



Global Advanced Research Journal of Management and Business Studies (ISSN: 2315-5086) Vol. 1(6) pp. 240-252, September, 2012
Available online <http://garj.org/garjmbs/index.htm>
Copyright © 2012 Global Advanced Research Journals

Review

The Balanced Scorecard in a Pharmaceutical Company: A Case Study

Rui Janota and Maria João Major¹

Associate professor Maria Major, Lisbon University Institute (ISCTE – IUL) and BRU/UNIDE researcher, Cacifo 105-A, Avenida das Forças Armadas, 1649-026 Lisbon, Portugal, Europe. Phone number: +351/217903495

Accepted 16 July 2012

The Balanced Scorecard (BSC) approach to performance measurement is gaining, over the last decades, an increased popularity due its strategic use of key non-financial measures along with the more traditional financial metrics. This paper outlines the process of development, implementation, usage and later on abandon, of the BSC in a Portuguese subsidiary of a leading international pharmaceutical company. In order to support our findings we review in the existing literature on the BSC concept and highline the characteristics of this concept analyzing the reasons of its popularity. In addition this paper postulates the likely impact of such a performance measurement system on the organizational behaviour and provides a framework on how the BSC implementation can effectively help an organization in clarifying its mission and strategy into new goals. Finally, this paper outlines the organizational challenges and potential pitfalls associated to the BSC implementation.

Keywords: Balanced Scorecard; Abandon; Change; Management Accounting.

INTRODUCTION

In 1992, Kaplan and Norton introduced the Balanced Scorecard (BSC) concept as a new system for organizing both financial and non-financial performance measurements (see Kaplan and Norton, 1992, 1993). In the beginning of their article they discuss the well-known device these days, “*what you measure is what you get*” (Kaplan and Norton, 1992: 71), which points out the authors’ view on the role of performance measurements in managerial work. The wide range of financial and non-financial measurements, which the scorecard offers, provides managers with a comprehensive framework representation of both the organization’s tangible and intangible assets. The BSC addresses the need for multiple measures of performance and provides a

strategic framework, which specifically encourages the use of both financial and non-financial measures along four perspectives - financial, customers, internal business processes, and learning and growth - to measure organizations performance. In both research and practice, the BSC has received much attention, particularly as a tool for driving unit level strategy within many industries, including hospitality, health, manufacturing and banking. In 1996, Kaplan and Norton evolve the concept further to become a strategic management system, which they argue supports four managerial processes, namely clarify and translate vision and strategy, communicate and link strategic objectives and measures, plan, set targets, and align strategic initiatives and enhance strategic feedback and learning (Kaplan and Norton, 1996b).

The BSC appears to have all the answers for choosing the most appropriate measures of company performance, which are governed by the organization’s strategic

orientation and external competitive environment. The success of the BSC relies on a transparent and well-defined strategy as the basis for the development of specific and relevant performance measures. The BSC acknowledges that organizations respond to the environment they face in developing their strategy and their performance measurement system, in order to achieve their objectives (Kaplan and Norton, 1992, 1993, 1996b).

The purpose of this study is the increase of the understanding of how the BSC is used in the commercial organization of a major pharmaceutical company operating in Portugal. This work is operationalized by studying how a BSC entered a single, multinational corporate group and diffused internally, over time, in the Portuguese organization and thru out its different departments. Understanding the use of the BSC involves the gathering of knowledge on how it was designed, implemented, used and later on abandoned in the organization. In this study, the *design* of the BSC corresponds to one first level of description and investigates what the system does and why. The design includes the description of the contents of the BSC in the organization, what the BSC emphasizes and why the BSC points to the things it does. For instance, the perspectives in the BSC and why these perspectives were chosen in the organization are illuminated. The *implementation* of the BSC reflects a second level of description and focuses on how the BSC was transformed and evolved in the organization. The choices of BSC representations are illuminated through describing how the BSC was built, deployed and disseminated throughout the organization. The study of the implementation reflects a historical aspect of an organization, and is a useful consideration in understanding the final results of BSC in this organization. The *use* of the BSC focuses on the physical realization of the system in the organization and thus represents the third level of description. The use dimension explores activities, such as documentation of measurements, reconstruction of strategy, reporting of results and communication within units, dissemination of information, and strategic planning all related to the BSC realization. Thus, the use dimension focuses on how people made use of the BSC in their day-to-day practices. The *abandon* of the BSC represents the fourth level of description, detailing the reasons why the tool was abandoned, mentioning the events leading to this decision.

The research method chose to perform this work was a case study, performed in a retrospective perspective, since we will be focusing in a well delimited period of time (1999-2003). The main research questions posed in this study are thus: How was implemented the BSC in a specific pharmaceutical company? How was used the BSC in this particular company? This paper is organized in the following manner.

Section 2 accounts for the methodological approach employed in this investigation. Research strategy, collection and analysis of evidence, and the quality of research are some topics that are presented and discussed in this section. In section 3, a short background of the case company is presented followed by a case description. The application of the BSC is described with respect to how it is designed, implemented, used and abandoned in the company, analyzing the results from the case study. Finally, in section 4 the findings from the empirical study are synthesized and the research process is critically discussed. Study limitations are also presented along with an agenda for future research.

