequency	Percentage
Bachelor	161	78.92%
Master	14	6.86%
MBA	14	6.86%
Post-Graduation	10	4.90%
High School	5	2.45%
Total of Valid Responses in this Question	204	93.58%
Total of Valid Responses in Survey	218	100%

The big majority (97.55%) of the respondents have a bachelor or a higher level of education.

Educational Background

In addition to the educational level, some respondents (110) indicated their educational background (Table 15).

Table 15 – Respondents' Educational Background

Respondents Educational Background	Frequency	Percentage
Management	37	33.64%
Economics	32	29.09%
Engineering	31	28.18%
Law	4	3.64%
Accountability	3	2.73%
Finances	3	2.73%
Others	5	4.55%
Valid Responses in this Question	110	50.46%
Valid Responses in the Survey	218	100%

The majority of the respondents (90.91%) have an educational background in management, economics or engineering. If we add all the educational areas more related to strategy (management, economics, accountability and finances) we come up with a total of 68.19%. This may be the respondents who had more contact with strategy tools during their education.

4.1.3 Research Findings

In this part of the dissertation, the results obtained in each question of the questionnaire are presented.

4.1.3.1 What Strategy Tools are Most Popular in Companies?

In the first question, we received a total of 218 valid responses which is equal to the survey's useful responses (Table 16).

Table 16 – Strategy Tools Used by the Companies Surveyed

Strategy Tool	Frequency	Percentage	Rank
SWOT Analysis	169	77.52%	1
Scenario Analysis	167	76.61%	2
Brainstorming	153	70.18%	3
Resource Analysis	129	59.17%	4
Risk Analysis	126	57.80%	5
Strategic Group Analysis	114	52.29%	6
Balanced Scorecard	101	46.33%	7
Portfolio Analysis	74	33.94%	8
Life Cycle Analysis	72	33.03%	9
Value Chain Analysis	68	31.19%	10
Porter's Five Forces	63	28.90%	11
Generic Strategies Analysis	55	25.23%	12
PEST Analysis	43	19.72%	13
Tools Internally Developed	5	2.29%	14
Action, Strategy and Business Plans	5	2.29%	15
Financial Tools	5	2.29%	16
Others	18	8.26%	
Valid Responses in this Question	218	100%	
Valid Responses in the Survey	218	100%	
Total Additional Responses	22	10.1%	

The results of the survey show that the most used tool is SWOT analysis (used by 77.52% of the companies surveyed) followed at a small distance by Scenario Analysis (76.61%) and Brainstorming (70.18%). It is also worth noting that Balanced Scorecard, which is a relatively recent tool in strategic management, is already used by almost half of the companies surveyed (46.33%). Also significant is the fact that the popular tools developed by Porter (1985, 1998) are among the least used ones. Value chain is used by 31.19% of the companies, Porter's Five Forces by 28.90% and Generic Strategies Analysis by 19.72%. The Strategic Group Analysis is the only one of Porter's "creations" that is used by more than a half of the companies (52.29%). The least used tool is Pest Analysis (19.72%).

Now, we briefly present the descriptive statistics on the mean number of strategy tools used by each company (Table 17).

Table 17 – Descriptive Statistics for the Number of Strategy Tools Used

Number of Strategy Tools Used per Company	
Mean	6.12
Standard Deviation	2.92
Median	6
Mode	7

As we can see the mean is slightly above six and the median is equally six, while the mode is seven. Hence, the surveyed companies generally use six strategy tools to undertake their strategic activities. However, this result may have been affected by the type of methodology employed. Nonetheless, we decided to give this information because we think that it may be useful in future researches to focus in the identification of the average number of tools used by companies.

4.1.3.2 How Companies Access Strategy Tools?

In this question, we received a total of 218 valid answers and 23 (10.6%) additional responses in the “others” category (Table 18).

Table 18 – Ways of Accessing Strategy Tools

Forms of Accessing Tools	Frequency	Percentage
Education and Training	176	80.73%
Consulting Companies	110	50.46%
Specialized Literature	81	37.16%
Magazines and Newspapers	28	12.84%
Internet Searches	27	12.39%
Corporate Headquarters	13	5.96%
Partnerships	1	0.46%
Sector Association	1	0.46%
Others	3	1.38%
Valid Responses in this Question	218	100%
Valid Responses in the Survey	218	100%
Total Additional Responses	23	10.6%

The results obtained show that the most important way used by companies to access strategy tools is through the education and training of their human resources (80.73%). Then, we have consulting firms which is a channel of access used by half (50.46%) of the companies. We

also observe that specialized literature is an option used by 37% of the companies. Finally, it seems that popular business literature has little relevance in strategy tools' dissemination. Our results indicate that only 12.84% of the companies access tools through magazines and newspapers. We also found the same result in internet searches.

In the "others" category, we were able to classify five of those responses within our predetermined list of alternatives. The other 18 responses were classified in different categories. The most relevant one is corporate headquarters, mentioned by almost 6% of the companies. We also find interesting that "partnerships" was referred by one company and "sector association" by another.

4.1.3.3 Which is the Typical Way of Strategy Tools' Implementation?

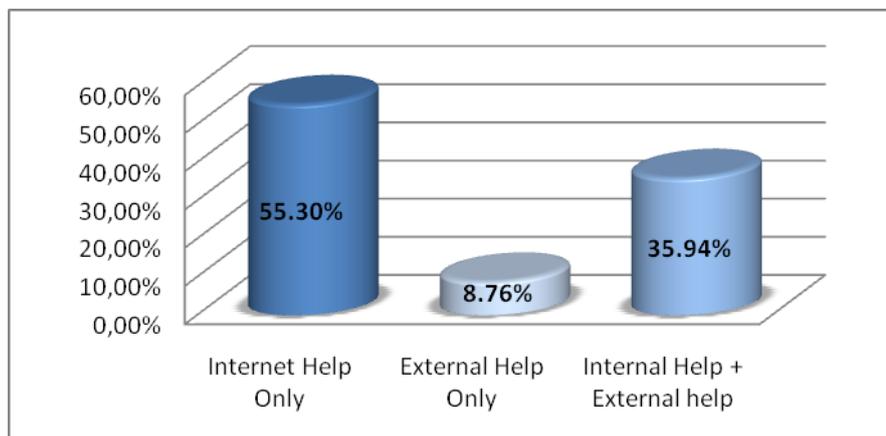
In this question, we had a blank response and therefore our total valid responses were 217. The results obtained illustrates that the big majority (78.34%) of the companies use internal help to implement tools and only 38.71% rely on external help (Table 19).

Table 19 – Ways of Implementing Strategy Tools

Way of Implementation	Frequency	Percentage
Internal Help	170	78.34%
External Help	84	38.71%
Valid Responses in this Question	217	99.5%
Valid Responses in the Survey	218	100%

In order to develop a better idea about our results, we present them in a more detailed way (Figure 4).

Figure 4 – Ways of Implementing Strategy Tools



The previous figure shows that more than half (55.30%) of the companies rely only in their internal resources to implement strategy tools. We also can see that 35.94% of the companies combine internal and external help. This suggests that these companies try to have an active role in the implementation of strategy tools but they also ask for the help of external players who may have more specialized knowledge. Finally, a minority (8.76%) of the companies reported that they relied entirely in external help to implement strategy tools. In other words, some companies prefer to leave all the implementation work to external players.

4.1.3.4 Which is the Typical Way of Applying Strategy Tools?

In this question, our main goal was to understand, in general terms, how companies act upon tools. Hence, we asked respondents to prioritize three general ways of using tools (according to the literature review in section 2.2.3.5.4). We received a total of 181 valid responses in this question which is 83.03% of the total valid responses collected. This was the close-ended question with the least valid responses because respondents sometimes did not prioritize all the options as asked or simply had put crosses. The results obtained are presented subsequently (Table 20).

Table 20 – Priorities in the General Ways of Applying Strategy Tools

	A	B	C	Total
N° of Times as 1st Priority	26	112	43	181
(% of Times as 1st Priority)	14.4%	61.9%	23.8%	100%
N° of Times as 2nd Priority	36	60	85	181
(% of Times as 2nd Priority)	19.89%	33.15%	46.96%	100%
N° of Times as 3rd Priority	119	9	53	181
(% of Times as 3rd Priority)	65.75%	4.97%	29.28%	100%

A- The indications mentioned in the sources are followed

B- It is made an adaptation of the instrument or it is used partially according to our goals

C- The ideas and concepts of the instruments are used to create new ways of work and new instruments

Following, we provide a graphic illustration to better illustrate the results in the above table (Figure 5).

Figure 5 – Ways of Applying Strategy Tools

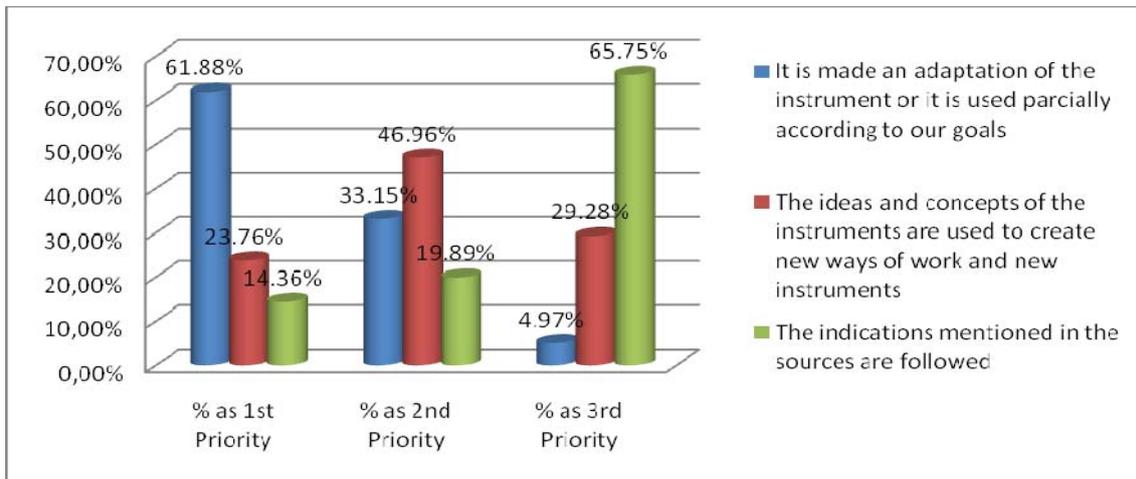
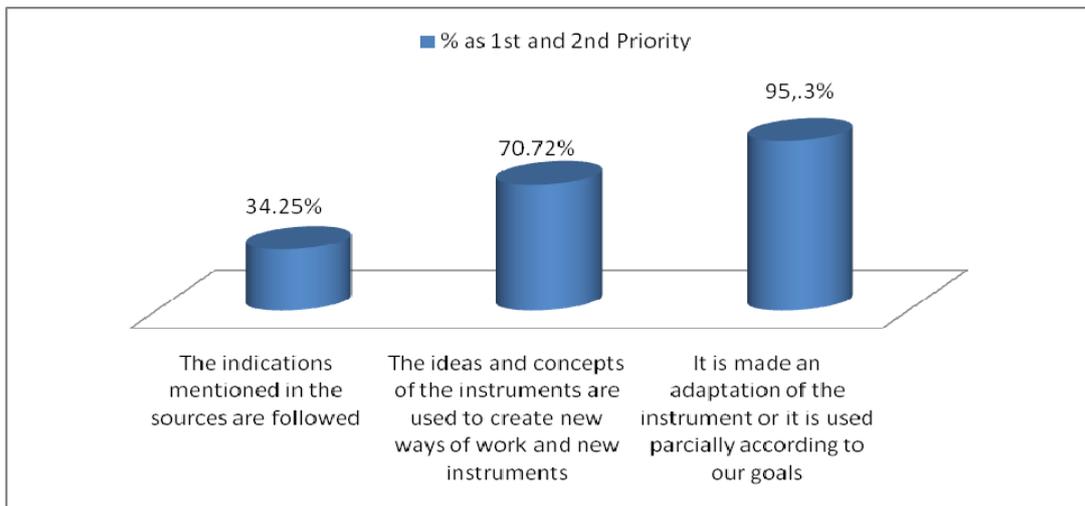


Figure 5 shows that the majority of the companies act upon tools by adapting them to their own goals and realities (61.88% as 1st priority). Furthermore, only 23.76% of the companies said that their preferred way to use strategy tools was to create new ways of work or new instruments. The least used way is to employ tools exactly as mentioned in the sources (65.75% as a 3rd priority). Figure 6 demonstrates with more accuracy the situation described.

Figure 6 – Ways of Applying Strategy Tools (1st and 2nd Priority)



The previous graphic strengthens the ideas explored before. Therefore, 95.3% of the companies indicated that they use tools through adaptation as first or second priority. In the creation of new tools, we observe that 70.72% indicated this option as a first or second

priority. In contrast, only 34.25% of the companies said that their first or second priority was to use tools according to their theoretical sources.

4.1.3.5 What are the Main Reasons of Strategy Tools' Use?

In this question, we provided respondents a set of alternatives and asked them to classify their importance. The results obtained (Figure 7) shows that all the reasons provided are important for managers but there are some which are considered more relevant than others.

The most important reasons to justify strategy tools' use are “make decisions more rational objective and transparent” (4.27), “clarify company’s strategy” (4.19) and “support the implementation of strategy at all levels” (4.18). On the other extreme, we found that the less relevant drivers of strategy tools' use are “facilitate the collection and analysis of the information” (3.68), “facilitate communication and generate dialogue” and “facilitate coordination and alignment of interests” (3.61).

Figure 7 – Mean Scores for Reasons of Strategy Tools' Use

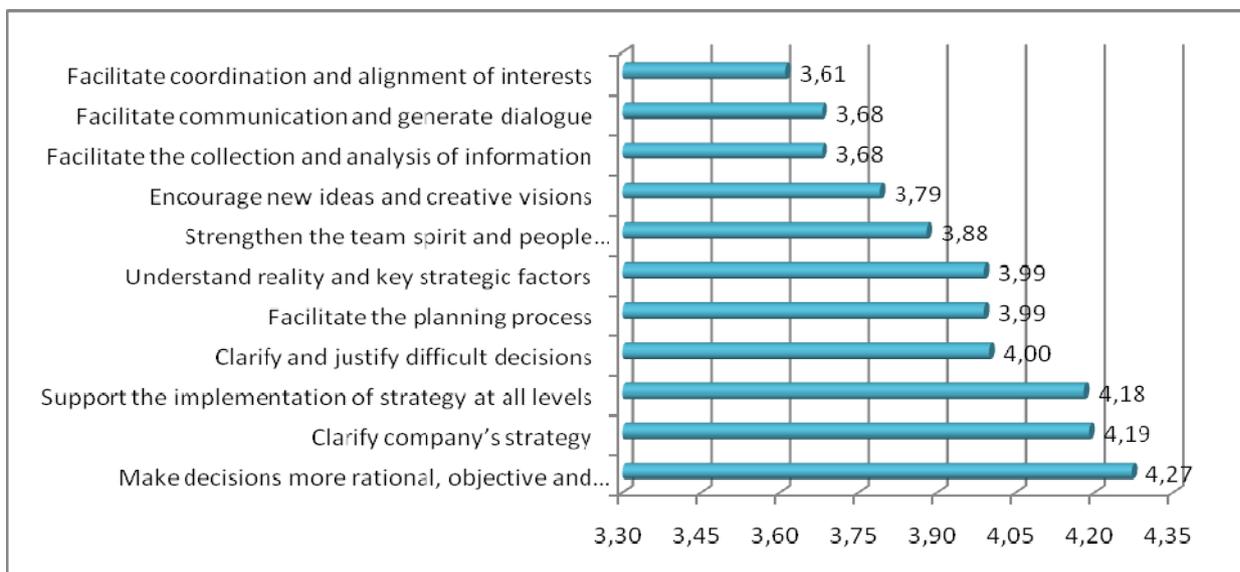


Table 21 analyses this data in more detail to better illustrate the differences identified. As it is possible to observe, the reason with less support from our respondents had been considered important or highly important by 57.67% of the companies. Therefore, all the reasons listed were considered relevant by the majority of the companies surveyed.

The most compelling reason that motivates managers to use strategy tools is “make decisions more rational, objective and transparent”. This reason was considered important or highly

important by 88.84% of the respondents. We also found that “support strategy at all levels of the company” (84.19%) and “clarify company’s strategy” (83.72%) were the second and third most important reasons. “Facilitate the planning process” was considered important or highly important by 78.14% of the companies.

Table 21 –Reasons for Strategy Tools’ Use (Levels of Importance)

Reasons for Strategy Tools’ Use	Imp. or Highly Imp.	Moderately Important	Little Imp. or Not Imp.
Make decisions more rational, objective and transparent	88.84%	9.77%	1.40%
Support the implementation of strategy at all levels	84.19%	13.02%	2.79%
Clarify company’s strategy	83.72%	13.02%	3.26%
Facilitate the planning process	78.14%	18.60%	3.26%
Clarify and justify difficult decisions	75.81%	19.53%	4.65%
Understand reality and key strategic factors	74.88%	20.47%	4.65%
Strengthen the team spirit and people commitment with organization	68.37%	24.65%	6.98%
Encourage new ideas and creative visions	66.98%	25.12%	7.91%
Facilitate communication and generate dialogue	63.72%	26.51%	9.77%
Facilitate the collection and analysis of information	61.40%	31.16%	7.44%
Facilitate coordination and alignment of interests	57.67%	33.95%	8.37%
Valid Responses in this Question	215	98,6%	
Valid Responses in the Survey	218	100%	

Also worth mentioning is the fact that respondents considered important or highly important the use of strategy tools to “clarify and justify difficult decisions” (75.81%) and to “understand key strategy factors” (74.88%). The above six reasons were the ones considered important or highly important by more than 70% of the companies enquired.

“Strengthen team spirit and people commitment with the organization” was considered important or highly important by 68.37% while “encourage new ideas and creative visions” obtained 66.98%. The least important reasons were “facilitate communication and generate dialogue” (63.72%), “facilitate the collection and analysis of information” (61.40%) and “facilitate coordination and alignment of interests” (57.67%).

4.1.3.6 What are the Main Difficulties in Strategy Tools’ Use?

The last question of the questionnaire was open-ended. Consequently, we received a lower response rate than usual in all other questions. Therefore, we got a total of 102 valid responses

which means 46.79% of the total valid responses received (218). This situation confirmed our fears about open questions and it fully justifies our option to avoid a whole questionnaire made of open questions. Though, we collected a variety of interesting responses that give us rich insights about the main difficulties managers face when using strategy tools.

From the total of 102 valid responses, we were able to classify 125 different inputs. These inputs were then put together in different categories according to their similarity.

Table 22 provides all the categories that received at least two inputs. The isolated inputs were aggregated under the category “others”.

Table 22 – Difficulties of Strategy Tools' Use

Difficulties Mentioned	Frequency	Percentage
Access to information (especially about competitors and external environment)	22	22.22%
Adapt to company own reality and terminology	18	18.18%
Human resources education and preparation to use tools	16	16.16%
Coordinate the use of tools across the company (locally or globally)	13	13.13%
Resources availability (especially time and human resources)	12	12.12%
Resistance to change and difficulties to engage people	11	11.11%
The time of implementation and learning are too long and sometimes frustrating	5	5.05%
Coordinate efficiently the use of different tools and concepts	4	4.04%
Monitor the outcomes and consequences of tools usage	2	2.02%
Lack of commitment from the top management	2	2.02%
Use tools "by the book"	2	2.02%
Select and focus on the important variables	2	2.02%
Uncertainty of the environment	2	2.02%
Others	14	14.14%
Total Inputs Classified	125	-
Total of Valid Responses in this Question	102	46.79%
Total of Valid Responses in the Survey	218	100.00%

The most widely mentioned difficulty was “access to information”. Approximately 22.22% of the respondents said that they have a difficult time to access the information needed to use strategy tools. They also revealed that the toughest information to find was about competitors and external environment. The following quotes are an example of this situation “the main difficulty is to obtain reliable data about the industry which turns the use of some models (especially Porter) a little bit theoretical”; “it is difficult to obtain with rigor all the needed information, especially in what regards to competitors”.

The second difficulty most mentioned (18.18%) by companies was to adapt strategy tools to the company own reality and terminology. In fact, companies revealed that strategy tools were not easy to adapt to company's situation and goals. These circumstances were clearly explained by one respondent who said that one difficulty he felt was to “adapt [strategy tools] to company businesses and reality; to remove/lighten the ‘academic effect’ ”.

The third difficulty categorized was “human resources education and preparation to use tools” (16.16%). Indeed, executives considered this an obstacle to the effective use of strategy tools. An example was “weak education of the human resources, who hold a short-term vision”.

Companies also indicated that they feel difficulties in coordinating the use of tools across the company (13.13%), they lack the needed resources such as time and people (12.12%) and they face some resistance to change and difficulties to engage people in the use of strategy tools (11.11%).

Some difficulties that have less prevalence among companies were the long time of learning and implementation (5.05%), the complexity of coordinating the different tools and concepts (4.04%) and the lack of commitment of top executives (2.02%). In this last difficulty, we should point out that the majority of the respondents were top executives and therefore it is quite unlikely that they will attack themselves. Put another way, this difficulty might have had a higher prevalence if our target respondents were middle and lower level managers.

The results obtained may be a departure point to conceive a research that tests the importance of these different difficulties.

4.2 Interview Results

This section begins with some general considerations. Afterwards, we set out the profile of our sample and discuss the background model to the presentation of our results. Finally, we put forward the results according to the meaningful themes found in our data.

4.2.1 General Considerations

Before presenting the interview findings, we need to make some considerations. Firstly, we should remember that the interviews were applied to build on the outcome of our survey and to understand in more detail strategy tools' use in companies. Secondly, we carried out a semi-structured approach that enabled the collection of substantial data. Thus, the results

presented are already filtered according to the methodology used (qualitative content analysis). Thirdly, we only present the results that deserve our full attention at this stage. Other results obtained in our follow-up interviews will only be provided during the results' discussion. We do this for two reasons: we do not want to saturate our readers with duplicated information and we deem that some results are more valuable only when complemented with the survey results. Fourthly, the outcomes are displayed by synthesis and comparisons. Finally, we assured total confidentiality to our respondents. Consequently, we did not provide any names of companies or interviewees (instead we used letters A to G).

4.2.2 Sample Profile

According to our criteria we interviewed large companies (all have more than 250 employees) and all the interviewees were top executives with close contact to their company's strategy (Table 23).

Table 23 – Companies' and Interviewees' Profile

Interview	Company Profile		Interviewee Profile	
	Sales	N° Employees	Job Position	Education
A	1500 M€	253	Communication and External Relations Director (member of the board committee)	Post-Graduate
B	51 M€	270	Management Control Director	Bachelor
C	300 M€	600	Financial Director	Bachelor
D	1500 M€	1150	Strategic Planning Director	MBA in Finance
F	32 M€	258	Strategic Planning and Management Control Director	Post-Graduate
E	52 M€	370	CEO	Bachelor
G	5.000 M€	35000	Strategy Director	Bachelor

In this regard, we can observe that three of the interviewees are strategic directors, one is the financial director, one the management control director, and one the CEO. Only interview A has a job position that is not close to strategy work however he has a seat on the board committee and therefore he participates in all the important decisions of the company. Accordingly, we think the interviewed executives have the adequate job positions to answer our questions. However, we have to admit that the ideal situation would be to enquire of people with the same job position in every company. Though, we have to be realistic and understand that this was not feasible to ensure.

4.2.3 Background Model to Frame the Interview Results

In order to ensure a logical structure to the presentation of the interview results, we rely on strategy as practice framework (section 2.2.2.3). In this sense, the different sections of the results relate to the three elements of that model: *praxis*, practices and practitioners. This approach is taken because this research is focused on the level of practices and thus it is concerned with the details of strategy tools' use.

Furthermore, we also rely on the notion of strategy tools' use model (section 2.2.3.5.3) to expand our level of analysis and increase the breadth of our approach. This model focus on strategy tools, strategy practitioners and context. Hence, this model is quite similar to the strategy as practice framework but it gives relevance to the context which can bring some more insights to our analysis.

4.2.4 Research Findings

4.2.4.1 Strategy Tools Deployment

In this part of the interview results, we focus on the interaction between practitioners and practices (strategy tools). More specifically, we uncover how managers apply and manoeuvre strategy tools. In this matter, all the companies interviewed revealed little concern with the theoretical assumptions that strategy tools normally carry. They clearly stated that the important thing is not the tool in itself but the work that it enables to accomplish. The following statement from Executive A is illuminating *“what is important is that the tool stimulates reasoning. It is more important the quality of reasoning than the proper use of the tool. For example, regarding the use of Porter Five Forces, I do not remember any of us reading what Mr. Porter said about the model and about what to put in each box, it is not so important. What is really important is that the tool helps people to think on the various implications for our business”*.

In the same vein, Executive D outlined *“in general we do not use the theoretical procedures to the letter since we prefer a more intuitive use”*. The same executive also added that the dynamic of the sector was an obstacle to the use of the more theoretical tools: *“the more theoretical tools are not used because it is tremendously difficult, in such a dynamic sector to invest the time to use those tools. We have to make a trade-off between the time spent and the*

benefits reaped with the usage of these tools". Executive F also explained that they do not use the tools' theoretical presuppositions in plenitude because they have to balance the efforts needed and the benefits they can achieve: *"we do not use these tools theories fully because we think the costs to implement them are superior to the benefits that we can get. This is always a subjective evaluation but it is what we do..."*.

In order to make our picture more precise, we present one more quotation. Executive G revealed that to be efficient she needed to adapt the tool to the company's reality: *"if I want to be efficient I have to transform this to our reality, sometimes I even have to turn the tool around and adjust it...clearly I did not make a copy/paste of the tool, I extracted the best from the tool to analyze what I wanted and to make my points"*. She also added *"it is due to an area that manages strategy and development to adequate the tool's theory, essence and objectives to what we intend, since the exercise have to be simple...there are tools that it does not worth imagining that I will apply them because it would be a perfect waste of time, and sometimes I extract the juice, I take off only what I intend to illustrate and I do not analyse in concrete, because to analyse in concrete means to stir thousands of data, thousands of transactions..."*.

It is also relevant to highlight that some companies reported the creation of new tools. Put differently, they undertook a creative process that lead to the development of new tools based on the needs and challenges they wanted to address. In this regard, Executive A described one of these situations: *"so let's arrange a system based on balls, I give 3 balls to each person of the group [during a brainstorming session] and each one have to distribute them through the ideas that considers most important, and this is a tool very simple but in the end they all finish the meeting with the feeling that the group felt that idea x, y and z were the most voted and so we need to focus on them..."*. In this specific episode, the executive described the creation of a simple tool that can have dramatic strategic scope because it decides which ideas they will focus on. Another example was given by Executive G, who gave us a full description of the tool she created to organize important information and call the attention of the board for them. She created that tool in order to aggregate vital information about the consumer, the sector, the company and the markets were the company was involved in. To better demonstrate this, we present a small quotation of her long description: *"...then I systematized this of the consumer and sector in top of the mind 1, top of the mind 2, and top of the mind 3, and here I had all the themes that are known from everybody and it is bad if we are not aware of these issues...and then I made something extremely visual because all of this had information behind, I had n factors in each of them, each factor was supported by specific documentation, and then I prepared something beautiful with colours hot or very hot, I have developed my*

own colour code...". This executive justified her need to create this tool: "...this was the manner I had to systematize the information that I passed away because I only can have credibility with facts...If you ask [her name] did you see this in some place, I will tell you no, but maybe I have inspired [unconsciously] in some of them [tools]..."

These were just two examples among others provided by Executives A and G. This suggests that some companies have to develop their own tools to address specific needs.

Summary

We found that companies typically are not too concerned with the theories behind the tools. They often use the tool as an object that can be manoeuvre of, changed and adapted according to their goals and resources. All the interviewed companies revealed this pattern. Some of them justified that they have to adapt the tools because of the characteristics of their sector or reality (Companies A, C, D, F and G). Another reason reported was that they have to make a trade-off between the resources needed to work out the tool and the benefits they can reap (Companies D, F and G). On the bottom line, they generally try to use simple tools or to turn the tool as simple as possible.

4.2.4.2 Strategizing Activities Mediated by Strategy Tools

In this section, we give more attention to the *praxis* element of the strategy as practice framework. In other words, we present the results obtained that relates to what exactly managers do when they are using strategy tools. This is important since our research approach takes a practice perspective, that is, we focus on the level of practices to better understand the use of strategy tools. Moreover, the literature review indicated that strategy tools are objects around which strategizing activities take place (Becky, 2003). Thus, it makes sense to identify the strategizing activities that managers are able to employ through the utilization of tools.

Before proceeding, we should point out that an activity is "a state of being active, a particular act, deed, hobby etc (to be) done" (Horny and Ruse, 1995: 8). It is also pertinent to remember that a practice encompasses forms of bodily and mental activities (Reckwitz, 2002). In this light, we identified in our data some essential activities that managers were able to perform through the use of strategy tools. These activities have consequential outcomes because they enable managers to address issues of strategic relevance, that is, to make sense of the relationship between the company and their environment.

Following, we put forward several quotations from our interviewees that lead to the identification of the strategizing activities. To begin with, we quote Executive E who revealed “...*some tools enable us not only to react but also to be proactive, in the sense that they enable us to **identify what is happening in real time***”. Therefore, we perceive that strategy tools bring about the activity of identifying and recognizing important issues to the company. Moreover, Executive D said “...*they also enable us to monitor **the accomplishment of strategy** and I think that is really important*”. Hence, strategy tools also allow managers to monitor and check their strategic activity.

Executive C observed “*they [strategy tools] serve to **analyse reality** almost online and to make judgments on the company daily activities, so that we can take measures as fast as possible to modify whatever is needed in our business*”. In this sense, strategy tools are used by managers to undertake careful analysis of important business issues.

Executive B said “*we use these frameworks because they enable us to **systematize the information available, they enable us to define a line of thinking, and structure our reasoning process***”. Executive D outlined “...*with these tools we can **systematize** and that forces people to **focus, to think** on the relevant questions and to define what is really important*”. These statements show several important activities that are mediated by the use of strategy tools. Firstly, strategy tools enable managers to organize and systematize important information. Secondly, strategy tools permit managers to focus on the key factors of their activity. Thirdly, strategy tools are relevant to stimulate thinking which is essential to develop a sense of reality and a strategic vision.

Executive A pointed out “...*other tools make us to introduce some new elements, so when we think about substitutes, this **oblige us to think in the market** in five years, the products in five years will not be the same, therefore these models help us to **communicate and make people think in new things** that can affect our business in the future...it also help us to **think in things that are known** but need to be turned explicit to **transform into numbers***”. Again, this quote underlines the relevance of strategy tools to make people think in known and unknown issues. In fact, tools may enable people to think in new things and this can lead them to create or innovate in some way (new projects, ideas or understandings). Another output of tools' use is the communication that is established between people. Thus, strategy tools also work as platforms that give a common vocabulary and allow people to interact and discuss key issues. Furthermore, tools enable to make things clearer and this allows quantification. Hence, strategy tools provide a framework to quantify the central issues and this is a basis to perform

the planning activities. Moreover, all the other activities identified aid the company's planning endeavours.

Executive D stated “*tools enable us to better **systematize** the information and that enable us to **decide** with more confidence*”. Accordingly, strategy tools mediate the determinant activity of deciding. Put another way, strategy tools enable managers to perform a number of activities that cause them to make certain decisions. Besides, the identified activities lead managers to undertake a continuous process of reflection. This also contributes to learning, that is, by being constantly doing activities that focus on important strategic issues, individuals are permanently learning and improving themselves.

It also becomes clear during our interviews and subsequent analysis that these activities may occur almost simultaneously and sometimes at the unconscious level. In other words, many of these activities occur in the mind (mental activities) and sometimes the mind is so fast that it performs several activities in a few seconds. For example, it is possible for managers to rapidly identify an issue, organize it in their internal frames of reference and then come to a decision. This process may sometimes be triggered by the use of a strategy tool. Hence, we discovered that strategy tools are an essential part of strategy work and therefore they may have tremendous impact in the macro level, that is, their use (micro level) can influence important decisions and consequently companies' outcome and performance (macro level). In these circumstances, studying strategy tools' use and the strategizing activities performed may enable us to establish links between micro-strategizing and macro-strategizing as it has been widely suggested in strategy as practice literature (Johnson *et al.*, 2003).