RESEARCH METHODS AND METHODOLOGY

Due to the interpretive character of the research with focus on understanding a qualitative research strategy was selected. According to Denzin and Lincoln (2002:3) "...*qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them*". Since this study aims to explore and explain a contemporary phenomenon in a real life setting, within which the researchers have no ability to control, the case study strategy was selected as a research strategy (Yin, 2009). According to Stake (1994) the case study should be selected with respect to what can be learned. The researcher should choose cases from which he or she believes they can learn the most. Based on this statement and the following criteria we selected the full organization of the subsidiary of a global pharmaceutical company in Portugal as a case for the present research study: The design of the BSC in the organization includes financial and non financial measures that are derived from a vision and strategy and are categorized into perspectives derived from the original four presented by Kaplan and Norton (1992); The BSC was implemented and used in the organization; The investigators have access to information needed to collect case study data. The first criterion concerns the fact that the organization has really implemented a BSC. According to the advocates, the original framework of the BSC proposed by Kaplan and Norton (1992) contains four perspectives encompassing goals and measures. Since the BSC in practice is being changed and adapted to the organization's conditions, the original framework has been used in judging if the organization has implemented a BSC or not. According to Malmi (2001), for a measurement system to be a BSC, it should contain financial and non-financial measures, which should be derived from strategy and the measurement framework should contain perspectives derived from the original four. Thus, the number of perspectives does not matter, but should be derived from the original framework. The

second criterion concerns the implementation process. How does one know that the BSC is fully implemented in the organization? Kaplan and Norton (1996b) suggests that it takes about 25-26 months for a company to make the BSC a routine part of the management process. However, the time schedule depends very much on the organization's background, history and current situation. Therefore, in this case some employees of the company in Portugal were questioned about the implementation of the BSC. In addition, managers in the organization were asked if they made use of the BSC in their work. According to Yin (2009), there is a potential risk in conducting a case study that a case may turn out not to be the case it was thought to be from the beginning. Therefore, the case needs to be carefully investigated beforehand to prevent misrepresentations and to maximize the access to the field. Thus, the third criterion for selecting a case is that the investigator has access to information. As we selected a case study strategy we needed to define our research questions. These were: (1) How was the BSC implemented in this particular pharmaceutical company operating in Portugal?; (2) Why did it adopt the BSC?; (3) What main difficulties were encountered during implementation?; and (4) What difficulties were encountered in using it?.

It is common to divide research strategies into two principal scientific approaches: the positivistic and the hermeneutic. These two doctrines represent two different perspectives, which mean they yield different scientific. The concept of positivism reflects a desire to draw conclusions based on empirically determined knowledge. It implies that the researcher is working with an observable social reality and that the end product of such research can be the derivation of laws or law-like generalisations similar to those produced by the physical and natural scientists (Ryan *et al.*, 2002). This approach sees only knowledge that can be measured as true and proper, and it is extremely important to separate fact from opinion. The other main theoretical approach, the hermeneutic, focuses on understanding the entirety and interpretation of events. For this reason the hermeneutic approach is often considered as the opposite of positivism. Unlike the positivist, the hermeneutic does not consider the world to consist of an objective reality but instead focuses on subjective consciousness. Each situation is seen as unique and its meaning is a function of the circumstances and the individuals involved. In this work, we will be more focused towards the hermeneutic approach. The reason is that we are going to conduct research based on our interpretations of the reality and the phenomenon on study. There will be no measurable "truth" to this research, since it is a study where human beings behaviour and social constructions will create the base for our conclusions. Hence, there is no scientific truth to the answers this study will produce. Each situation will be analysed as unique and its meaning will be generated by the circumstances and the individuals

involved.

Collecting and processing information can be done in two separate ways, either by the quantitative or by the qualitative method. By the quantitative research method, data is collected in numbers from which statistical calculations and conclusions are drawn. This method is often used when large populations are analysed. The qualitative method, on the other hand, penetrates every observation in a deeper way, focusing upon variables that are harder to classify and quantify. The main purpose of qualitative research is to obtain a more profound knowledge than the fragmented information generated by quantitative methods. This work is of a more qualitative character, which is derived from the use of a hermeneutic scientific approach. We are mainly going to analyse one company, representing one business, which will present us with an opportunity to draw in-depth conclusions.

There are numerous approaches to the task of gathering data needed in the examination of a problem. A common distinction is made between two different types of data, namely primary data, which consists of information collected through direct examination; and secondary data, which includes earlier examinations, existing statistics, literature, and articles. In this work, both primary and secondary data will be used. Of course that for determine the research questions, we started by collecting secondary data. Since the BSC concept is used differently in different companies, it was important to start the research by creating a basic understanding of it. The BSC tool is fairly well defined, but as well patent in the previous section, we've searched for most recent literature and articles in academically reviewed journals in order to pick up the latest discussions on the subject.

The primary data collected has the characteristics of information directly suited to our research. Through the understanding and knowledge obtained during the collecting of secondary data, we were able to shape the understanding of the information needed to collect. The primary data was mainly acquired by conducting personal interviews and letter inquiries with employees at the company.

The interviews were performed at the respondents office and taped (when possible and authorised) and then rewritten with the help of notes taken during the interview and the play back of the tape when possible at the end of the day, so that we were able to go back and read the interviews again for a better interpretation and to be able to put the answers into a context, where we should be able to understand the big pictures.

The case study presented in this paper is based on 24 semi-structured interviews with fifteen employees and one interview with the consultants that help in the implementation of the BSC. The interviews were conducted from September 2007 to March 2008 and lasted about 1-1.5 hours each, adding up to a grand total of 30 hours invested in this process. The interviewees were selected on the basis of the person's position in the

Table 1. Interviews with Employees

Date	Title	Position	Department	Taped	Duration
12-Set-07	Country Manager	Managers	Administration	Yes	1:33:00
14-Set-07	Business Development Manager	Managers	Sales & Marketing	No	1:25:00
15-Set-07	Marketing Manager	Managers	Sales & Marketing	No	1:10:00
18-Set-07	Regulatory Manager	Managers	Regulatory	Yes	1:00:00
19-Set-07	Sales & Marketing Manager	Managers	Sales & Marketing	Yes	0:56:00
28-Set-07	Sales Manager (Branded Products)	Middle Management	Sales & Marketing	Yes	1:20:00
1-Out-07	Sales Manager (OTC Products)	Middle Management	Sales & Marketing	No	1:20:00
8-Out-07	Finance Manager	Managers	Finance	No	1:50:00
12-Out-07	Human Resources Manager	Managers	Human Resources	Yes	1:00:00
29-Out-07	Finance Controller	Middle Management	Finance	No	1:15:00
2-Nov-07	Accountant Responsible	Middle Management	Finance	Yes	1:10:00
15-Nov-07	Regulatory Manager	Middle Management	Sales & Marketing	No	1:50:00
19-Nov-07	Product Manager	Middle Management	Sales & Marketing	Yes	1:10:00
28-Nov-07	Product Manager	Middle Management	Sales & Marketing	No	1:40:00
6-Dez-07	Logistic Manager	Middle Management	Finance	Yes	1:30:00
11-Dez-07	Area Sales Manager (Division N)	Middle Management	Sales & Marketing	Yes	1:10:00
12-Dez-07	Area Sales Manager (Division C)	Middle Management	Sales & Marketing	No	1:15:00
11-Fev-08	Area Sales Manager (Division S)	Middle Management	Sales & Marketing	No	1:20:00
14-Fev-08	Human Resources Assistant	Operational	Human Resources	No	0:40:00
18-Fev-08	Accountant Assistant	Operational	Finance	Yes	0:45:00
20-Fev-08	Senior Sales REP	Operational	Sales & Marketing	Yes	1:10:00
21-Fev-08	Senior Sales REP	Operational	Sales & Marketing	No	0:55:00
25-Fev-08	Sales REP Assistant	Operational	Sales & Marketing	No	0:40:00
30-Mar-08	Country Manager	Managers	Administration	Yes	1:55:00
Total Time of Interviews					29:59:00