Table 24 summarises the activities identified and presents a dictionary definition for each one (Horny and Ruse, 1995). As we can see strategy tools allow practitioners to identify important issues, that is, to recognize important problems, needs or facts. We also noticed that managers undertook activities of organizing (to arrange people or things in a system or particular order), analysing (examining things in detail) and monitoring (to watch and check a situation). Moreover, we discovered that strategy tools enable managers to quantify (measure, express the amount of something), plan (an arrangement for doing or using something) and focus (maintain their attention on certain issues).

Besides, strategy tools are used to interact (have an effect on one another) and communicate (to share or exchange ideas and information). Strategy tools also allow managers to engage in learning (to gain knowledge of) and creating/innovating (to make something new or introduce some change). Ultimately, we found that all the activities mentioned enable managers to

undertake the fundamental activity of thinking (to use the mind in order to consider, form opinions and decide) and deciding (to give a judgment about, to make one's mind).

Table 24 – Strategizing Activities Mediated by Strategy Tools

Identify	to recognize a problem, need, fact, etc. and to show that it exists
Organize/Structure/Systematize	to arrange (people, things, etc) (in a system or particular order)
Analyse	to examine (a thing) carefully in order to learn something about it
Focus	to maintain attention on certain issues
Quantify	to measure; to express the amount of
Plan	an arrangement for doing or using something, considered in advance
Monitor	to check the progress of something
Communicate	to exchange, pass on, (news, information, feelings), etc.; to share or exchange news etc (with a person)
Interact	to have an effect on one another, another person or thing
Learn	to gain knowledge of, become skilled in (a subject being study, a particular activity)
Create/Innovate	to make (something new or original) / to introduce changes or new ideas
Think	to use the mind in order to consider, form opinions, decide
Decide	to settle (a question or a doubt); give a judgment about (something); to think about something and come to a conclusion; to make one's mind

All this process is complicated and continuously evolving and it contributes to mould the creation of individual and collective perspectives and visions which affect company's direction. From this vantage point, strategy tools enable to undertake several strategizing activities that tend to make things clearer. Executive G made an interesting remark "*...there are here many tools, and the beauty of tools is exactly this, so I am confused, stop, stop the game and now catch something, fix your focus, and as we do these exercises, things begin to become clearer and clearer*". So it seems that the use of strategy tools is part of a process where individuals and organizations are continually making sense and updating their views on the issues that relate to them. Hence, maybe we should see strategy tools' use as part of the broader process of strategy (as a social activity) that is continuously being shaped, altered and updated.

In order to have the full picture about these strategizing activities, it is crucial to understand that they are performed around important issues. Put differently, those activities only have strategic meaning if they relate to issues of strategic relevance. Therefore, we identified that the strategizing activities focus on business, market, industry and societal issues. Table 25 aggregates the dispersed examples of strategic issues that managers referred to during the interviews.

Table 25 – Examples of Strategic Issues Addressed by Strategizing Activities

Strategic Issues	Examples
Business Issues	Restructuring; new investment/segment/product; company's resources and capabilities;
Market Issues	Consumers; regulation
Industry Issues	Industry trends, prospects, requirements; competitors
Societal Issues	Economic, political, social issues

Managers told us that tools allowed them to analyse and define the restructuring of a business, to evaluate new investments, new segments, and new products and also to focus on the company's resources and capabilities. In market issues, our interviewees talked about consumers and regulation. At the industry level, they pointed out issues such as industry trends, prospects, requirements and competitors. Finally, at the societal level strategy tools allowed managers to address economic, political and broad societal issues that affect their business.

Summary

In short, we found out that executives generally use strategy tools to identify, organize, analyse, focus, quantify, plan, monitor, communicate, interact, learn, think and decide on business, market, industry and societal issues. All this complicated process occurs almost continuously and shapes strategy work. Therefore, strategy tools' use is consequential to macro-strategizing since they allow practitioners to undertake a set of interrelated activities to address important strategic issues.

4.2.4.3 Routines of Strategy Tools' Use

Following, we focus on the interrelations between *praxis* and practices (strategy tools). In this vein, we unveil the patterns established in the use of practices. More specifically, we uncover which routines managers develop on the application of strategy tools. This is important since it can tell us how different strategy tools may generate distinct *praxis*.

Our data revealed that companies generate different patterns in the use of strategy tools. The majority employ some tools on a regular basis, that is, they have defined (consciously or unconsciously) specific moments where they typically use a tool.

In this regard, we found out that every interviewed company that rely on Balanced Scorecard (Companies A, C, E and F) use it monthly. Generally, they read a report based on the tool's output and they usually discuss it with their colleagues, superiors and subordinates. Besides, the tool is upgraded annually with the results of the year and with the objectives, goals and actions for the following years. Executive E's statement is illustrative *"the Balanced Scorecard properly saying is used once a year when we calculate the final results and define, update the objectives for the future. However, the indicators and information resulted from Balanced Scorecard are reported monthly and they enable us to control the concretization of the objectives and to discuss it throughout the company"*. Executive F also advocated *"...like I said Balanced Scorecard is used monthly...we analyse it and I clearly discuss it with the responsible of each area and exactly departing from that analysis we are able to take corrective measure..."*.

SWOT analysis (used by companies A, B, D, F and G) is another type of tool that companies employ in a regular basis. To be concrete, from the five interviewed companies that use this tool, four utilize it annually. Notwithstanding, they can use SWOT analysis in other circumstances but at least they use it once a year, generally when they are preparing their budget and plan. In this vein, Executive B said *"SWOT Analysis we do not do across the whole company, but it is done by the marketing staff when they present the next year plans, they make a well developed SWOT Analysis [that it is a basis for the strategy formulated by the administrators]"*. Executive F also pointed out *"SWOT Analysis has different characteristics and it is clearly done at an annual basis and more to the medium and long term, it is more a strategic view on the business..."*.

Regarding Brainstorming, different patterns were found. Some companies (B, C and F) also undertake sessions routinely in order to bring some light on strategic issues. In this regard, Executive B explained that *"...we do brainstorming at least once a year in what we call the meeting of innovation and new products, and here are involved all the areas of the company [directors] and we discuss these things, basically oriented to new ideas and products"*. By the same token, Executive C revealed that they usually have two brainstorming sessions, one in the middle of the year and another in the end. He said that the goals are to evaluate the ongoing activities and achievements, to share their interpretation of the environment and to exchange ideas in order to generate value for the company. Other companies (A, D, E, and G) revealed that they do not define specific moments to undertake brainstorming. They use it as part of their set of tools but its use depends on the circumstances and challenges they face. In this domain, Executive E asserted *"Brainstorming is used when we have an important issue or*

problem to discuss, so it always depends on the need to creatively discuss an issue or solve a problem”.

The general idea is that they employ this tool to face unexpected situations such as important strategic decisions that have to be made (e.g. laying-offs or large investments), a crisis, a particular event that emerged in their market/industry (e.g. entrance of a new competitor) or in the broader environment (e.g. crisis in financial markets) or even in situations where the company necessitate to foster creativity and innovation for increasing value generation.

The companies that have predetermined moments where they use Brainstorming also undertake this kind of unplanned sessions when they have to face important issues or problems. From this vantage point, Brainstorming can be used regularly in specific defined moments or occasionally in unexpected situations, that is, in a non-routine basis.

Scenario Analysis is employed in a non-routine basis by the majority of interviewed companies (A, D, E, F and G). Put differently, this tool is utilized to face emerging needs and issues such as the analysis of new investments (e.g. new projects or products), important changes on the company (e.g. restructuration process) and major strategic options (e.g. focus on some businesses and abandoning others; entering new businesses or markets). Besides, this tool is useful to generate new perspectives about reality and to trigger creative thinking. Conversely, Companies B and C revealed a routine use of Scenario Analysis, that is, they usually employ scenarios when they prepare their budgets every year. Executive C said *“we use it [Scenario Analysis] periodically; I would not say that it is only once a year but once a year certainly is, we do it when we think in our budgets and plans for the next year and so in these moments all the scenarios are evaluated”.*

Our data favours the idea that resource analysis is a tool used in a non-routine basis, in other words, it is not the kind of tool that companies employ year after year. This idea was supported by the reports of company F and G. They considered this tool relevant to reflect deeply in their company and to foster new ideas for developing value added activities with major impact in their future strategic orientation.

Company A and D reported a non-routine use of Porter's Five Forces. In this regard, Executive D pointed out *“tools such as Porter's Five Forces are not part of our routine because they are often used in moments of strategic reflexion”.* Both companies made clear that this is not the type of tool that they use every year.

Our previous results suggest that the interviewed companies have two types of behaviour upon tools. On the one hand, they rely on certain tools on a routine basis, that is, in specific defined moments. On the other hand, they display a non-routine use of strategy tools, in other

words, they use some tools occasionally to face emerging needs and unexpected situations. Executive F's statement is quite illustrative *"like I said Balance Scorecard is analysed monthly, a SWOT analysis may be done annually and the use of scenarios is made according to the needs, therefore whenever a new project comes, a new idea or a new need to rethink a certain business unit we may use scenarios. So, there are tools that are used periodically like Balanced Scorecard and SWOT and others that are used occasionally according to the needs..."*. We identified this pattern in companies A, B, C, D, E and F. The only exception was company G who displayed a different approach to the use of strategy tools.

This company treated strategy tools' use as a continuous ongoing process that needs different tools at different times. Accordingly, they do not display a routine use of any strategy tool. The following statement is quite expressive *"...I end up reflecting here [in the questionnaire] not tools that are used every year and all in the same way but those that enters as the strategic debates evolves"*. She also said *"Then there are another question, if you use always the same tools, you are not challenging yourself, and so these tools have to be used but if you do your analysis always with SWOT it will be natural that few things change and so you are not getting insights any more...I remember that I made a SWOT in 2004...and I stayed three years without doing it and only this year [2007] I did it but with much more strategic sense, because I also evolved on this, and I confess that after three years some different questions emerged, if I have done SWOT Analysis every year it probably would be a copy & paste and so it would not bring added value to the exercise..."*

Summary

The interviewed companies typically have a set of tools were they rely to undertake part of their strategy work. The majority (six out of seven) displayed both routine and non-routine use of strategy tools. Put differently, they generally have some tools (such as Balanced Scorecard and SWOT Analysis) that are used at predetermined times. Other tools (such as Scenario Analysis and Resource Analysis) are employed according to needs that emerge in order to provide different points of view on reality and to trigger creative strategic thinking. Finally, we found one company that broke this pattern since they rely exclusively in a non-routine use of strategy tools, that is, they use different strategy tools in different moments of the strategy debate and they treat strategy as a continuous ongoing activity.

4.2.4.4 Strategy Tools' Use Dynamics

This section takes into consideration all the elements of the strategy as practice framework, that is, we focus on the way things happen (*praxis*), on the practices (strategy tools) conducted and on the practitioners involved. Furthermore, we bring to the foreground the notion of context that is embedded in the strategy tools' use model (section 2.2.3.5.3).

Following, we describe the use of specific strategy tools that were discussed during our interviews (we mainly directed our focus to the most popular tools in our survey).

Scenario Analysis is part of the portfolio of all the interviewed companies. Nevertheless, some differences in its practical use were identified. Table 26 condenses the most important findings about Scenario Analysis' use. Our focus is on the level of practices, that is, in the tool, the practitioners, the *praxis* and the context.

Table 26 – Summary of Scenario Analysis' Use

Company	Focus	<i>Praxis</i> Episodes	Tool Output	Context of Tool Creation	Creators	Context of Tool Use	Users of Tools Output
A	Broad	Multiple Episodes	Developed Descriptions	Individual and Group Meeting	Multilevel Team	Group Discussion	Executives and Business Unit Managers
B	Specific	Dual Episodes	Numeric	Mainly Individual	Management Control or Financial Manager	Group Discussion	Executives
C	Specific	Dual Episodes	Numeric	Mainly Individual	Financial Manager	Group Discussion	Executives and Functional Managers
D	Specific	Dual Episodes	Numeric	Mainly Individual	Strategy Manager	Group Discussion	Executives and Strategy Director
E	Specific	Dual Episodes	Numeric	Mainly Individual	Strategy Manager	Group Discussion	Executives and Planning Manager
F	Specific	Single Episodes	Numeric	Group Meeting	Executives	Group Discussion	Executives
G	Broad	Multiple Episodes	Developed Descriptions	Individual and Group Meeting	Strategy Manager	Group Discussion	Executives, Strategy Director and Business Unit Managers

Companies B, C, D, E and F showed a simpler approach. Typically, they employ this tool to address specific situations such as analysis of new investments, businesses, products, or evaluation of important modifications within the company. They also made clear that the use of this tool was essentially numeric. Put another way, they habitually consider different variables (e.g. industry growth, sales growth or cash flow projections) and according to alternative assumptions of those variables they assume different values and create alternative scenarios (typically between three and five). In this matter, Executive F said “...we put the business or situation that we are analysing in Excel and then we put a series of variables [e.g. investments, cash flow projections] and we then change the inputs to see what are the outcomes of the different options...and this is normally around the numbers, changing them, feeling them...”. In the group of companies mentioned above, only company B said that besides the numbers they also write down the advantages and disadvantages of each scenario. Regarding the way this tool is put into practice, the majority (Companies B, C, D and E) reported that it is a single person who does the different scenarios in a spreadsheet application and then they discuss the results in meetings that generally involve executives and sometimes functional and business unit managers. Hence, the tool's use generally occurs in dual episodes, that is, the tool is produced in one episode (mainly by one individual alone) and the tool's outcomes are discussed and modified in another episode (normally in group discussions). Furthermore, they can exchange some ideas before and after effectively doing the scenarios in the computer. Executive B's statement is illuminating “the scenarios are imagined by the executives and its execution is made by me [Management Control Manager] or in more specific situations by the financial director. Then the executives discuss the scenarios we made and take a final decision or ask for further modification of some variables...”.

In this matter, Company F displayed a different pattern of use, that is, they build the tool in a dynamic and interactive way during a meeting. Put differently, this company use the tool in single episodes, that is, the tool's output is created and discussed simultaneously. Executive F's account shows this situation “normally we are doing and discussing at the same time, normally we are doing, we are discussing, we put the variables, we evaluate scenarios, it is a situation managed as we decide and analyse and incorporate the scenarios in the spreadsheet...it is an extremely dynamic process that is done in a meeting at the executive level, that is, the president and me (executive director)...”.

Companies A and G revealed a completely different picture since they use Scenario Analysis along several episodes, with a broader focus and with a more developed output. These

companies take into consideration a wider picture that considers macroeconomic variables such as important political and social issues that relates to the evolution of societies and human beings. Besides detailed quantifications for each scenario they also wrote several documents that support a clear explanation of each scenario. This is a long process made in multiple episodes, that is, there is normally one element that initially works out the tool and then its outcomes are discussed in a group session. Afterwards, the process is repeated several times until the outcomes desired are produced. Executive G's long description clarifies this picture *"the scenario first has to be defined, we have to do a draft of the scenario, a draft of the vision, a clarification of what the scenario will be. Then, we have to go into quantifications of levels of investment...so we had all that was questions, alternatives, we had the assumptions behind those alternatives that were already quantified...I produced documents in Word, in Excel, matrixes of analysis that were then carried to a debate with executive commission, so with three executives and then in another stage we had a broader meeting with key personnel in the company in order to get more inputs...and if you want me to say, in the end of all this long process we ended with a power point slide for each scenario that summarised the vision, the big medium and long term goals for each scenario and the quantification of investment needs, and then we made a thorough evaluation of each scenario..."*.

We also found that the practitioners that participate in the creation and utilization of the tool output vary from company to company (e.g. executives, functional managers or multilevel team). Generally, in the creation of the tool participates only a single individual or a reduced number of people. In contrast, in the discussion of the tools' output, usually, a higher number of people participate.

In order to be succinct and objective, we will be briefer in the presentation of other tools. SWOT Analysis is used by companies A, B, D, F and G (Table 27). In the majority of the companies (A, B, D and G), the tool is formalized by a single individual who does the work of organizing all the available information to build the framework. In this regard, Company F showed again a different pattern, since SWOT Analysis is created during meetings that generally only include the executives. Executive F's statement is clear *"We [executives] meet, each of us brings ideas and then we discuss and we build and complete the model"*.

Regarding the person who develops the tool, we found different pictures. In Company A, SWOT analysis is mainly produced by business unit managers, in company B it is chiefly produced by the management control or financial director, in companies D and G it is created by the strategy manager and in company F it is the responsibility of the executives.