organization, and the person's profession (see Table 1). This selection was intended to enhance the ability to analyze the data from different frameworks and to receive different views on the use of the BSC. In addition, the interviewees were selected on the basis that they had been working in the organization since the introduction of the BSC in 1999 and had an active participation in the implementation and usage of this tools.

The Empirical Study

Brief description of the company

XPTO is a global pharmaceutical company with leadership positions in products for humans and animals. Thru its corporate values, the company is committed to creating value for customers, partners and investors by leveraging the knowledge and resources to drive growth-oriented innovation. With nearly 1,400 employees and revenues of \$654 million, XPTO is active in more than 27 countries around the world. Founded in Norway in 1903, XPTO is currently positioned for growth in all businesses segments that actively operates. XPTO is dedicated to becoming a leader in specialty pharmaceuticals by serving the evolving needs of its customers, by providing best-in-class customer service through innovative

partnerships, technologies and processes. XPTO has been focused on seizing opportunities and delivering results by harnessing the power of constructive change. It's all part of its continuing commitment to growth through increased performance. XPTO was established in Portugal in 1968, when it launched its first product, which is currently the market leader in its therapeutic area. By 2005, XPTO was marketing 37 generic products in a variety of therapeutic areas, which currently represents about 75% of its total net income of EUR 19 million.

The emergence of the BSC

From its inception, the XPTO organizational structure in Portugal assumed a clearly commercial stance, with approximately 80% of its then 74 employees linked directly to the Marketing and Sales Department. This was considered its core business, as research, development and production were not being carried out in this country. Assisting the Sales and Marketing department were five other departments providing support to the company's business activities. These were the Financial, Legal, Human Resources, Computer Systems and Regulatory departments. Each of these departments, hierarchically reporting to the general management in Portugal,

cooperated in its functions with the respective international departments. Although the company held a well established position in the Portuguese market, with a significant market share (in the therapeutic areas in which it operates) and an enviable degree of financial-economic health, by the end of the 1990s, the Portuguese organization was frankly out of step with the Group's international strategy. That is, the business was not very diversified; it was based on high margin products, but ones that had been on the market for two decades and thus highly vulnerable to being overtaken by alternative therapies. Added to this was the fact that the company in Portugal had not been able to create business opportunities for launching the divisions of animal health and sale of antibiotics as raw materials.

The implementation of the *Balanced Scorecard* (BSC) in 1999/2000 would set the company on a completely different course, dropping its emphasis on selling branded and patented products in order to prepare for the sale of generic products, a business segment which was then taking its first steps in Portugal. Implementation of the BSC acted as a catalyst, facilitating acceptance, at all levels of the company, of more challenging goals, with the aim of achieving better performance on an integrated set of indicators rather than improving financial indicators alone. In other words, the BSC made it possible to translate and give form to the company's mission and strategy by setting new objectives, redefining the business and strategically investing in the generic medicinal products market, aligning itself with the Group's international strategy.

In June 1999, XPTO Portugal's General Management gave form to the company's mission in an attractive and effective slogan, "Accessible Medicine". Thus the company made a commitment to making medicinal products more accessible to the great majority of the population by providing more economical, quality therapeutic solutions via the sale of generic medicinal products. But this concept of accessibility was even broader, encompassing health care professionals (responsible for prescribing the medicine) and consumers, by making a wide and varied range of quality products available, at a lower cost, with more comprehensible information and more relevant support services (for both patients and doctors). By embracing this strategic mission and declaring its intent to market generic medications in Portugal at a time when the segment was worth about 0.001% of the total value of the pharmaceutical market, XPTO gained a certain notoriety to the point that its Country manager and regulatory manager were invited to participate in a parliamentary working group. The group's work led to the drawing up of Law 14/2000, of 8 August 2000, the first legislative document to regulate and provide incentives for the production, sale and consumption of these products. The company's change of course, which turned out to be a winning bet, was concretized by five new generic

products that were introduced on the market in January of 2000. XPTO was the second company to market generic products in Portugal and is a founding member of the *Associação Portuguesa de Genéricos* (APOGEN – Portuguese Generics Association), an organization designed to promote generic products.

By 2005, XPTO was marketing 37 generic products in a variety of therapeutic areas, which currently represents about 75% of its total income of EUR 19 million. The organizational structure remains the same, but the number of employees has grown to 89, with the Marketing and Sales department naturally maintaining its relative weight in the company. In the 2005 management report, the management of XPTO Portugal reiterated its intention to stay at the forefront of marketing "Accessible Medications", by inviting its suppliers, employees and other sales partners to join them in strengthening this mission and, above all, in defending, brooking no compromise, the quality of the company's products and services in order to contribute to improving the population's quality of life.

The introduction of the BSC at XPTO in the US

The roots of the BSC introduction at XPTO, in the United States, go back to the beginning of 1997. Back then, the pressure to deliver a good return to shareholders had increased, and the company thus monitored its EBIT¹ EBIT – Earnings before interest and taxes. development on a long-term basis. The company had encountered a situation where it needed to produce and to measure an ever-higher yield for its shareholders - a demand that had appeared recently with the growing popularity of the shareholder value concept in the 1990s, and also boosted by the increase company's debt. Knowing that the company could not satisfy this demand with the tools it already employed, corporate top management assumed that these demands could be met if an appropriate tool was available. As the Portuguese Country manager recalled, back in 1997, a performance gap of the company in the United States became visible and top management decided translate corporate strategy into manageable objectives and that would simultaneously introduce EBIT and thereby shareholder-value-oriented thinking and management into the company. Against this background, the search for an appropriate tool of performance measurement tool began. An important actor in the search process was the company's Chief Executive Officer, which had an extensive network of contacts with external consulting firms. With recourse to this external knowledge, benchmarking processes and theoretical investigations, the company discussed the Economic Value Added (EVA®) concept as a potentially helpful system and gradually moved to the BSC as a tool of interest. The

BSC was identified as the tool that best served the needs of the company. Apart from its function as a strategy translator, it was appreciated for its simplicity and conciseness. Also, the ability to use non-financial indicators in addition to the financial ones was of key importance. In 1997, at the time when the search process for a suitable tool started, Kaplan and Norton's book on the BSC (Kaplan and Norton, 1996) as well as the first case studies and reflections on the new tool were published in international journals. Such recipes serve as a synonym for organizational ideas such as the BSC - thus, given that the tool had already then reached a certain degree of media attention and popularity, and that it was celebrated as an innovative and progressive tool propagated by consulting companies, it would probably be naive to claim that the decision to implement BSC company-wide was based on rational aspects only. Finally, since the company had a history of producing innovative products and continuously sought to perpetuate the image of a progressive company management's decision to employ the BSC for legitimizing and signaling purposes was also very likely. Having closed the search process, top management decided to implement the BSC company-wide. A project team was formed, consisting of four people of the company's Internal Control department. At the beginning, the team's task was first to do some investigations in the BSC method itself and to determine which external consulting company could best support the scorecard method introduction. Some time after the Internal Control department wrote a handbook about the Business Driver Scorecard concept. This handbook was distributed company-wide at the end of June 1998, serving as the official internal guide in matters involving the scorecard.

When the BSC concept was first introduced, the adoption of the concept in each country where the company had an existing business was not mandatory. Countries were encouraged to develop a scorecard, but the use of the concept was not binding until January 2001 when, for the first time, scorecard reporting was officially required in the strategic planning process. Similar to the introduction of the concept itself, no rules were made which networks should be mobilized to develop the scorecards. Each country was free to decide whether they wanted to design a scorecard on their own, whether they wished to ally with external consultants or how else to proceed. Some of the subsidiaries developed the tool without help from the outside and some decided to associate with one of the recommended external consulting team for assistance in the design and implementation of the BSC.

This initial non-binding policy in the BSC introduction had, naturally, reflections in the different levels of scorecard implementations thru out the different countries. The first BSC efforts began already in 1998, in the subsidiaries of the Unites States, and the last scorecard project was initiated in January 2001. These

differences can partly be attributed to dissimilarities in terms of financial and human resources availability in each country. On top of these variances in the introduction start points, it looks like no common development and implementation process across the business divisions occurred. Despite the existence and availability of the official internal scorecard development handbook almost subsidiary followed its own approach, often a modified version of the one suggested by the top management of the company. However, in contrast to the variance in BSC introduction, the problems faced during the development and introduction process seem to have been similar across all countries - obstacles identified most frequently were problems of acceptance and communication, definition of appropriate scorecard measures and their measurement in practice, as well as difficulties related to the information Technology (IT) processing of the BSC data (Lyons and Gumbus, 2004). As an effort to disseminate the awareness to the BSC company-wide, but out side the formal procedures, top management of the company decided to begin the publication of small but of regular articles on the BSC in the internal monthly magazine. This initiative helped in the non-formal company-wide diffusion of the BSC, long before it would become a mandatory tool.

The BSC in Portugal

The subsidiary of XPTO in Portugal was one of the first, within the companies group, to implement the BSC. To do so, the management team in Portugal, composed by the Country manager, finance and marketing managers, had the cooperation of one of the recommended external consultant companies. The development process in Portugal, as recommended by the internal scorecard development handbook, consisted basically of three steps. First, country strategy was discussed – this strategic discussion was then extended to an exchange of thoughts about an appropriate vision and value proposition of international top management. This initial discussion, occurred in September 1999, produced a draft document that would become the basis of the BSC implementation in Portugal. The second step included the training of local staff. The necessary pre-knowledge on the BSC was given by having employees occasionally attended internal presentations by the companies's BSC expert. Such presentations typically included a BSC implementation case, for example, in one of the company's production plants. The third and final step in the BSC development process was again a workshop, which dealt with the discussion of a linkage model (cause-and-effect chain) for the critical few objectives and the determination of appropriate key performance indicators and targets. It was in this final step that, according to the Country manager, "*a unique challenge was assumed by the local top management*". At the end

of 1999, it had become quite clear that new opportunities in the Portuguese pharmaceutical market would arise from the introduction of generic products in the market. In order to assume a leading position in this emerging market, XPTO Portugal began doing its home work by clearly defining and communicating its vision and values. Mailing campaigns to all employees and posting bills in the office walls, transmitted a clear message to everyone to where the future would be.

The BSC of XPTO in Portugal, was thus build in accordance with the companies scorecard development handbook. The vision of the company was illustrated in the left of the scorecard: "*Accessible Medicine*". The scorecard is divided into four perspectives: the financial perspective the market perspective, the internal process perspective, the know-how and culture perspective. Strategic goals and key task were derived from each perspective. For each strategic goal in XPTO's scorecard several tasks were determined, being those tasks considered as critical success factors, which were the most critical issues for the organization's competitiveness and therefore aligned with the vision and strategic objectives (Kaplan and Norton, 1996a). The strategic objectives, together with critical indicators, help the organization in Portugal to deploy the over-all vision down to strategically important measurements (Kaplan and Norton, 1993). Therefore, in order to analyze the BSC of XPTO in Portugal, one needs to focuses on the achieving its vision.