Table 27 – Summary of SWOT Analysis' Use

Company	Focus	Typical Way of Use	Tool Output	Context of Tool Creation	Creators	Context of Tool Use	Users of Tools Output
A	Broad	Multiple Episodes	Formalized Description	Mainly Individual	Business Unit Managers	Group Discussion	Whole Company
B	Specific	Dual Episodes	Formalized Description	Mainly Individual	Management Control or Financial Manager	Group Discussion	Executives and Functional Managers
D	Specific	Dual Episodes	Graphical Description	Mainly Individual	Strategy Manager	Group Discussion	Executives and Strategy Director
F	Broad	Single Episodes	Informal Notes	Group Meeting	Executives	Group Discussion	Executives
G	Broad	Multiple Episodes	Formalized Description	Mainly Individual	Strategy Manager	Group Discussion	Executives, Strategy Director and Business Unit Managers

In the level of formalization of the tool's output, different patterns were uncovered. Companies A, B and G exhibited an extensive formalized description which included the graphical form of the model and thorough descriptions and analysis of each element of the model. On the other hand, company F demonstrated a totally informal use of the tool that resulted in raw notes taken during the meeting where they build the model. Executive F's quotation illustrates this *"it is an informal process where we meet, we all seat down and we start throwing out ideas and to analyse...like I said it is not formal we stay with some notes and nothing more."*. Company D also showed an informal approach but they said that they end up with the graphical form of the model that sums up the important ideas.

All the interviewed companies use SWOT Analysis' output to communicate and exchange ideas during group discussions that can be broader (including executives, managers and even the whole company) as in companies A, B, and G or can be restricted (only including executives and eventually the strategy manager) as in companies D and E.

Finally, companies employ the tool with different focus. Companies A, E, and G use the tool in a broader way since they include in their analysis a focus on broad environmental issues (e.g. macro economy, society or politics). On the other hand, companies B and D displayed a more restricted focus, which is chiefly oriented to their market and sector. These differences may relate to different ways of approaching strategy work.

All the companies said to use brainstorming to address strategic issues. This tool is typically group oriented so it is absolutely natural that the context of tool creation and use is the same. Put another way, the tool's output is created and developed during group sessions. We also realized that companies use Brainstorming to address a variety of themes that can range from specific situations (e.g. how to face a new competitor) to broad perspectives (e.g. ideas about the current environment). In addition, practitioners present in each session may vary according to the scope of the issue being treated. On the bottom line, this is a very flexible tool that may be used in diverse ways depending on the different issues that emerge.

Balanced Scorecard is used by companies A, C and E. Generally, a single user is responsible for analysing the tool's output and for creating a monthly report that then is distributed to all the executives and to functional and/or business unit managers. This report is used at different levels of social context. Indeed, practitioners may read the report and analyse the data alone (individual level of social context) or they may feel the need to interact and communicate with their subordinates, colleagues or superiors to discuss the outcomes of the tool (interpersonal level of social context). Therefore, this tool normally generates several episodes of use and its output is formalized.

Summary

We noticed that strategy tools are used by different people at different times in diverse contexts. In general, we found two levels of tools' use: producing the outcomes and discussing those outcomes. Typically, an individual does the job of organizing and putting the tool into practice. Then, the outcomes produced by the tool are discussed in one-on-one interactions or in formal group discussions. Moreover, strategy tools may be used in single, dual or multiple episodes. Single episodes happen when the tool is produced and discussed simultaneously while in dual episodes this process is separated in two different stages. In multiple episodes the tool is produced, then discussed, then modified and then discussed again and this may be repeated for several times. Finally, the tools' output can be more or less formalized. This can be linked with the way companies approach their strategy work.

CHAPTER 5 – DISCUSSION

5.1 General Considerations

This chapter discusses the findings of the dissertation. Since our research had two stages (questionnaire and interview), in this section, we have the opportunity to link the outcomes of both in order to build an integrated picture and a rich account of strategy tools' use in companies. This discussion follows the research questions formulated in the methodology section of this dissertation (Chapter 3).

5.2 What Strategy Tools are Most Popular in Companies?

Before undertaking a more detailed discussion on the findings related to this research question, it is necessary to clarify some issues. Firstly, it is important to remember that we listed a set of strategy tools and we enabled respondents to add other tools in the category "others". Nevertheless, we cannot assure that other tools (different from the ones listed) are not used by companies since respondents not always have the same willingness to provide additional information.

Secondly, we will compare our results with the ones of other similar researches in the field (Clark, 1997; Frost, 2003; Gunn and Williams, 2007; Stenfors *et al.*, 2007). As explained in our review of the literature different approaches were used. More specifically, the researches of Clark (1997) and Frost (2003) looked for strategy tools' use in 36 different strategic tasks. In contrast, our approach was more general, that is, we sought to identify the strategy tools used for any kind of strategy work. This was also the methodology used by Stenfors *et al.* (2007) and Gunn and Williams (2007). In these circumstances, our comparisons will be mostly oriented to the research on the largest Finnish companies (Stenfors *et al.*, 2007) and to the research on companies from an economic region of the UK (Gunn and Williams, 2007). These two researches used different approaches. Stenfors *et al.* (2007) made open-ended questions in contrast to Gunn and Williams (2007) who provided a set of tools to be selected. This last research was the most similar to the approach of this dissertation.

We now move on to discuss the results obtained. The foremost fact to highlight is that SWOT analysis is the most used strategy tool by the surveyed companies. Interestingly, these findings match with other similar researches in the field that were conducted in several

different geographical regions such as Australia, New Zealand, Malaysia, Hong-Kong, Singapore, United Kingdom and Finland (Clark, 1997; Frost, 2003; Gunn and Williams, 2007; Stenfors *et al.*, 2007). All those studies arrived at the same conclusion using different approaches and methodologies. From our point of view, this fact strengthens the idea that SWOT Analysis is probably the most popular strategy tool. Moreover, the prevalence of this tool in the companies surveyed (78%) is extremely high but quite similar to the larger companies in Finland (75%), and to companies of an economic region in the UK (70%).

These results seem quite impressive since they suggest that a tool created more than three decades ago keeps being included in companies' portfolio of strategy tools. Furthermore, it indicates that the utmost strategic thinking of Sun Tzu (2000) is still valid in our days: to win in the war or in the market one ought to know the environment and thyself; and the threats shall guide to opportunities.

On the other hand, this outcome gives credit to Mintzberg *et al.* (1998) argument that a great number of consultants and managers keep relying on SWOT model and other design school notions, albeit new techniques are continually being introduced. Or, under the framework of bounded rationality (Simon, 1955; March and Simon, 1958), it is consistent to think that executives prefer to use simpler approaches that are easy to manoeuvre and understand (Frost, 2003; Jarzabkowski and Wilson, 2006; Rigby and Bilodeau, 2005; Stenfors *et al.*, 2007; Stenfors and Tanner, 2006).

The prevalence of SWOT Analysis is rather confirmed in the post-questionnaire interviews. For executives the use of this tool is justified by its simplicity and wide spreading (e.g. "this is something that everyone in company knows and understands"). However, this excessive reliance on SWOT can also be perilous to companies since several authors have questioned its effectiveness and claims that it is dangerous to rely on such a simplistic approach (Grandy and Mills, 2004; Picton and Wright, 1998; Piercy and Gilles, 1989; Ruocco and Proctor, 1994). Additionally, some authors consider that strategy tools' use influence managers' mental models and frames. This may illuminate some elements of companies' strategy at the expense of others and thus provoke a cognitive bias in strategy-making (Knott, 2005). From this stance, it is important that companies avoid relying exclusively on one strategy tool to produce their strategy work (Stenfors *et al.*, 2007). Therefore, SWOT can be useful if it is balanced with other strategy tools to form a diversified portfolio. This will allow different points of view and different perspectives (Hussey, 1997).

In our study, companies usually reported an average portfolio of six different strategy tools. This compares with the average of five strategy tools in the portfolio of the largest Finnish

companies. Again, the results seem very similar and thus they build on the idea that companies rely on different strategy tools to make their strategy work.

The second most used tool in our survey was Scenario Analysis (77%). In contrast, Scenario Planning obtained 25% in the largest Finnish companies (Stenfors *et al.*, 2007), and 28% in companies from a UK's economic region (Gunner and Williams, 2007).

The noted difference may be justified by the terms used, Scenario Analysis and Scenario Planning. In our perspective, Scenario Analysis has a broader sense that encompasses increased number of activities such as scenarios for analysing different investments. This was widely noticed in our interviews, since the majority of the respondents argued that scenarios' typical use was to evaluate specific situations (e.g. analysis of investments, projects, products or important issues related to the company) and even when it was used to evaluate macro strategic options they relied on a less formalized approach. These outcomes are important because they reveal that a more intuitive use of scenarios is much used by companies to support their strategic decisions while the more formalized approach of scenario planning might have less popularity. Accordingly, the considerable differences between the use of Scenario Analysis and Scenario Planning in companies is congruent with Mintzberg's (1994) long seated claim that the planning school of strategy has lost its relevance, at least in the way that it was initially conceived. The more intuitive use of scenarios strengthens the idea that managers prefer to rely on tools that are simpler, easier to apply and less time consuming.

The third most used strategy tool in our survey was Brainstorming (70%). This outcome is somewhat surprising if we compare to the fact that only 20% of the largest Finnish companies use this tool. Again, these results may be influenced by the different methodologies employed. However, the difference is quite significant. One possible explanation is that Portuguese managers have a broader notion of Brainstorming concept and therefore they consider that most of the strategy meeting sessions come under the heading of Brainstorming. Nevertheless, we provided a clear description of the meaning of this tool in the questionnaire. Additionally, in our follow-up interviews the general idea transmitted was that they undertook Brainstorming sessions to address important strategic issues or simply to make sense of reality in a creative and open-minded environment. Consequently, this may indicate that the companies surveyed have a great concern with addressing important issues collectively and to create an appropriate environment to foster creative ideas and creative views about relevant matters.

The three tools mentioned before were used by more than 70% of our sample which shows their wide incidence in the companies surveyed. Besides, these tools are used in very intuitive

and simple ways which, again, reinforce that managers do prefer simpler tools and easier approaches.

The fourth most used tool was Resource/Capability/Competences Analysis (59%). This result suggests that companies are determined to understand and identify their resources, capabilities and competences. Hence, this seems to give credit to resource-based view (Barney, 1991; Grant, 1991; Newbert 2007; Prahalad and Hamel, 1990; Wernerfelt, 1984), a school of strategy that gained momentum during the 1990s. In companies of a UK's economic region, Resource Analysis obtained 15% while Core Competencies got 32%. We decided to mix this view in a single tool and therefore we cannot make such a detailed analysis. Though, the important thing to gather is that companies are really concerned with their internal strengths.

Our survey shows that the Balanced Scorecard – a recent tool (Kaplan and Norton, 1992) – is already being used by a considerable number of the companies surveyed (46%). Albeit this incidence is inferior to the one verified in the largest Finish companies (57%), it appears that some companies in Portugal are rapidly adhering to recent practices. In companies from a UK's economic region, the incidence of this tool was just 30%.

Another issue that came to light is the lack of use of the tools created by Porter (1985, 1998). For instance, Value Chain obtained only 32% of the respondents' preferences. This result contrasts with the 20% in an economic region of the UK and with the 6% in the largest Finnish companies. We also noticed that only 29% of the companies use Porter's Five Forces framework. This compares with the 13% in companies from an economic region in the UK (Gunn and Williams, 2007). In line with this, Generic Strategies is even used by fewer companies (25%). If we add to this the fact that only 34% of the companies use Portfolio Analysis (approaches such as the BCG matrix and McKinsey matrix) we may arrive at the conclusion that tools from the positioning school of strategy (Mintzberg, 1990) are now used by less and less companies. Our follow-up interviews may help to understand this situation since the majority of the respondents disregarded the use of some tools because they were too elaborate, too theoretical and excessively "academic". In fact, two of our respondents gave the example of Porter Five Force's framework to illustrate what they were saying. Though, this data builds on the perspective that managers tend to avoid the use of conceptually elaborate tools in favour of the simple and intuitive ones.

The least used tool in our survey was PEST analysis (20%). This data may indicate that companies do not consider it so useful to undertake an analysis that is only focused on the external environment. This idea come up in our interviews where mangers indicated that companies do not give much value to an analysis exclusively focused on the macro

environment. Instead, they usually prefer to connect the analysis of the environment with the analysis of their company and even of their competitors. They advocated that SWOT is a more complete tool although it does not go so deep in the analysis. An alternative view to this situation is that companies are so focused in their internal resources and in their close environment (business, market and competitors issues) that they give little attention to a more detailed analysis of the macro level. It may also be that they consider too time consuming and little effective a detailed focus on the macro environment. However, as we said before focusing too much on certain issues at the expense of others may be perilous. In other words, some companies may be relying excessively on simpler approaches which can narrow their thinking and their strategy decision-making process (Pellegrino and Carbo, 2001).

It is also interesting to highlight that companies pointed out some internally developed tools. This seems to demonstrate that some firms need to create their own tools to address their own challenges. This is in line with Kaplan and Jarzabkowski's (2006) report.

It is relevant to compare the strategy tools included in the strategy manuals reviewed (section 2.2.3.2) with those used by the companies surveyed. Surprisingly, with the exception of SWOT analysis all the other tools described in more than 80% of the manuals reviewed (Portfolio Analysis, Porter's Five Forces, Generic Strategies, Life Cycle Analysis and PEST Analysis) obtained low results in our survey. In this group of tools, the highest mark was just 34% (Portfolio Analysis) and the lowest was 20% (PEST Analysis). Therefore, strategy tools included in some strategy manuals are used by a third or less of the practitioners in our survey. We also noticed that our results in some of these tools are quite similar to other researches in the field. This situation may suggest that managers give little attention to strategy manuals and to some of the tools that are taught in business schools.

In spite of this, some alternative explanations may be forwarded. Firstly, this may indicate that strategy manuals and business schools are teaching tools that managers do not consider adequate for today's complex and fast changing environment. Secondly, it is also possible that it is a problem of persuasion, that is, manuals and business schools are not convincing managers for the usefulness of these tools. Thirdly, when managers are in day to day management they may forget most of the knowledge they learned or had access to through strategy manuals or they may simply consider the knowledge acquired irrelevant in face of their challenges. Fourthly, it is also possible that the temptation for simpler approaches and intuitive uses lead managers to disregard this type of knowledge. Fifthly, it could be that the so talked lack of communication between academics and practitioners (Maclean and Macintosh, 2002; Tranfield and Starkey, 1998; Whittington, 2004) is causing a problem

between the creators and users of strategy tools. That is, the excessive abstraction of academics on the one hand and the focus of managers in practice on the other hand may aggravate this problem. Hence, academics may be producing tools of little use in practice or managers may not understand those tools and perceive their benefit. It is important to highlight that our results do not allow us to support any of the above suggestions. Nevertheless, we certainly raised important issues that deserve being studied in more detail. In summary, during this discussion, we brought to light some pertinent matters. Firstly, we noticed that SWOT analysis is consistently the most used tool in this kind of empirical research. Secondly, we observed that managers tend to prefer simpler and intuitive tools that are easily applied. Thirdly, we have seen that the tools that are most talked about in strategy manuals are amongst the least used ones.

5.3 How are Strategy Tools Used in Companies?

5.3.1 How do Companies Select Which Strategy Tools to Use?

In this sub-research question, our main goal was to describe important issues in companies' selection of strategy tools since this can help us to understand their use.

In this regard, Stenfors (2007b) revealed that the selection of strategy tools is less a result of rational behaviour and more an outcome of managements fads (Abrahamson, 1996). Although our research was not able to test this statement, it helps to comprehend strategy tools selection by discussing the disseminators of strategy tools and the reasons of strategy tools' use.