In the financial perspective the strategy objectives were linked to revenues, costs and gross margins goals. Thru the achievement of theses objective the company would be able to fairly remunerate the involved stakeholders and thus offering to the market "*Accessible Medicine*". In the Market perspective, ten strategy objectives were defined: to launch generic products; to increase the participation in the hospital tender business; to manage the transition from existing branded products to generic products; to lobby for default substitution; to focus promotion in doctors for the prescription of generic products; to form and maintain partnerships with pharmacies; to build bridges between doctors and pharmacies for the implementation of generics; to implement an XPTO brand; to assure product quality; and to produce and market a wide range of generic products. The strategic objectives the market perspective aim to an implementation of the concept of the generic product in the Portuguese pharmaceutical market – being generic products, by definition, considered as "*Accessible Medicine*". For the internal perspective, eleven strategy objectives were set: to identify target and lobby partners; to target doctors prescription; to leverage local knowledge in the generics market; to operate as a distributor for other international generics companies; to enable fast regulatory approval processes; to in-source services from with the XPTO international structure; to position the company within the Portuguese generic

market; to create an internal task force to support the hospital business; to assure a better sales force territorial management; to create and update a product wish list; and to search for local acquisition opportunities. The internal perspective, with its strategy objectives, aims to deploy a lean and flexible organization into the Portuguese market, able to offer its customers, patients and partners products and services compatible with "*Accessible Medicine*". In the know-how and culture perspective the strategy objectives were related to the development of commercial skills, to the integration of the XPTO skills, to the increase of generics mindset, to the improvement of IT skills, to the improvement of product sourcing skills and to the establishment of new brand values within the organization. For the strategy objectives of the know-how and culture perspective, the goal was to enhance internally the mind set on the "*Accessible Medicine*" concept. For all the strategic objectives, XPTO Portugal defined 21 key measurements, align with the critical success factors in order to indicate how the company was standing in respect to the overall vision (Kaplan and Norton, 1992). All goals were presented in percentage points, in order to measure the goal achievement from the previous quarter of the year. The measurements and goals in the scorecard were also documented in a measurement document, which includes all performance measurements reported for year 2000. According to the information gathered in interviews, all three member of the Portuguese XPTO management team, first became acquainted with the BSC concept in June 1998, when the official internal scorecard development handbook was distributed company-wide. They then welcomed the new concept due to its logic and similarity to his way of managing the company. Moreover, the emphasis on both financial and non-financial assets made the tool even more attractive since the company had been focusing too much on financial cutbacks during the stringent economic measures in the 1990's (when for the first time in many year, the Portuguese government decided to cut down the price of reimbursed medicines) in order to assure product profitability in the existing products. The Country manager explained that the aspiration to shift focus was one important aspect when agreeing to be one of the first companies within the group to implement the BSC in 1999/2000. In addition to the strengths of the BSC, the Country manager highlighted that the weaknesses of the diffuse performance measurement system spread thru out the company, enabled him to accept and embrace the BSC implementation in Portugal. As former Sales & marketing manager, he claims that the traditional measurement systems were very resource demanding to use and required expert skills. The common understanding, at the beginning of the implementation process, was that the BSC was more applicable to the company's activity and more easy to use. As we concluded in interviews, every single manager of the company believed that they would

better control their own activities by setting their own goals and measurements. The consultants along with the local management team started designing a scorecard for XPTO Portugal, in late 1999, as described previously. The design of the scorecard provided a clarification of the company's vision. The management group decided upon a common vision for the company and thereafter each department annual report was used as a basis for designing perspectives and strategic objectives. The departments could then focus on measurements, goals and action plans instead of putting effort into strategic. After a BSC had been designed and formally approved by local management, in December 1999, the responsible for each department in the company were requested to present his budget for the next (and following year) in accordance to the BSC design. Due to the lack of resources, in the first year of the implementation, each department was free to deploy the scorecards throughout its organization. Thus, there were no directives concerning what level the scorecard should be taken down to.

The Country manager, against the advise from consultants, allowed the managers from each departments to have their own choice of deploying the scorecard model. However he required that the scorecard should be used as a budget and reporting model at the department level and that performance measurement, for the year 2000, should align with the BSC design. A prioritization of task was therefore suggested by the Country manager, in an internal memorandum, dated from December 20th, 1999. Another important aspect in change initiatives is to let the people in the organizations adapt to the changes and feel that the changes contribute to their situation in order to make changes effective (Beer and Eisenstat, 2000). At XPTO Portugal, the Country manager had an open and flexible attitude towards departments abilities to adapt to the usage of the BSC, the timing of the implementations and usage was of key importance. Although XPTO Portugal seems to have created conditions for an effective implementation of the BSC through an open attitude, recommendations, adaptation of terminology and time allocation, one may reflect upon the consequence of some "rush" in its introduction. As mentioned before, Kaplan and Norton (1996b) suggests that it takes about 25-26 months for a company to make the BSC a routine part of the management process. However, the time schedule depends very much on the organization's background, history and current situation. The need of changing the company strategy, in order assume a leading position in the Portuguese generic market, boosted the implementation and usage of the BSC, with all it's inherent frailty. When choosing to design and implement a BSC in a period of 7 to 8 months, as XPTO Portugal did, ones risks to have poor diffusion of the tool throughout the organization, deficiencies in communicating objectives (including terminology error)

and resistance to change.

The usage of BSC

By 2001, BSC had become a natural instrument in management and not only a new way of organizing managerial work at XPTO Portugal. As stated by the Country manager, in Portugal the BSC contributed to documenting managerial work in a structured way, which lead to orderliness in the management (*"I think the structure is similar to how most managers think in their managerial work. I mean... the wheel has not been reinvented. For some managers it is as if the wheel has been invented but I don't think so. It is well-structured and accessible"* – The Country manager).