Several authors considered that the main disseminators of strategy tools are business schools, consulting firms, strategy manuals, and popular management literature like magazines and newspapers (Clark, 1997; Jarzabkowski, 2004; Jarzabkowski and Wilson, 2006; Stenfors and Tanner, 2006; Stenfors and Tanner, 2007). The present research indicates that these players may have different levels of influence in strategy tools' choice. Though, we found that managers' primarily rely on their education and training programmes to get the knowledge they need to apply strategy tools. Also, in our interviews it becomes clear that education was by far the most relevant source to access strategy tools. Most of the interviewees said that they had contact with the tool during their education or in subsequent seminars and programs that they attended. This fact may suggest that business schools and academic institutions have the most pre-eminent role in the diffusion of strategy tools. Accordingly, the selection of

strategy tools may be mostly influenced by them. Put differently, the strategy tools that are taught in business courses and programmes may be the ones that managers decide to adopt in their companies. Besides, we noted that consulting firms has a respectable role in strategy tools' diffusion. These players work with half of the companies surveyed, and therefore they also mould the choices of a considerable number of firms.

In our research, we also discovered that managers do not usually spend too much time reading about which strategy tools they should use or how to apply them. Instead, they may prefer to rely in simple notions that they study briefly on the courses and programmes they frequent or to rely on the notions and instruction passed on by consultants. However, when companies do rely on reading they clearly prefer specialized literature rather than popular literature. This may indicate that the so called influence of popular management literature (Mazza and Alvarez, 2000) have little relevance in the choices made by some companies in Portugal. Though, there are other possible explanations. Firstly, managers may have consciously not selected this alternative even if they rely on popular literature. This may happen if they consider inadequate for professional managers' to rely on these kinds of sources. Secondly, it may be that Portuguese popular literature is less powerful, attractive and convincing than literature from other countries (e.g. United States) which is normally very appealing.

Another interesting finding is that corporate headquarters were pointed out by some companies as a relevant source of strategy tools. This is an interesting outcome since we could not find any reference in the literature about this issue. Furthermore, this may indicate that one important element that large companies use to access strategy tools is through communication and knowledge sharing across the whole organization. This even may propose that companies create, in specific departments, their own tools to address their own challenges and then they disseminate that knowledge and those practices to the rest of the company.

In this research, we also discovered one company that had access to strategy tools through partnerships and another through their sector's association. Although this is a weak finding and needs additional investigation, it may suggest a way for further collaborative strategies across enterprises. In this regard, one interviewee explained that their company had become member of Corporate Strategy Board[®]. This is a firm that agglomerates several executives from diverse business environments and potentiates networking between them. Thus, this is another example that emphasizes the need to explore the importance of these types of collaboration in strategy tools' diffusion.

To sum up, the results suggest that managers seek direct orientation (e.g. programs, seminars, consultants) to access the knowledge about strategy tools and they rely little on readings of

the literature. Finally, we were unable to compare our results with other studies because none of them approached this topic.

We now move on to debate the reasons that may be most relevant in strategy tools' choice. In our questionnaire, we listed a set of alternatives and asked respondents to classify them according to their importance. During the discussion of this topic, we compare our results with the ones of the largest Finnish companies (Stenfors and Tanner, 2006). In this study, they listed various options and asked managers to select the ones they considered adequate.

In our review of the literature, some authors suggested that the search for more objectivity, rationality and efficiency in strategy decision-making process was the main reason for managers to use strategy tools (Kaplan and Jarzabkowski, 2006; Stenfors *et al.*, 2007). The outcomes of this research seem to confirm this statement since surveyed companies considered "make decisions more rational, objective and transparent" the most important reason to justify their use of strategy tools. This idea also became quite clear in almost all the interviews undertaken. For example, Executive E asserted that the use of strategy tools permitted them more clarity and therefore they were able to support their decisions in rational arguments.

The needs to clarify company's strategy and to support its implementation at all levels of the company are also two compelling reasons to justify the use of strategy tools. These outcomes propose that companies seek strategy tools to do their strategy work and clarify their strategy. This idea was also suggested in our interviews where some respondents revealed that strategy tools enabled them to make sense of the big picture and thus clarify in their minds the company's strategy. These findings also indicate that managers look for strategy tools to monitor strategy work and therefore ensure its implementation. This issue also emerged in our interviews where executives gave the example of Balanced Scorecard as a tool that enabled them to support the implementation efforts. The reasons mentioned before were also highly supported by the largest Finnish companies. In this regard, 74% of them considered strategy tools important to clarify company's strategy and 54% considered tools relevant to support strategy implementation. Though, it seems that strategy tools have an important role in the definition of company's strategy or at least it indicates that managers desire tools that aid them in the clarification of strategy. Besides, managers want strategy tools that help them in the implementation of strategy.

Kaplan and Jarzabkowski (2006) undertook an in-depth case-study about the use of two strategy tools (aggregate project plan and a tool created by practitioners). They indicated that managers seek to use strategy tools since it become easier to justify hard decisions (e.g.

cutting jobs) with the rigorous and impartial outcomes of a tool. Our research supports this idea since “clarify and justify difficult decisions” was a reason considered important or highly important by 76% of the companies surveyed. Again, this reinforces the thought that managers desire strategy tools to increase the rationality of their decisions. Moreover, they seek rationality because that gives them increased legitimacy and power to make certain decisions. In this sense, the use and choice of strategy tools may be driven by legitimacy and power concerns. Consequently, managers may prefer to rely on tools that hold high levels of legitimacy. In this regard, Mazza and Alvarez (2000) stated that a tool can be considered legitimate when it is widely spread throughout the business world. This may explain why SWOT Analysis is the most popular strategy tool.

Our research also discovered that managers consider strategy tools as relevant elements of a company's planning process. Thus, it seems that tools help to increase the efficiency and quality of company's planning activities. In fact, managers considered strategy tools highly useful to identify key strategy factors. This idea suggests that managers use tools to develop more abstract levels of thinking that provide them with a deeper understanding of the important strategic factors (Frost, 2003; Stenfors and Tanner, 2007; Webster *et al.*, 1989). This was amply focused in our interviews, where several executives outlined that strategy tools were vital to trigger thinking and understanding of the company and their environment. Put differently, tools were determinant in the process of continuously making sense of reality. This reason was also mentioned by a significant number (51%) of the largest Finnish companies.

Stenfors and Tanner (2006) in a research on the largest Finnish companies suggested that managers tend to use strategy tools more to boost efficiency than creativity. Our outcomes clearly support this view since all the reasons (six) that were considered important or highly important by more than 70% of the surveyed companies are more related to efficiency concerns. Additionally, in these top six reasons, we did not find any that relate specifically to facilitate communication or connection between organizational human resources. This seems to clearly indicate that managers' prime desire when using strategy tools is to pursue more efficiency and rationality in their activities and decisions. It can also be that managers view tools as efficiency oriented instruments and therefore when they think of strategy tools they are already “programmed” to look for efficiency. Another possible explanation is that the actual strategy tools are not flexible enough or appropriate to foster creativity. Accordingly, it appears that more strategy tools have to be created in order to generate creativity and

innovation. It also suggests that managers have to be convinced that they can and should use strategy tools to encourage creative thinking.

In line with the scenario portrayed, we found that managers ranked eighth the reason “encouraging new ideas and creative visions”. Although it has strong levels of support it is behind several other reasons referred to by managers. This result is also congruent with the research on largest Finnish companies (40%) where this reason ranked seven. Hence, this seems to reinforce the idea that managers employ tools more for efficiency than creativity. We also found in our research that encouraging team spirit and people commitment ranked seventh. In the study of the largest Finnish companies this reason ranked eighth and was selected by 39% of the respondents. This outcome suggests that managers also seek to increase the connection between human resources albeit it is not as important as concerns with efficiency. By the same token, we found that facilitating communication and generating dialogue ranked ninth. This reason was ranked higher (sixth) in the study on the largest Finnish companies. Nonetheless, it seems again to indicate that when managers use strategy tools this is not their prime concern.

It is important to emphasize that “facilitate the collection and analysis of information” was a reason that also ranked ninth. This outcome is in sharp contrast with the ones in the largest Finnish companies (ranked second and was selected by 70% of the companies). This situation may be related to the fact that the companies surveyed have considered the access to information their main difficulty in the use of strategy tools. This problem was not reported by the largest Finnish companies. Thus, it seems that a reason for this discrepancy is the fact that the companies surveyed have less adequate information systems and/or operate in a less transparent environment. This may explain why the collection and analysis of information is not a highly important driver for strategy tools' use in some Portuguese companies.

Finally, the least important reason was to facilitate the coordination and alignment of interests. This means that companies consider the use of strategy tools as less important to align different interests in the company. This can also be a recognition by managers that some politics and complexities arise in the process of strategy tools' use. Accordingly, this may reinforce the idea that managers always seek rationality but in practice they often find that the use of strategy tools is much more subject to emotion and politics (Kaplan and Jarzabkowski, 2006). We were not able to find this situation because in our opinion our research approach were not sufficiently deep (e.g. participant observations or interviews with several elements of the some company) to reveal this kind of detail. Nonetheless, our data enables us to build on the idea that managers chiefly seek rationality when they use strategy tools.

To end this section, we would emphasize that all the reasons listed were considered important or highly important by more than 55% of the companies. Accordingly, we can conclude that all the reasons were considered important to justify the use of strategy tools. This was an outcome already expected since the reasons we listed derived from the literature review. Nevertheless, our main goal was to identify which reasons were the main drivers of strategy tools' use. In this regard, if we make a careful analysis of our results and those obtained in the research on the largest Finnish companies, we can suggest with more confidence that companies' major drivers to use strategy tools are more related to rationality and efficiency activities than to creative endeavours. However, Kaplan and Jarzabkowski's (2006) report and the fact that the least important reason was the coordination and alignment of interests may indicate that this desire for efficiency face some obstacles. Finally, we have seen some consistency between the results of this dissertation and the results on largest Finnish companies (Stenfors and Tanner, 2006). This increases the relevance of some findings and invites more research about this topic.

5.3.2 How do Companies Deploy Strategy Tools?

Our main goal in this sub-research question was to describe how companies deploy strategy tools, that is, how they put them into practice. Our review of the literature indicated relevant issues in this topic. Firstly, it is important to shed light on how managers typically apply strategy tools in practice. Secondly, it may be helpful to understand companies' preferred way to implement strategy tools. Thirdly, it can be useful to identify the main difficulties on the deployment of strategy tools.

Regarding the practical application of strategy tools, our questionnaire results indicate that managers typically act upon tools by adapting them to the situation they have at hands (first or second priority in 95% of the cases). More surprisingly, the second preferred way for managers to act upon tools was to use their own ideas to create their own tools (71% as a first or second priority). Besides, we found that managers seldom use the tools as they were prescribed (34% as a first or second priority).

These results are quite clear and they were reinforced by all the interviews undertook. In other words, as we described in the presentation section of the interview results (section 4.2.4.1), managers display a low concern with the theoretical assumptions and procedures behind strategy tools. Though, our outcomes contradict that strategy tools are used as prescribed,

which puts in question what some authors (Gunn and Williams, 2007; Stenfors, 2007b) considers to be the pre-eminent view in the field. Hence, the results of this dissertation seem to oppose to a representational epistemology of strategy tools' use in favour of a practical epistemology as suggested by Jarzabkowski and Wilson (2006). Put differently, the results obtained build on the recent perspective that strategy tools are subjected to various patterns of adaptation and utilization (Jarzabkowski and Wilson, 2006; Kaplan and Jarzabkowski, 2006; Stenfors and Tanner, 2006; Stenfors and Tanner, 2007). In this sense, managers adapt tools to their needs irrespective of their theoretical origins and premises and they display little concern with that situation.

Jarzabkowski and Wilson (2006) also defended that the practical epistemology was the reason for managers to keep using tools that are theoretically less adequate in fast changing environments. Put another way, managers keep using tools that are less relevant to their contexts because they undertake bricolage activity (Baker *et al.*, 2003), that is, they undertake considerable modifications to the tool procedures. In this regard, Jarzabkowski and Wilson (2006) said that tools from positioning school (e.g. Porter's Five Forcers or BCG Matrix) were yet widely used because managers usually adapt them (practical epistemology). However, the results of this dissertation and other similar researches in the field (Gunn and Williams 2007; Stenfors *et al.* 2007) suggest that tools from positioning school have low levels of use in companies. In this light, we favour the practical epistemology view (suggested by Jarzabkowski and Wilson, 2006) but we raise the possibility that some tools are more flexible than others. That is, some strategy tools are more adaptable to different contexts, situations and challenges. In this scenario, it seems that the aforementioned positioning school tools are less flexible and therefore less used by managers. This could be linked to the fact that these tools are more complex in terms of its theoretical background which is contrary to managers' preference for simple tools.

In order to reinforce our suggestion that strategy tools have different levels of flexibility, we should remember the massive use of SWOT Analysis. In this respect, we have to take into account that both SWOT analysis and Porter's five forces were created more than two decades ago. Then, if we consider that today's environment is much more complex and dynamic than in the 1980s we could raise the possibility that strategy tools developed at that time could be dated nowadays. Therefore, the assurance of their survival might be their levels of flexibility. Given this, we suggest that SWOT Analysis continuous to be widely used because it is more flexible and less complex than Porter's Five Forces. This favours our notion that strategy tools may have different levels of flexibility and consequently different

levels of use in the long term. Accordingly, this might be an interesting theme of research and also something that strategy tools creators should have in mind when designing new tools.

Another topic that deserves some discussion is the comparison of strategy tools' levels of use with the prevalence of a certain school of thought (e.g. design school, positioning school or resource based view). From our point of view, the recognition that managers perform substantial adaptations that considerably alters strategy tools theoretical presuppositions hinders the possibility of comparing the strategy tools used in companies with the predominance of a certain school of strategy (Jarzabkowski and Wilson, 2006). For example, we think it is not correct to say that positioning school ideas and perspectives are not widely spread in companies just because few companies use strategy tools from positioning school. To be honest, we must say that one of our initial ideas was to explore this situation. However, the discovery that managers dramatically adapt strategy tools hampered these intentions. It may be wiser to understand the characteristics of the most used tools and the activities they enable to perform. This may be a better approach for understanding the role of strategy tools in companies and their effect on strategy.

We also need to highlight the fact that companies display a creative behaviour, that is, they also create their own tools to face their needs and challenges. This idea is evident in our questionnaire results and it was also reinforced in our interviews. In this regard, one executive explained in detail the creation of various tools and admitted that they unconsciously may be based on standard tools that are known. This finding opens a fruitful avenue of research, since it could be very interesting to research what type of strategy tools managers are creating. This could illustrate managers' real needs and it could be very useful to help the producers of strategy tools.

In conclusion, our findings illustrate that managers clearly like to adjust, modify and adapt tools to their needs. This may be a reason for their preference for simple and flexible strategy tools. Additionally, we found that they like to create their own tools. This may be because they find the tools available not adequate for their challenges or simply because in some situations nothing can substitute a tailored strategy tool. Finally, we think that our outcomes do not put in question that strategy tools are artefacts that enable theories to be actionable in practice (Jarzabkowski and Wilson, 2006). Instead, it only indicates that the translation of the theory into practice is normally subjected to adaptations from practitioners. In this scenario, assuring strategy tools' flexibility gains an increased importance.

Another topic of relevance for better understanding strategy tools' deployment is the issues concerning their implementation. In this respect, our main aim was to identify the prevalence

of internal and external help in the implementation process. Although this approach does not give us a great deal of detail about how things happen in practice, it enables us to have an idea about the importance of internal and external actors.

In this perspective, we discovered that internal help alone prevails as the preferred way of strategy tools' implementation in the companies surveyed. Our questionnaire results showed that 55% of the companies rely solely on their internal resources (e.g. knowledge and capabilities of their human resources) to apply strategy tools. This outcome suggests that strategy tools' disseminators (the sources where companies have access to strategy tools) have an increased importance in these kinds of companies. Hence, the education and training programmes frequented by managers may be highly relevant to influence the success of strategy tools' implementation. Moreover, the fact that the majority of the companies rely exclusively in their internal resources to implement strategy tools may help to explain why managers generally adapt strategy tools during their application.

We also found that only 36% of the companies surveyed combine internal and external help. Because we have not been able to collect more data in this area we are not able to make conclusions. However, based on our interviews we can raise alternative interpretations. Firstly, it may be that companies use exclusively internal resources to implement some strategy tools and rely exclusively on external help to apply other strategy tools where they consider less prepared or where they think it would be a waste of internal resources. This idea came to the surface in two of our interviews (Executive's A and G). In fact, executives said that usually consultants were asked to employ strategy tools to address specific themes where they lack the necessary expertise or where they simply did not want to spend their own resources. Secondly, it also might be that companies apply some strategy tools combining external advise with internal know how. That is, it may happen that both actors (internal and external) work cooperatively to achieve the best outcomes in the implementation process. Executive A described one of these situations where the consultant brought the tool and worked as facilitator to stimulate the company human resources to discuss important issues according to the frame determined by the tool. Thirdly, it can be that each part addresses some issues of the tool implementation process. In this regard, Executive C explained that consultants provide the instructions and the models in each stage of the implementation process and they just sit down and work on that frame.