As the company's financial controller referred in one of the interviews, the BSC was both used as an instrument in following up the departments' results as well as in the strategic planning process: (*"So, it's like a follow up instrument, but also a platform for discussing strategies."* financial controller). Other managers of the company, such as the regulatory manager, referred the BSC as a dynamic tool, which develops from a way of describing how to follow up and how to plan the activities within the departments. She believed that it takes time to develop the scorecard to become a way of controlling the activities at the department level (*"When you start with the BSC it becomes more like a description of the activities. But if you continuously work with it and become familiar with following up goals, measures and action plan every four months, it becomes more and more a controlling factor. Because the focus is then shifted to planning and follow-up from just watching and seeing what happens. It will take time before all the departments work this way."* regulatory manager).

But not only manager of the company share this opinion on the BSC. All the non manager employees interviewed express that they viewed the BSC as a tool that management of the company could draw benefits from in their strategic work. The interviews show that the commitment to the BSC did not varied much between departments. Almost every employee from sales department seemed more involved in the work and familiar with the concept. Whereas employees from the regulatory department were well used to the concept and committed to the work. The transfer of the BSC information into a Lotus Notes database, in yearly 2001, made this tools accessible (in different levels of authorization) to each and every employee in the company. With this IT development it was possible to access on-line information of the Portuguese BSC. This was important not only for the Portuguese employees of XPTO, that with a "click" could access the information on their KPI's and report their achievements, but also of particular interest to the top management in the Unites States, that could regularly monitor the measure the

performance of each subsidiary around the world. When the usage of the BSC became a routine in the daily activities, almost every interviewed employee of the company view the BSC as a directive from the management to receive information about the unit's annual activities and to measure their on individuals KPI's. However, some managers expressed that a continuous adaptation of goals, measures and action plans lead to frustration since the employees feel that they never become good enough as the goals continuously change. Thus the employees might lose their commitment to using the tool. In order to make people review their scorecards on a more continuous basis, since June 2001, all the departments had one hour per week during department meetings to spend on upgrading their scorecards. However, the interviews with the employees proved that this time was seldom used for that purpose. One of the departments used the action plans in the BSC during department meetings as a basis for reviewing the actions taken during the week. While the action plan was followed up every week, the measures were mainly reviewed once a year. Another department sometimes used their scorecard at departments meetings to check what actions they have planned to take during the year. However, using the scorecard during the meetings was not standard procedure.

Many of the employees that were interviewed also claimed that the scorecard contributed to an increased understanding of the work in the department. The scorecard was regarded as a tool, not only for management, but also for the employees to understand how they work and how they should plan their work during the year. Four of these employees clearly stated that the scorecard provided employees with a comprehensive overview of the work, allowing the prioritizing of the activities since one could see the balance between the initiatives and thus recognize if there was a need for more effort in some direction. Some employees also point out that the department scorecard may have functioned as a basis for discussions with colleagues within the department. And most importantly almost every employees revealed that BSC was perceived rather as a way of thinking in the day-to-day work than a paper including different elements. Although the employees do not explicitly work with the scorecard in their day-to-day work, there are similarities in thinking in both the day-to-day work and the annual planning in the scorecard, as mentioned by a Sales Representative (*"I think people reflect on it in their daily work, but don't call it a scorecard. During my daily activities I think of the goal with a certain activity and how we should achieve it."* sales representative). In addition, the scorecard was viewed as part of the day-to-day work as the scorecard represents the daily activities through the measurements.

Findings show that, in 2001 and 2002, the BSC was well diffused and disseminated through out the XPTO

Portugal organization. It was used for reporting results up-wards in the organization to the management of the department and in planning the annual activities. The BSC was also used as a basis for discussions within the departments. The contributions from the application of the BSC at the departments of the company was experienced as increased orderliness and understanding of the work at the department. According to Kaplan and Norton (1996) the benefits from the BSC are first and foremost referred to as effectiveness in managerial work. For instance, the BSC helps management to clarify and gain consensus about strategy, communicate strategy, and obtain feedback to learn about and improve strategy. In the case of XPTO Portugal, improvements in the company vision (*"Accessible Medicine"*) was one of the main purposes for the introduction of the BSC. However, the departments also seem to benefit from using the BSC although the BSC was expected to mostly improve managerial work in the management team.

One may also reflect on barriers to the use of the BSC at the department level. Findings indicate that the BSC has received less attention at sales department and marketing unit than in other administrative departments, such as regulatory or finance. This might have been linked on differences in work design and unit size, although we have no evidence to this conclusion. After 2001, with the new IT tool, all departments were obliged to report their results do the local management every quarter and in time for the annual balance sheet review. The measurements in the BSC were then updated for the current period in the Lotus Notes database. Although the departments had some knowledge of the expected reporting procedures, in that first year most departments did not report their measurements in time, which led to the management need to remind manager to fill in their BSC. At the same time as the annual reporting of results from the previous year, every department put together their BSC for the following year. The departments then define their objectives, measures and action plans. According to the Country manager, the BSC was a dynamic tool, which should continuously be changed and adapted to the organization's conditions. Therefore, the scorecard needed to be reviewed and changed gradually (*"The idea is that you should think of and reflect on [the BSC] and I don't believe it should be static. Thus I think it should change and develop as new things arise, otherwise it wouldn't be a BSC"* – The Country manager).

Although there are no requirements on the degree of deployment, what happened was that each manager of the company decided, with additional efforts, in late 1999, to taking the scorecard down to the unit level allowing each department to gradually getting used to the concept and becoming aware of its benefits. In interviews the researchers discovered that, differently from the management team, some employees received the news on the BSC implementation with great skepticism, partly due to its terminology. Terms like *"vision"* and *"customer"*

were somehow difficult to use in a established pharmaceutical company – the terms ‘results’ and ‘patient’ were more usable. Naturally that the difficulties in getting started with BSC depends on peoples focus on their own interests. According to the Country manager, single individual that do not want to be forced in a certain direction, characterize the small lobbies that are build within the pharmaceutical companies. He stated that the sales representatives, visiting doctors seem to have more difficulties in being involved in this project and make the expected changes. The fact that official document, related to the design and implementation of the BSC were translated into the Portuguese language also didn't help. All the non manager employees that were interviewed expressed that at first they thought the new concept was not easy to understand. Two interviewees expressed that the vocabulary and concept took a lot of effort to sort out (*“When we filled out our annual reports we had to reflect on what a process is and what is meant by customer and what is an employee. We had to think about the meaning of the concepts and what they meant to us.”* sales representative). One employee thought the new design was hard to relate to and adapt to, mainly on what the linkedge was concern (*“At first I thought it was a mess. I thought it was difficult to understand what it meant. Therefore it took some time to get a grip on it, but when we all had to used it a few times it became natural.”* logistic manager). Three employees that were interviewed also expressed that the initial information from the management was poor and only in the English language, which caused a barrier in terms of communication. The accounting assistant thought that it was mainly one-way communication, which did not create any deeper understanding to the company or its employees. He felt that the manager from he's department talked about the concept too often without explaining its implications. Another employee, a senior sales representative, thought that the lack of a clear training and explanation of the purpose of the new model led to frustration when filling in the BSC form, where he had to daily report his activities mapped against its respective objectives (*“Sometimes it has been so much that I have felt ‘No, not that again’, but it has been good. Now I feel I can manage some of it. It was quite trying for a while.”* A senior sales representative). One important factor that influences the effectiveness of change initiatives is the recognition of a need for. If people in the organization experience a tension to change, the change initiative is more likely to be successful than if people experience the current situation as satisfactory. In this work, as mentioned before, we've found a company using the traditional financial measurement systems, considered to be very resourceful demanding, in terms of required expert skills. Thus, there was, in fact, a need for change concerning the performance measurement system, which may have enabled the acceptance of the BSC at the company.

The abandon of the BSC

In 2002, after the Enron, WorldCom and Arthur Andersen events in the United States, like all listed companies, XPTO was compelled to adopt into its internal controller policies the Sarbanes-Oxley legislation. This imposition, extensive to all XPTO subsidiaries around the world (that included a full and detailed description of all company activities and processes) absorbed most of the financial and human resources allocated to the usage and keeping of the BSC, which by 2003, and in line with top management instruction, began to be of optional application, rather than mandatory, as before. These activities would serve later on to determine implementation of the necessary internal control measures, required by the legislation and by the audit company to issue a clean review of the XPTO consolidated financial statements, published in the United States (Keller, 2007). This clean review was mandatory if the company hoped to continue on being listed in the United States stock market exchange, without any penalties. As quote by the Country manager: *“we had to respect this, or else we would be out of business”*.

In XPTO Portugal, like in many other small countries, the business activities were profoundly affected by the Sarbanes-Oxley wave, in 2003. The implementation of Sarbanes-Oxley meant that every single activity of company would have to be described and documented. As concluded from interviews, time was a central factor in the involvement and participation in the BSC. All employees that were interviewed express that they do not have enough time to get involved in the scorecard as much as they would want. However, although management had allocated one hour per week to work with the BSC, this time is seldom used for that purpose. The motivation to work with the BSC, after 2003, seemed to be unclear among employees. Employees had to prioritize the day-to-day activities or the Sarbanes-Oxley tasks. This low motivation indicates that employees did not have enough incentives to use the BSC. This have led to a decrease in the organization's willingness to change, which would affect BSC use in the long run and also other concepts that may have been implemented with it. With the addition of these new set of tasks raising from the Sarbanes-Oxley application, the Country manager in Portugal, prioritizing resources, announced the suspension of the usage of the BSC in the summer of 2003. Although the Lotus Notes database was looked for new inputs (it remained open for consulting) the suspension was never an official abandon, in part because the Country manager of XPTO Portugal, always hoped to re-implement the BSC after the Sarbanes-Oxley wave.

Contrary to other countries, where the usage of the BSC was suspended and later re-implemented with a new strength and vitality, after 2003 the BSC was never again used in XPTO Portugal.

CONCLUSIONS

Findings from the case study show that the BSC in the company studied was used primarily in strategy, planning, reporting and follow-up activities. In addition, the BSC was used in discussions between employees, to disseminate information throughout and outside different department in the company, thus creating an orderliness and understanding of the annual activities and developmental activities. Comparing the use of the BSC with the purposes of its introduction in the company indicates that the BSC was used to fulfil its original purposes, thus laying part of the answer to our initial research question. The findings indicate that the BSC was used as a strategic management system that aimed to increase company management control - the BSC was also used as an information system from which managers receive measurable information about the operational activities that provide the basis for follow-up, planning and developmental activities. The use of the BSC at XPTO in Portugal was thus a dynamic process that involved all employee participation and adaptations to existing measurement systems, as well as discussions between people to create a common framework for interpreting measures and goals in the BSC. Findings show also that the studied company had potential for developing the BSC to become a full integrated strategic management system in the future. The abandon of the BSC followed by the introduction of an internal control tool, such as Sarbanes-Oxley, reveals the importance of the correct allocation of resources to the maintenance of the usage of the BSC, after its implementation. The lack of resources and the arrival of an endless and time consuming task led to the abandon of the BSC.

The major contribution of this study lies in the description of the BSC in its practical context. We still have limited knowledge on how the relatively new BSC works in practice; especially in a pharmaceutical company environment and in large-sized multinational companies as studied here. Because of the dominance of normative BSC studies in contemporary literature, managers might benefit from this empirically grounded studies that not only highlight the positive aspects of the BSC but also the shortcomings or critical areas. Accordingly, from a managerial perspective, the actual problems experienced when implementing and using the tool might be perceived as the most valuable information of this study. Similarly, the specific organizational factors that were identified as influential for the evolution process might help managers to avoid mistakes when implementing and maintaining the BSC.