Our results also demonstrated that a minority of the companies relied exclusively in external help to implement strategy tools. This may indicate that a small number of the companies surveyed do not want to waste their time working with strategy tools to do their strategy

work. Instead, they might prefer that external actors work with those tools and deliver the results already prepared for analysis and decision. We also thought that this could happen in situations where companies use fewer tools. Nonetheless, our data indicate that the companies, who rely exclusively in external help, use an average of 6.6 tools which is close to the total average of our survey (6.12). Accordingly, these outcomes may strengthen the idea that these companies prefer to spend little time with strategy work. This situation may be dangerous since it is extremely important that internal human resources participate fully in their companies strategizing activities.

Another issue that deserves our attention is the fact that, in total, only 40% of the companies rely on external actors to access strategy tools. Therefore, if we compare this with 50% of the companies who say they access strategy tools through consulting firms, we come to the conclusion that in some situations companies seek knowledge and advice near consultants but then they prefer to implement by their means.

In a nutshell, we come to the conclusion that the majority of the companies surveyed relied exclusively in their internal resources to implement strategy tools. This may be a contribution to intensify the process of tools adaption. It also suggests that the major influence that creators and disseminators of strategy tools exert in companies is through teaching and not by specialized advice or participation on the implementation of strategy tools. Finally, we were not able to make any comparisons with other studies because this issue has not been empirically addressed. Thus, there is a need to go deeper into this subject in order to better understand our findings.

In this research, we also discovered that the difficulties in the use of strategy tools may affect the way they are deployed. In this respect, the major difficulty reported was access to information. In other words, they said that it is really difficult to get accurate information about the environment, industry and competitors. This means that companies face huge challenges in strategy tools' use because they are not able to gather all the information they need. This could happen because they may work in markets or industries that have a lack of transparency or because they do not have the appropriate information systems to collect, organize and systematize all the important information. We have both of these situations in our interviews. For example, Executives B, C, E and F said that it is very difficult for them to know what their competitors are doing or to get more precise information about the state of their industry. Also Executives C, D, E and F revealed that they would like to have a better information system but they lack the resources for that. Nonetheless, this is a vital problem when they need to effectively put some strategy tools into practice. Furthermore, this theme

gain relevance since the largest Finnish companies (Stenfors *et al.*, 2007) did not report the same problem. This could mean that they have already implemented better information systems and/or that they operate in more transparent environments.

The second major difficulty revealed was the adaptation of the tool to the company's own reality and terminology. In this regard, companies normally said that it was really hard to translate the tool to the particularities of their industry, market and business. They also emphasized that it was difficult to incorporate the tools terminology with the company's own language. This difficulty may signify a number of issues. On the one hand, it may indicate that the strategy tools available are not flexible enough to face today's challenges. On the other hand, it can mean that managers are not sufficiently trained and not flexible enough to rapidly apply the tools to their needs. This could indicate that classroom approaches have to be improved in order to stimulate high levels of flexibility and adaptability. It may also be that managers do not see the real usefulness of strategy tools and therefore they do not fully commit to their use. These concerns were also widely in the mind of Finnish managers. Thus, this strengthens the idea that this difficulty may be felt in a wide range of companies.

The third difficulty reported was the human resources education and preparation to use strategy tools. This proposes that employees generally lack the adequate preparation and knowledge to apply strategy tools. This reinforces our suggestion that human resources lack of preparation is an obstacle for the adaptation of tools to company's reality and terminology.

The fourth difficulty stated was the coordination of tools' use across the company. In this respect, executives said that it was not easy to ensure the consistency of strategy tools' use across different people and sectors of the company. This suggests that companies find it complex to regulate the use of tools to achieve comparable outputs. It also may indicate that people interpret tools in different ways and therefore its use becomes much more complex. Moreover, we have reports that tools' use was difficult to coordinate because the different parts of the company wanted to employ the tool to pursue their own interests instead of the overall interests of the company. Though, it seems that the use of strategy tools also become intricate because politics arise in the process (Kaplan and Jarzabkowski, 2006). Executives from the largest Finnish Companies said to have communication problems which can be linked with our discovery of coordination difficulties.

The fifth issue revealed by managers was the availability of required resources (especially time and human resources) to use a strategy tool. In this realm, managers said that they did not have the time and/or the human resources available to apply these kinds of tools or at least to use them in a more formalized way. This issue was reinforced in all the interviews

undertook. Hence, this lack of resources may be another reason to explain why companies generally adapt tools or why they prefer to use the simpler approaches. Put another way, companies do not want to waste significant resources with the use of strategy tools and thus they tend to adapt them or to rely on those that are easier to apply. This situation may also occur because managers do not think strategy tools are sufficiently important for their strategy work. This lack of resources reported is congruent with the findings on the largest Finnish companies. Accordingly, this supports the idea that the employment of some strategy tools requires the investment of large resources (Rigby and Gillies, 2000; Rigby, 2001).

The last difficulty mentioned by a significant number of managers was the resistance to change and the difficulty to engage people. This was an expected outcome since there are varied reports in a diversity of subjects that emphasize the resistance to change that normally exist in companies. In the majority of the situations, it may be possible that the main reason for this resistance is a lack of knowledge or a lack of understanding about the tools. In other words, this could be linked with legitimacy (Kaplan and Jarzabkowski, 2006), that is, if managers do not perceive a tool as valid or useful the typical behaviour will be some resistance. This was also reported by Executive A who said that they typically relied on SWOT to communicate throughout the company since it is a tool that everyone knows. He also added that when a less known tool is used some employees display resistance. This kind of results was also identified by Stenfors *et al.* (2007) in the study on the largest Finnish companies.

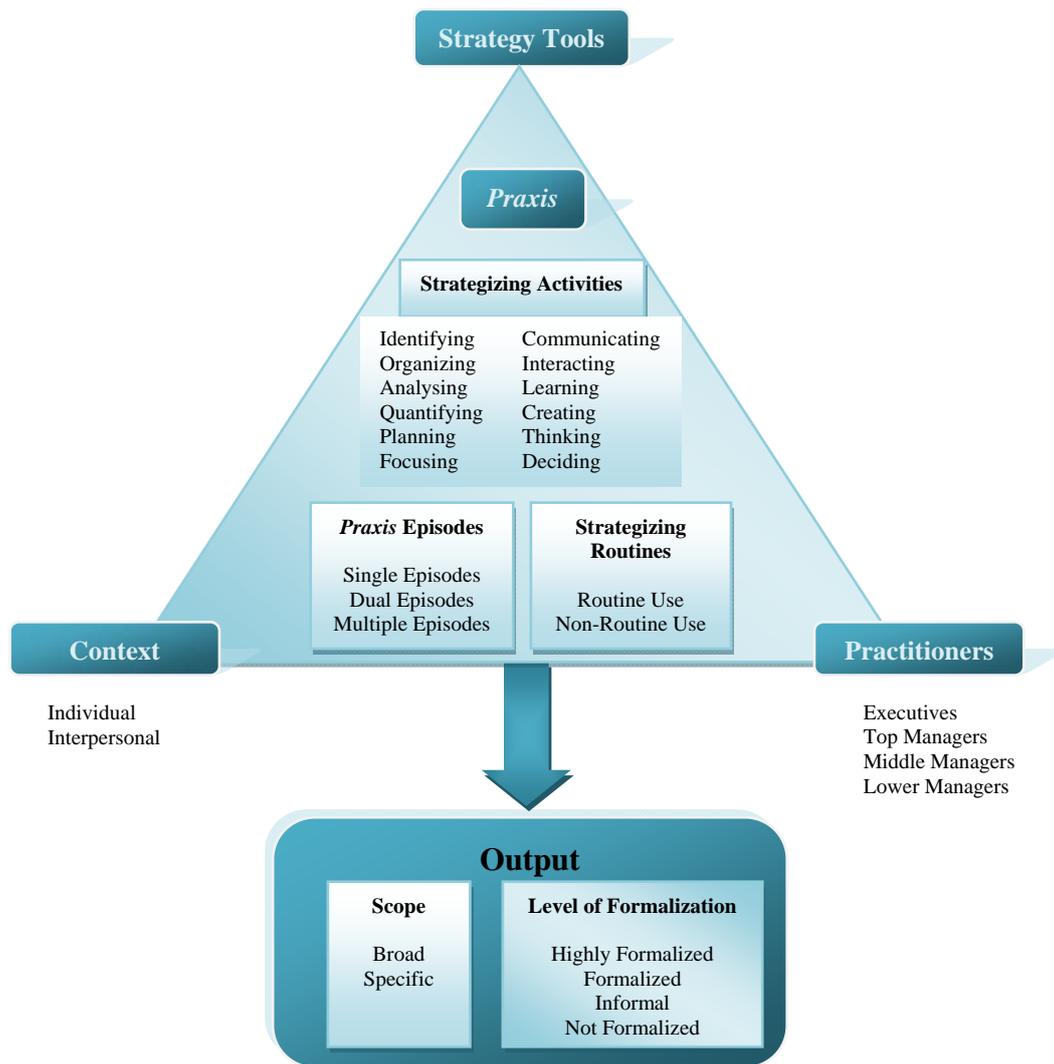
5.3.3 Which are the Most Important Issues in Strategy Tools' Use?

This sub-research question has a broad scope since we wanted to have our minds open to any kind of findings. This was important since strategy tools' use is a topic clearly under explored. In fact, apart from the broad notions of strategy as practice framework (section 2.2.2.3) and strategy tools' use model (section 2.2.3.5.3), there was little literature in this subject to give us some kind of guidance. In this light, our main goal was to bring to the surface some interesting issues, ideas and perspectives about the practical use of strategy tools. Nonetheless, we did not expect to identify all the important issues because that would require a deeper and lengthier approach which was not feasible in this dissertation.

It is also important to highlight that we planned to address this research question mainly through our interviews. Therefore, since we relied in a small number of interviews we are unable to generalize our results. In the face of this, we will not discuss deeply the results

obtained. Instead, we provide an integrated framework (Figure 8) that summarises important issues that can be relevant to understand strategy tools' use and their effects on strategy outcomes. We should also clarify that we departed from the general notions of the two models aforementioned (strategy as practice framework and strategy tools' use model) to explore our results and create a richer framework that includes more variables and ideas.

Figure 8 – Strategy Tools' Use Framework



Our framework highlights four overarching elements of strategy tools' use: strategy tools, practitioners, context and *praxis*. The constant interaction between these elements shape the outcomes obtained with the utilization of strategy tools. Following, we discuss each element of the framework in the light of our findings.

The *praxis* is the activity prompted by the effective use of strategy tools. Consequently, the interaction between the practitioners, the strategy tool and the context of use will be

determinant to form the *praxis*. Though, we discovered that when practitioners interact with a strategy tool they generally undertake a set of activities. We indentified thirteen basic activities performed by managers. In this sense, we found that strategy tools are mediators of activities such as indentifying, organizing, analysing, planning, communicating, thinking or deciding to name just a few. These activities are performed to approach important issues about the company and their environment. More specifically, they enable managers to embrace business, market, industry and societal issues and consequently they have impact in companies' strategy and performance. The identification of these activities and the issues around which they are performed is an important starting point to dig deeper into our understanding of strategy tools' use. Accordingly, it will be pertinent to identify which strategy tools are used to perform each activity. Possibly, we will observe that some companies use a set of tools because they favour certain activities over others. We may even come to the conclusion that the prevalence of some strategizing activities vary according to the characteristics of the different industries, markets, businesses and companies.

Moreover, it is relevant to grasp which activities are performed more frequently and which have a greater impact on company's strategic outcomes. The activities performed may also be related to the profile of the company's executives and top managers. In other words, their personality may cause them to prefer one type of activities (e.g. communicating, interacting or learning) over others (e.g. organizing, planning or quantifying). Hence, the strategy tools used and the activities performed may be an indicator of the type of strategy work the company does and even about the strategy the company pursues.

Stenfors and Tanner (2007) also provided a framework of the strategizing activities mediated by strategy tools. They suggested that the twelve strategizing activities identified were performed at four different levels of social context. Their main focus was on specific activities (e.g. planning efficiently, enacting organizational culture.). In contrast, we suggested general basic activities (e.g. identifying, organizing) since this could be a better starting point to explore the practices that occur in the micro-level of strategizing (Johnson *et al.*, 2003).

The strategizing activities discussed occur in what we call a *praxis* episode and they are a consequence of the interaction between practitioners and strategy tools. These episodes may occur at different levels of social context. In this sense, managers may interact with a strategy tool alone or they may do this in an interpersonal context where more than one individual participate.

We also found that the use of each strategy tool may occur in single, dual or multiple *praxis* episodes. Single *praxis* episodes take place when the context of tool formalization is the same

of tool discussion. Put another way, in these situations managers interactively produce and discuss the outcomes of strategy tools. Dual episodes occur when the context of tool formalization and discussion are different. In this case, there is a person or a group of people who first work out the tool to produce some outcomes. Then, the tool and its outcomes are discussed in another episode where a larger number of practitioners are present. This can be more a communication situation where the outcomes obtained are presented to other practitioners who assume a passive role or this can be a more interactive episode where practitioners actively discuss the results presented and make their suggestions to modify and improve the outcomes of the tool.

Finally, we consider multiple episodes when the tool is used on several occasions to the address the same issues. In this perspective, the outcomes are formalized, discussed and then modified and discussed again, and this process is repeated over a certain time. This concept of *praxis* episodes may signal different ways of approaching a company's strategy. Therefore, while some companies use strategy tools in a limited time frame (single or dual episodes) to address specific situations, other companies undertake a more continuous use of strategy tools (multiple episodes). The latter cases may indicate companies that view strategy as a continuous process and thus they consider strategy tools' use as an instrument for continuously updating their views and perceptions about strategy. Conversely, the other approach may suggest companies that only concern themselves about strategy in specific situations. In other words, strategy is not part of their daily activities (at least in a formal way).

Our results indicate that generally the tool formalization occurs in an individual context while the subsequent use of its outcome happens in an interpersonal context. Naturally, the process of tool use never confines itself to these two episodes since the person who prepares the tool normally does the work in several stages (the information and knowledge needed sometimes are gained in several daily work activities) and after the tool is discussed generally there is a formalized outcome that can be consulted later by anyone who is interested in remembering some ideas.

In summary, the *praxis* episodes we described do not fully explain all the activities practitioners undertook but they enable us to portray the major events that occur during the use of strategy tools. This is a starting point to go further and study in detail each of these events. Then, one can progress to examine the informal situations (e.g. informal discussions) that are also triggered by strategy tools' use.

Strategizing routines is also a theme that came to the surface in our research. This is an important element of our model since it illustrates a part of strategy tools' *praxis*. In this regard, we noticed that companies may employ strategy tools in a routine or non-routine basis. In the former case, managers use the same tool in specific determined moments to address issues of strategic relevance (e.g. most of the companies reported to use SWOT analysis routinely every year). In the latter case, companies use strategy tools occasionally in non-predetermined moments (e.g. scenario analysis is normally used occasionally according to the needs).

The findings of this dissertation reveals that the majority of the companies interviewed (six out of seven) normally rely on some tools (such as Balanced Scorecard, SWOT Analysis or Brainstorming) in defined occasions that are then normally repeated in regular cycles (e.g. monthly, yearly).. From our vantage point, this situation may be a double-edged sword. On the one hand, this routine behaviour can turn strategy tools' use more efficient and therefore provide clearer outcomes. In this scenario, companies that display this behaviour may continuously achieve higher levels of clarity in their strategic orientation. On the other hand, this routine work (especially when the cycles are no more than a year) may create rigidity in managers' strategic thinking process. In other words, relying regularly on a set of tools may hinder managers' outlook on their company's strategy and create barriers to pursue new strategic alternatives. This may happen because using always the same tools in a short period of time may lead managers to make only minor improvements in each episode of use. However, it is also important to consider that these rigidities may be broken by the use of another set of tools in a non-routine basis. This appears to happen since some of the companies reported that they rely on some tools in a non-routine basis and with large intervals between each use. In this regard, they talked about tools such as Resource Analysis, Scenario Analysis or Porter's Five Forces. They generally said that these tools are not used on a yearly basis and they do not have predetermined moments to use them. Therefore, they seem to rely on these tools when they need to trigger different strategic thinking or to approach things in a more detailed and formalized way.

However, we have found one company that broke the pattern described. In this vein, company E demonstrated a pure non-routine use of strategy tools. Put another way, they do not have any defined moments to use strategy tools. They treated strategy as a continuously evolving activity where different tools entered in different stages. They use the tools according to the needs felt in each stage of the strategic development process. In fact, they usually do not know what type of tools they will be using each year. This process may trigger creative

thinking and provide different points of view on the company's strategic outlook. Nevertheless, this behaviour could be dangerous if it is done in a completely disordered way. This is not the case in this company since one person (strategy director) is responsible for conducting the whole process and introducing the adequate tools at each juncture of the strategy development process.

On the bottom line, the important finding to highlight is that companies develop their own pattern of strategy tools' use. In some situations, they rely on some tools in a routine basis and use other complimentary tools on a non-routine basis. In other cases, they employ strategy tools on a pure non-routine basis. Since this topic has not been explored in other research, we think further research is needed to understand which behaviour is prevalent: pure routine use of strategy tools, pure non-routine use of strategy tools or mixed (both routine and non-routine) use of strategy tools. Furthermore, we should try to understand better which tools are the most used on a routine basis and why. In addition, it may be pertinent to know with what regularity each tool is employed to see if we can detect common patterns in different companies. Then, we could also try to compare the performance of companies that display a pure non-routine use of strategy tools and those that have a routine behaviour.

Another important issue of the model is the different practitioners that participate in the various episodes of strategy tools' use. We found that a diversity of people may be present in these episodes. For example, the work of tool formalization normally is undertaken by a strategy director. Nevertheless, we also found that a financial, planning or control management director or even the executives may be responsible for formalizing the tool. This is an important issue since the personality of the practitioners who formalize the strategy tool may have a considerable influence on the way the tool is employed. In particular, we noticed that a strategy director who has a marketing background produced a more detailed and formalized outcome than another strategy director who has a financial background. We obviously cannot say that the differences found were based on their background but we can raise that possibility. Consequently, this is a topic that deserves empirical attention in future researches.

In the episodes for discussing the tool, we normally found the presence of a larger number of practitioners. This may suggest that companies prefer to have a single or a reduced number of practitioners working on the tool formalization and then enlarge the number of participants present to discuss and share ideas on the tool's outcomes.

Another important issue is the output produced by strategy tools' use. We discovered differences in the scope of the output and in its level of formalization. Though, some

companies use strategy tools with a more restrained focus. In other words, they limit the use of the tool to specific issues that are very well defined and they only consider factors that are closest to the issue being evaluated. In contrast, other companies seem to have a more elaborate approach and to consider a larger number of factors in their analysis. For example, in Scenario Analysis, this group of companies will consider the impact of broad factors (societal, economic, and political) in their scenarios while those with a specific focus will only consider the factors most related to the issues under consideration. This situation may also indicate company's approach to strategy. Hence, the companies who have a more specific focus may be the ones who have a less elaborate approach to strategy.

Regarding the level of formalization of the output, we found that it can vary from the highly formalized outputs (e.g. several written documents and graphic illustrations) to the totally informal ones where managers keep the outputs only in their minds. In our view, this also may be associated to the type of approach the company has towards strategy development. In this regard, it could be interesting to study if the differences in the level of formalization of the output have impacts on companies' performance and outcomes. Making this approach would enable the linkage between the micro-strategizing (levels of formalization of strategy tool output) with the macro-strategizing (company's performance).

When considering our model, we also need to bear in mind that the different strategy tools used (e.g. SWOT Analysis, Balanced Scorecard or Brainstorming), may influence the behaviour of the other variables of the framework. In this sense, it will also be relevant to carry out detailed research on individual tools in order to observe the effect of each tool on the other elements of the model.

In summary, rather than presenting definite conclusions about how managers use strategy tools, we come up with an integrated framework that allows a more detailed account of strategy tools' use. Furthermore, the framework suggested can be a background for future research since it enables to design multiple approaches to study a diversity of issues that certainly will improve our knowledge about strategy tools' utilization. Thus, our model is a contribution for advancing research on the practical things of strategy (strategy as practice perspective) and to the establishment of stronger links between the micro and the macro level of strategizing.

CHAPTER 6 – CONCLUSIONS

6.1 The Conclusions

This dissertation intended to provide a description of strategy tools' use in the largest companies in Portugal. For that purpose, we sought to reveal the most popular strategy tools and the particularities of their use. More specifically, we focused on the choice of strategy tools and on their deployment in practice.

As expected, we should interpret the conclusions of this dissertation as a starting point to future researches. We believe this is justifiable since we took a descriptive approach and our subject of study is clearly underexplored. Thus, the conclusions are based on the facts obtained and they need to be tested and enriched in future researches.

Having made the necessary clarifications to ensure the adequate understanding of this section, we now present the conclusions. To begin with, the foremost fact to highlight is that companies in Portugal do use strategy tools to support their strategic activities. From our list of thirteen strategy tools, companies revealed to use an average of six and they disclosed during our interviews that these tools were extremely important in supporting their strategy work.

This research also confirmed that SWOT analysis is the most popular strategy tool as has been constantly reported in similar researches. Furthermore, we found that Scenario Analysis, Brainstorming and Resource Analysis are other popular strategy tools in the companies surveyed. In contrast, we verified that strategy tools from the positioning school (e.g. Porter's Five Forces or BCG Matrix) are not very popular nowadays. We also discovered that managers rely little on the strategy tools that are most often present in strategy manuals.

Regarding the choice of strategy tools, we concluded that business schools and academic institutions are the pre-eminent disseminators of strategy tools in the surveyed companies. Therefore, these actors have a strong influence in the strategy tools adopted by managers. We also discovered that practitioners do not often access strategy tools through readings of the literature and when they do they clearly prefer specialized literature. In this sense, managers typically rely in simple ideas that they study briefly on the courses and programmes they attend or they rely on the notions and instruction passed on by consultants.

This research also found that managers' primary reasons for using strategy tools are related with efficiency, rationality and legitimacy rather than creativity or innovation. Consequently, managers' choice of strategy tools may be highly influenced by these reasons.

Concerning the deployment of strategy tools, we found that managers seem to rely mostly on simple tools that are easy to apply and less time consuming. Even when they use more elaborate strategy tools they tend to undertake several adaptations which considerably change the tools' presuppositions. In this light, we concluded that a practical epistemology is the better perspective to look at strategy tools' use in companies. In other words, when managers use strategy tools they often adapt the tools' theoretical presuppositions to their own needs and challenges. Moreover, they also use standard strategy tools ideas (consciously or unconsciously) to create new ones that best serve their interests. Accordingly, our research builds on recent findings that strategy tools are not used as prescribed which contradicts the pre-eminent view in the field. We also found that some strategy tools may be more used than others because they are more flexible and therefore more adaptable to different contexts, people and situations.

In the implementation of strategy tools, we concluded that companies prefer to rely on their internal resources to ensure the implementation process, although some recur to external help. The exclusive use of external resources to implement strategy tools has little prevalence. Considering the results obtained, we can conclude that the surveyed companies typically deploy strategy tools through their internal resources and they undertake considerable adaptations to the tools' theoretical presuppositions.

The difficulties managers face when using strategy tools are also extremely relevant to understand how companies deploy them. In this regard, we concluded that managers' primary difficulty is the access to information from the external environment. Additionally, we found that although companies prefer to adapt strategy tools they think the existing ones are complicated to use and adapt. Besides, they generally agree that their human resources are not well prepared to use strategy tools. Hence, we concluded that strategy tools have not only been underexplored in the academia but also in companies.

The interviews conducted enabled us to arrive at the conclusion that strategy tools' use has several important issues that influences what happen in practice. In this particular, we suggested an integrated framework which includes: strategy tools, practitioners, context and *praxis*.

Concerning *praxis*, we identified that it is important to understand the strategizing activities managers perform through the use of strategy tools. We also revealed that strategizing

routines (routine or non-routine use of strategy tools) are an important element to grasp the practical utilization of strategy tools. Besides, we found that strategy tools' use in companies may vary in terms of *praxis* episodes undertaken (single, dual or multiple). Regarding the context, we have observed that the use of strategy tools may occur at the individual level or at the interpersonal level where two or more persons interact. In the practitioners' domain, we discovered that different practitioners from different levels participate in the use of strategy tools. Concerning strategy tools, we made clear that their characteristics also affect the way of use. Finally, we concluded that the interaction between these elements influence the outcomes achieved and this can vary in terms of focus (broad or specific) and level of formalization (from highly formalized to not formalized).

In synthesis, this dissertation provided a broad description of various important issues that regards to strategy tools' use. In fact, we identified which strategy tools are used more frequently in companies. We described important issues on the deployment of strategy tools and we uncovered the major factors that may affect their choice. We also suggested a framework that includes important elements that should be considered when studying strategy tools' use.

As a final point, we can say that strategy tools are an active part of the broader process of strategy (as a social activity) since they contribute to continuously shape, alter and update organizational strategy.

6.2 Research Limitations

Although we made a continuous attempt to avoid any research activity that could undermine the quality of this dissertation, it is important to recognize that it has some limitations. We have taken them into consideration in every stage of our research and we transparently highlight them in order to avoid inadequate conclusions about our study.

To begin with, we should say that some limitations derived from the innovative character of this research. We have approached a theme that was quite unexplored in strategic management literature. Therefore, we were moving on the dark since there were little knowledge and information to guide our efforts. In addition, we used a recent view (strategy as practice) in strategy field to approach our subject of study (strategy tools). These facts did not allow us to rely on any established and highly tested instruments. Hence, we had to create our own instruments of data collection (questionnaire and interview) which could not be

thoroughly tested. However, we also said that one of our goals was to use this research to improve our instruments in the future.

It is also important to highlight that limitations arise from our choices in the creation of our instruments. More specifically, the fact that we listed a number of strategy tools in our questionnaire may limit our conclusions about the most popular strategy tools to the ones listed (although we gave respondents the opportunity to add other tools).

Another limitation of this research emerges from the use of interviews in a small number of companies. Thus, the results obtained cannot be generalized to a wider population.

Finally, we also have to say that we relied on mixed method research which is a non-traditional methodology of research. Albeit we undertook an extensive literature review to understand the procedures of this methodology, we may have not been able to make all the possible interactions and relationships between our data.

6.3 Future Research

The research conducted in this dissertation has provided useful insights about several issues related to strategy tools' use. However, this topic was clearly underexplored and naturally our research approach was not able to get all the necessary answers. Hence, we think the results obtained are a starting point to trigger future research. In this section, we raise some suggestions that we believe relevant to advance the field further.

To begin with, there is a need to undertake large surveys in other regions of the world to enhance our view about the demographics of strategy tools' use. Moreover, it will be interesting to compare the strategy tools used at the different levels of a company's hierarchy. That is to say, we should investigate and compare the tools used at the corporate, business and functional levels. It is also pertinent to relate strategy tools used to company's size and industry sectors. In this regard, our research may provide information about the important issues to consider in a survey about strategy tools.

Another topic that deserves further attention is the particularities of strategy tools' use. We believe it would be valuable to conduct large comparative case studies that focus on the general use of strategy tools. In this domain, the integrated framework of strategy tools' use suggested in this dissertation may be helpful.

It will also be interesting to perform comparative case studies on specific strategy tools. We believe it would be appealing to focus on the strategy tools that are consistently rated as the

most used (e.g. SWOT Analysis) and the least used (e.g. Porter Five Force's). This approach may enable us to grasp why some tools are more used than others and what characteristics make the most used tools different from the least used ones.

An interesting finding of this dissertation was that managers create their own strategy tools to address their challenges. In this regard, we believe it is highly relevant to investigate which strategy tools managers are creating. This can be helpful for strategy tools creators because it will reveal the needs of strategy practitioners.

Empirical research that focuses on the relationship between practitioners and strategy tools may also be relevant. In this light, it would be interesting to compare the profile of practitioners with the type of strategy tools they use.

We also need to establish links with the macro level of strategizing. Put differently, we have to understand the consequences of strategy tools' use for company's outcomes and performances. The strategizing activities that we identified in our research may be helpful in this kind of approach since they may enable us to comprehend which are the most valuable strategic activities and what outcomes they produce.

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APPENDIX

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Appendix A –Questionnaire Questions Explanation (Full Description)

In the following lines, we present each question of our questionnaire and provide a detailed explanation about its reason and goal.

The questionnaire started by requiring some data about the company and the respondent. Thus, we asked for the name of the company (in order to control which companies had responded) and for the number of employees (to get information about the dimension of the company). Additionally, we asked for the position of the respondent in the organization (to have control about the respondent position level in the company) and for his educational background (to better describe respondents).

1. At the level of your company or business unit, which instruments, tools, or techniques are used or have been used in the last 5 years, in a systematic way (methodical, ordered) to support the most relevant decisions (those that implies the use of more resources and have wider scope and impact)?

In this first question, we asked respondents which types of tools they use in a systematic way to support the most important decisions. Our goal was to gather information about the tools they use or have used in most recent years to help strategic decisions.

We used the words instruments, tools and techniques to flag up that we wanted to know everything that they consider useful as a support for strategic decisions. Besides, we found in the dictionary that each definition is quite similar and has the same underlying meaning. Hence, according to Horny and Ruse (1995) instrument means “an apparatus designed to be used to perform an action” (p. 333), technique is described as “a practical method applied to a practical task” (p. 648) and tool is defined as “an object held in hand and used to do or make something” (p. 665). Therefore, the underlying logic is something that helps to perform an action or task. Additionally, we decided to use the three words together because in our pre-tests we had only used the word tool and the majority of the respondents said that they considered that word alone too aggressive and intimidatory. Instead, they suggested the word instrument.

Albeit we wanted to transmit to our respondents the idea of an open concept, we also felt the need to limit it in order to avoid confusion. Accordingly, we put forward the term “systematic way” with the aim of clarifying that we wanted tools that are used in an orderly and methodical way and not every ad hoc activity that they undertake. Moreover, we decided to avoid the word strategic because we found in the literature that it can be a subjective word for

respondents. Thus, we preferred to mention “the most relevant decisions” and to clarify its meaning in order to be more objective.

Finally, we gave respondents the option to select 13 different strategic tools. Under each one, we provided a little explanation to help managers identify the tool that we were talking about. We have done this because in our pre-tests we noticed that some respondents did not identify the tool only by their name, in other words, they asked me to explain what that name means and sometimes they replied “oh, we use it but we do not give that name”.

It seems pertinent to explain why we chose 13 tools and what criteria led to the selection of those tools. Hence, we provided a diversified list of strategy tools in order to indicate the openness of the concept and to invite respondents to give additional information. Nonetheless, being aware that there are lists in the literature that provide that provide dozens of tools, we obviously needed some criteria to reduce and present the most popular ones. With this in mind, we reviewed 11 strategy manuals from 1988 to 2005 with the aim of identifying the tools they presented. We thought this would be an interesting approach because generally strategy manuals are one of the most powerful sources of information on strategy tools. Our procedure was to review all the strategy manuals that we had access to through the library of our University. Although this is not the most rigorous process, we feel that it accomplished our goals.

We have selected all the tools that were listed in more than 60% (approximately 7 out of 11) of the books reviewed. With this approach, we arrived at a selection of ten tools. Then we looked carefully at the recent research of Stenfors *et al.* (2007) and decided to include any tool that was in the first four of the most used tools by executives from the 500 largest Finnish companies. We have done this because this is one of the most recent studies about strategy tools and its underlying logic is similar to ours. Moreover, considering the increasing interdependence and similarity among countries, we felt it was pertinent to include at least the most used tools in Finland. Based on this, we added two more tools that were not yet in our list. Finally, we decided to add Brainstorming because we thought this was a different kind of tool and this could enhance significantly the diversity of our list. This was important because we wanted to flag up the idea of an open concept in order to give total freedom for respondents to give additional information. The process described led to our final list. As we said before this may not be the best way (if it exists) to define a list of alternatives, it is simply one way that we consider viable for our objectives.

2. How your company or business unit had access to the instruments that were identified previously?

In this question, we sought to understand companies' preferred ways of acquiring and gaining access to the knowledge needed to use a strategy tool. We believe this is an important issue because the sources used by companies to acquire and access information about strategy tools may explain which tools are used or the way they are used. Moreover, it is quite relevant to grasp which entities have more influence on today's executives. This information can lead to different kinds of questions and interpretations that may stimulate research in the future.

We listed six alternatives and gave the possibility for respondents to add other options. The alternatives listed were based on our review of the literature and we think they cover the majority of the possibilities.

**3. In the implementation of the instruments identified on question 1 were used:
(Internal Help or External Help)**

We made this simple question just to have an idea about the process of implementation, in other words, we wanted to find out the importance of internal help and external help in the implementation process of strategy tools.

4. Following are listed possible ways to use the instruments indicated in question 1. Order them from 1 to 3, considering that 1 means the most used way and 3 the less used way.

In this question, we listed the three most common ways of using tools, according to what we found in the literature (section 2.2.3.5.4). We asked our respondents to prioritize the alternatives with the intention of understanding which is the typical way of acting upon tools. Additionally, we gave the opportunity to add other alternatives. This could be valuable information in order to have a general idea about the way managers approach strategy tools. This can have implications at several levels from the creation of tools, to teaching and to the design of implementation procedures.

5. To what point the following items are important or not important to justify the use of the instruments mentioned in question 1. Classify from 1 to 5 each item according to its level of importance or not importance.

In this question, we expected to generate information about the most important reasons that lead managers to use strategy tools. Put differently, we wanted to find out why managers are attracted to the use of strategy tools, what they expect, what goals they intend to achieve or what benefits they perceive. We decided to use a scale from one to five with the intent of generating richer information that enables us to develop a greater understanding about this topic. We listed eleven alternatives that derived from our review of the literature (section 2.2.3.6) and gave the respondents the opportunity to add other alternatives.

6. Describe the main difficulties in the use of the instruments identified in question 1?

In the last question of our questionnaire, our goal was to identify the main difficulties managers feel in the usage of strategy tools. This time, we decided to make an open question, primarily because we found less information in the literature about this issue, and thus we were not confident in our ability to design a comprehensive list of alternatives. Moreover, we think it is better and more edifying to give respondents the opportunity to freely give their opinion (at least in one question of the questionnaire).

Appendix B – Questionnaire Form
(Translated from the Original Portuguese Version)

Questionnaire

This Questionnaire aims to identify the instruments, models or tools used by companies in their activity with the goal of better understanding organizational strategy. **Please read carefully the instructions provided for the correct fulfilment of the answers.**

Please answer all the questions so that the questionnaire can be completely validated.

Company and Respondent Data

Company Name: _____	N° of Employees (approximately) _____
Job Position: _____	Educational Background _____

1. **At the level of your company or business unit, which instruments, tools, or techniques are used or have been used in the last 5 years, in a systematic way (methodical, ordered) to support the most relevant decisions** (those that implies the use of more resources and have wider scope and impact)?

Only some examples are listed. You should mark with an X the instruments that are used in your enterprise and mention others that are used but are not part of the list below. We provide a brief description of each instrument.

- Scenario Analysis
(Construction of different alternatives to the future taking into account different expectations)
- Life Cycle Analysis
(Industries, organizations and products generally develops through stages – introduction, growth, maturity, decline – which present different patterns and characteristics that have effect in strategy)
- Industry Analysis (Porter Five Forces Model)
(Analysis of the attractiveness of an industry through 5 forces: entry barriers to new entrants, possibility of substitutes, bargaining power of buyers and suppliers, and intensity of competition)
- Strategic Group Analysis
(Analysis of dimensions like price policy, geographical scope, among others, in order to build a matrix to group and visualize the competitors with similar strategies)
- PEST Analysis
(Analysis of the environment through political, economic, social and technological factors)
- Portfolio Analysis (e.g. Matrix BCG, Matrix GE/McKinsey)
(Generally are used variables such as growth rate and market share in order to relate the industry/market attractiveness against the competitive position of products/business units)
- Analysis of Resources/Capabilities/Core Competences
(Identification of resources, capabilities and/or competences of the enterprise that are valuable, rare, and difficult to imitate)
- Risk Analysis
(Benefit and Risk analysis of strategic options to determinate their attractiveness)
- SWOT Analysis
(Identification of enterprise strengths and weaknesses, and environment opportunities and threats)
- Balanced Scorecard
(Integrative model to evaluate organization performance using performance measures that covers 4 perspectives – financial, clients, internal processes, learning and growth).
- Brainstorming
(Group activity where people are free to express their ideas and perspectives on a subject)
- Value Chain (M. Porter)
(Separation and analysis of enterprises diverse activities in order to identify areas of competitive advantage)
- Generic Strategies (M. Porter)
(Model to choose one of three generic strategies: cost, differentiation and focus)

Others (mention others instruments that are used in your enterprise)

2. How your company or business unit had access to the instruments identified before?

Mark with an X the option(s) that explain(s) how you have access to all the instruments identified.

- | | | | |
|---------------------------------------|--------------------------|------------------------------------|--------------------------|
| Consulting firm/ External Consultant | <input type="checkbox"/> | Specialized Literature | <input type="checkbox"/> |
| Education and Training | | (Books, Scientific Articles, etc.) | <input type="checkbox"/> |
| (Conferences, Graduated courses etc.) | <input type="checkbox"/> | Internet Searches | <input type="checkbox"/> |
| | | Magazines and Newspapers | <input type="checkbox"/> |

Other(s) _____

3. In the implementation of the instruments identified in question 1 were used:

Mark with an X the option(s) that enable(s) to explain the implementation of all the instruments identified.

- Internal Help External Help

4. Following are listed possible ways of using the instruments indicated in question 1. Order them putting the number 1, 2 or 3 where 1 is the most used way and three the less used.

In the case you use the identified instrument in a different way you can indicate in the space "Other(s)".

- The indications referred in the sources of access identified previously (e.g. magazines, consulting firm, specialized literature, etc.) are followed.
- A partial use or an adaptation of the instruments are made considering the goals of their use
- The concepts and ideas of the instruments are used to create new ways of work and new tools

Other(s) _____

5. To what point the items listed following are important or not important to justify the use of the instruments that you indicated in question 1. Classify from 1 to 5 each item according to its degree of importance or unimportance.

1- Not Important 2- Little Important 3- Moderately Important 4- Important 5- Highly Important

Mark with an X the option(s) that you consider more adequate. You can indicate other alternatives in the space "others"

	Not Imp.	Little Imp.	Moderat. Imp.	Highly Imp.
Support the implementation of strategy at all levels	1	2	3	4 5
Clarify company's strategy	1	2	3	4 5
Clarify and justify difficult decisions	1	2	3	4 5
Understand reality and key strategic factors	1	2	3	4 5
Encourage new ideas and creative visions	1	2	3	4 5
Facilitate communication and Generate Dialogue	1	2	3	4 5
Facilitate the coordination and alignment of different interests	1	2	3	4 5
Facilitate the collection and analysis of information	1	2	3	4 5
Facilitate the planning process	1	2	3	4 5
Strengthen team spirit and people commitment with organization	1	2	3	4 5
Make decisions more rational, objective and transparent	1	2	3	4 5

Other(s) _____

Describe the main difficulties in the use of the instruments identified in question 1?

If you have doubts or want to give additional information send an email to bruno_oliveira@iscte.pt or call mobile phone number xxx.

E-mail to receive a research summary: _____
 (We estimate to send the summary between January and March 2008)

Appendix C – Questionnaire Cover Letter
(Translated from the Original Portuguese Version)

Dear Sir,

On the ambit of my dissertation of the Master in Business Administration of the Instituto Superior das Ciências do Trabalho e da Empresa (ISCTE), I come by this means to solicit the fulfilment of the questionnaire that is attached and that intends to raise the strategic analysis instruments used by companies in their activities.

The present study is directed to the largest companies operating in Portugal and has the goal of obtaining a better understanding of the use of the aforementioned instruments as support means to organizational strategy. In this sense, your collaboration is essential and valuable.

The questionnaire has 2 pages (front and back) and its fulfilment is fast and accessible (it should take about 10 minutes).

I also solicit the questionnaire to be fulfilled by an element from the top management of the organization that habitually participates on the strategic decisions.

Enable me to reveal that we guarantee total confidentiality, discretion and anonymity to the information provided by you. This is an academic study and the analysis of information will be done in an aggregate way without mentioning, at any moment, the name of any company.

If you wish to make any additional comments or to ask any question you can send an e-mail to bruno_oliveira@iscte.pt or phone to the mobile phone number xxx.

In the case you are interested in receiving a summary of this study I request that you indicate, in the end of the questionnaire, an e-mail address.

Attached to the present questionnaire follows an RSF envelope that you can use to return the questionnaire. If you prefer, you can answer the questionnaire in the site www.mestradoiscte.com.

To conclude, I express my gratitude for your collaboration and availability

Yours faithfully,

5th May 2007

(Author of the study)

(Director of the Master in Business Administration - ISCTE)

Appendix D – Questionnaire Follow-up Letter
(Translated from the Original Portuguese Version)

Dear Sir,

The Instituto Superior das Ciências do Trabalho e da Empresa, through one of its master students, is undertaking a study directed to the largest companies operating in Portugal which intends to raise the instruments of strategic analysis used by companies in their activities.

During the month of May, we sent a letter to all the companies included in this study asking for the fulfillment of a questionnaire.

At the present moment, we are very enthusiastic since the response rate obtained is overcoming our expectations. However, we did not receive any response from the company you direct.

For us, the participation of all the companies has an enormous value, so we amiably solicit that you answer the questionnaire that we attach to this letter.

We ask for the questionnaire to be fulfilled by an element from the top management of the organization (the fulfillment should take about 10 minutes).

We again reinforce total confidentiality, discretion and anonymity to the information provided by you and we reassure that we will not mention the name of any company in any circumstances.

If you wish to make any additional comments or to ask any question you can send an e-mail to bruno_oliveira@iscte.pt or phone to the mobile phone number xxx.

In the case you are interested in receiving a summary of this study I request that you indicate, in the end of the questionnaire, an e-mail address.

Attached to the present questionnaire follows an RSF envelope that you can use to return the questionnaire. If you prefer, you can answer the questionnaire in the site www.mestradoiscte.com.

To conclude, I express my gratitude for your collaboration and availability

Yours faithfully,

29th June 2007

(Author of the study)

(Director of the Master in Business Administration - ISCTE)

Appendix E – Questionnaire Administration Procedures (Full Description)

Following, we provide a full explanation of the administration procedures of the questionnaire.

We decided that we would wait approximately four months after the date of pointing out the questionnaire. We thought this length of time was adequate to give enough time for all the companies to answer the questionnaire.

Regarding the administration of the questionnaire, we have taken some measures with the aim of ensuring the credibility of our research and the achievement of a good response rate level. The procedures employed are listed below:

1. We addressed a presentation letter to the chief executive officer of each company explaining the objectives of our research and the procedures for completing and returning the questionnaire
 - In order to ensure that the person who was filling the questionnaire had the necessary knowledge to answer our questions, we made clear in the presentation letter that we required the respondent to be a top level executive who usually participate in strategic decisions.
 - With the aim of increasing the credibility of our approach, we assured confidentiality of data, promised to send a summary with the conclusions of our research to all respondents, and provided the email and the phone number of the researcher of this study.
 - The letter was signed by the author of the research and by the director of the master's course attended by the researcher.
 - The letter was stamped with the official logo of ISCTE Business School.
 - We included a self-addressed stamped envelope for returning the questionnaire.
 - We put together the presentation letter, the questionnaire and the self-addressed envelope in an official envelope of the Instituto Superior das Ciências do Trabalho e da Empresa (ISCTE) and sent it, by mail, to all the companies in our sample (993), on 7th of May 2007.
 - We had set out an online site (www.mestradoiscte.com) where the respondents were able to complete the questionnaire. This option was explained in the presentation letter. Therefore, the respondents could choose the most appropriate method of response for them.
2. We prepared a follow-up mail to all the non-respondents with the aim of increasing our response rate. Babbie (1998) considers this process extremely important and points out a set of recommendations to maximize benefits. We tried to follow his suggestions but some were

not possible to implement because of resource restrictions. Our procedures are summarised below:

- We launched a second mail shot explaining that some companies have already completed our questionnaire and that we would like to have the participation and collaboration of all the companies.
- This mail shot was sent out 8 weeks later in the 2th of July. We selected this timing because we started to notice a decrease in the questionnaires received and also because we were absolutely aware that it was not possible to provide a third follow-up mailing (as recommended by Babbie, 1998). Otherwise we would have sent the second follow-up 4 weeks after the initial mail out and a third one 8 weeks later.

Appendix F – Interview Guide
(Translated from the Original Portuguese Version)

Interview Guide

Company Data

Company Name:

Number of Employees:

Turnover:

Interviewee Data

Interviewee Job Position:

N° of years in the Job:

N° of years in the company:

Education:

Relation with Strategy:

General Questions:

(Confirm with the interviewee the responses given in the questionnaire)

1. What are the reasons that lead your company to use the pointed strategy tools?
2. In a general way, describe how the signaled strategy tools are used? With what objectives?
3. What are the ways used by your company to access and implement a strategy tool?
4. With what frequency do you use these strategy tools?

Specific Questions for Each Analysed Strategy Tool

(From the strategy tools selected we will analyse in more detail 3 or 4. Which do you consider more relevant?)

Selected Tool (1, 2, 3...)

5. Each strategy tool has associated a set of characteristics and procedures. How do you obtain the necessary knowledge to use this strategy tool? (How did you have access to the tool?)
6. Describe how the strategy tool is used.
 - Which activities are developed when the strategy tool is being used?
 - Describe, if possible, a typical episode of the use of this tool.
7. For what this strategy tool is used? (For what tasks? With what goals?)
8. Which people use this strategy tool?
9. To what point your company follows the theoretical orientations behind this strategy tool?
10. Why the company uses this strategy tool?
11. Which difficulties you face in the use of this strategy tool?

Appendix G – Interview Request Letter
(Translated from the Original Portuguese Version)

Dear Sir,

In the ambit of my dissertation of the Master in Business Administration of the Instituto Superior das Ciências do Trabalho e da Empresa (ISCTE), it is being developed a study that intends to raise the strategic analysis instruments used by companies in their activities.

In the following of the actual study, we applied a questionnaire to the largest 1000 companies in Portugal. At this moment, we are in a second stage where we aim to deepen the results obtained by undertaking interviews with managers from various companies (which have answered our questionnaire).

In this conformity, we came by this means to solicit your collaboration for the concession of a face-to-face interview with a maximum duration of 45 minutes. We also would like to solicit the authorization for audio recording the interview. This procedure is important to validate the subsequent data analysis.

Enable me to reveal that we guarantee total confidentiality, discretion and anonymity to the information provided by you. This is an academic study and the analysis of the information will be done in an aggregate way without, at any moment, referring the name of any company. Besides, only the author of this research will have access to the audio records.

Finally, we solicit this interview to be made with the company's Chief Executive Officer. In the case of this not being possible the interview may be done with a member of the company's top management that habitually participates in the strategic decisions.

If you wish to make any additional comments or to ask any question you can send an e-mail to bruno_oliveira@iscte.pt or phone to the mobile phone number xxx.

To conclude, I express my gratitude for your collaboration and availability

Yours faithfully,

15th November 2007

(Author of the study)

(Director of the Master in Business Administration - ISCTE)

Appendix H – Interview Administration Procedures (Full Description)

We now describe the procedures applied in the administration of the interview. These procedures were employed with the aim of making our research credible for the respondents, and to provide the basis for a good interview process and to the adequate recording of the data.

The following procedures were followed:

- We addressed a presentation letter, by e-mail, to the selected executives (we used the e-mails we collected through the questionnaires received).
- The letter was signed by the author of the research and by the director of the master's course attended by the researcher.
- The letter was stamped with the official logo of ISCTE Business School.
- We specified a date, time and venue for the interview with the available executives.
- Two days before the interview we sent a confirmatory e-mail.
- At the beginning of each interview, we explained the goals of our research, reassured confidentiality and obtained the respondent's consent on audio recording the interview.
- Interviews were recorded (when permitted) with Creative Zen Mp3 Player. When recording was not authorized (one case) notes were taken during and after the interview.
- The interviews were fully transcribed for subsequent analysis. For that purpose, it was used the software Express Scribe[®] (version 4.16).