Apart from three specific limitations, there is a significant limitation to this paper as a whole – by the time this study was realized the target company, XPTO Portugal, had cease to exist. In a worldwide merge with another pharmaceutical company, the activity, people, processes and values of XPTO were integrated in a

different cultural and business environment. Thus, this study performed in a retrospective perspective, might have been influenced by the absorption of the new company values, influencing peoples retrospective views over past events. Apart from this, the first specific limitation relates to the research process described in section 3. In order to give the reader additional foundations to evaluate the results from this investigation we would like to point out some critical aspects identified during the research process. As mentioned this study aimed to investigate the implementation of the BSC through a retrospective analysis of peoples' stories of the implementation, complemented by all the other documental evidence. During the interviews people were asked to remember their first contact with the BSC, which had occurred 7 to 8 year ago. There is always a problem in conducting retrospective analysis since people tend to reconstruct their memories in order to make them logical or suitable for themselves or to the researcher. This leads to an implicit risk that valuable information from the interviewee never reaches the investigator or that the researcher never receives the information of how events actually happened. Using a tape recorder during the interviews may also be identified as an obstacle in the research. In order to make the interviewee comfortable with the situation, we presented the purpose of the project and asked if the interviewee had any questions before introducing the tape recorder. In only 40% of the cases the usage of tape recorder was agreed to. Although there is a risk that the use of the tape recorder has made people withhold valuable information during the interviews the researchers experienced that people were open with their perceptions and thoughts. The reduction of the data in coding and analysis always leads to a loss of information. Even printing the taped interview and rewriting with the help of notes taken during the interview afterwards involves a loss of information. However, one could not neglect the fact that summarizing the interviews may have been a hindrance in the analysis of the information. During the analysis of the interviews no qualitative data program was used. Another critical aspect in the research is the fact that the findings from the interviews have been translated into English. This means that statements from the interviews presented in the work can be interpreted in a different way than if the statements were presented in interviewee's own language, Portuguese. Therefore, the reader should keep in mind that the findings are presented in a language different from the native language of the interviewees' when evaluating the results.

The second specific limitation of this work relates to time constrains when doing this research. Due to these constrains related to time and rules investigators were not able to fully explore the aspect of the abandon of the BSC in XPTO Portugal. This issue alone, by definition, might be the subject for another study. Finally the third specific limitation refers to access information provided

by the consultant. Access to this company that played a key role in the design and application of the BSC in XPTO Portugal, was very limited. Researchers were only able talk over the phone with one of the consultants, one single time and for a few minutes. The impossibility in accessing this information is a big limitation to this study.

In order minimize such limitations and to improve to the scope of this study, we generate new questions that may provide a foundation for future research. Investigators do not proposed any internal priority of the following suggestions since it largely depend on the researcher's background and personal interest. However, after conducted this case study we are especially interested in studying how the BSC, and maybe other management concepts, evolve over time and how researchers, society and practitioners influence and form these concepts. In addition, it may be interesting to further investigate the effects of using the BSC. This study focuses on peoples' interpretations of the benefits of the BSC. In order to complement this picture it may be interesting to investigate the relation between the economic development and/or customer satisfaction and the implementation of the BSC. Two other aspects that this study suggests as interesting topics for future research on the BSC are the organizational learning aspect of the BSC and, connected to that, its function as a strategic management tool. From a researcher's perspective, the usefulness of a BSC for learning processes would distinguish it from other contemporary management accounting tools. Therefore, future studies should investigate whether the BSC could really be useful in organizational learning processes and if so, of what kind these could be.

REFERENCES

- Ahn H (2001). "Applying the balanced scorecard concept: an experience report", *Long Range Planning*, 34(4): 441-461;
- Anthony R, Govindarajan V (2001), *Management control systems*. Boston, McGraw-Hill;
- Atkinson A, Balakrishnan R, Booth P, Cote J, Groot T, Malmi T, Roberts H, Uliana E, and Wu A (1997). "New directions in management accounting research", *J. Manag. Accounting Res.* 9: 79-108;
- Bayer J, Ashmos D, Osborn R (1997). "Contrasts in enacting TQM: mechanistic vs. organic ideology and implementation", *J. Quality Manag.* 2(1): 3-39;
- Beer M, Eisenstat R (2000). "The silent killer of strategy implementation and learning", *Sloan Management Review*, Summer, 29-40;
- Ceelman J (1998). *Building and Implementing a Balanced Scorecard*. Graphic Direct, Hampshire;
- Cooper R, Kaplan R (1992). "Activity-based systems: measuring the costs of resource usage", *Accounting Horizons*, 6(3): 1-13;
- DeGeuser F, Mooraj S, Oyon D (2009). Does the Balanced Scorecard add value? Empirical evidence on its effect on performance, *European Accounting Review* 18(1): 93-122.
- Denzin N, Lincoln Y (2001). *Introduction - the Discipline and Practice of Qualitative Research*. Handbook of Qualitative Research, New York, Sage Publications;
- Dick B (1990). *Convergent interviewing*, Brisbane: Interchange;
- Johnson H, Kaplan R (1987). *Relevance lost - the Rise and Fall of Management Accounting*. Boston: Harvard Business School Press;
- Kald M, Nilsson F (2000). "Performance measurement at nordic companies", *Eur. Manag. J.* 18(1): 113-127;
- Kanji G (1998). "Measurement of business excellence", *Total Quality Management*, Vol. 9, No. 7, October, 633-643;
- Kanji G (2003). "Performance measurement system", *Total Quality Manag.* 13(5): 715-728;
- Kanji G, Sá P (2001). "Kanji's business scorecard", *Total Quality Management*, 12(7): 898-905;
- Kanji G, Sá P (2002). "Kanji's business scorecard", *Total Quality Management*, 13(1): 13-27;
- Kaplan R, Klein N (1996). *Chemical bank: Implementing the Balanced Scorecard, Case Studies from Harvard Business School: Implementing the Balanced Scorecard*. Harvard Business School Publishing;
- Kaplan R, Norton D (1992). "The balanced scorecard - measures that drive performance", *Harvard Business Review*, 70(1): 71-79;
- Kaplan R, Norton D (1993). "Putting the balanced scorecard to work", *Harvard Business Review*, 71(5): 134-147;
- Kaplan R, Norton D (1996a). "Using the balanced scorecard", *Harvard Business Review*, 74(1): 75-85;
- Kaplan RS, Norton DP (1996b). *The Balanced Scorecard: translating strategy into action*. Boston, Harvard Business School Press.
- Kaplan R, Norton D (2000). "Having trouble with your strategy? Then map it", *Harvard Business Review*, 78(5): 167-176;
- Kaplan R, Norton D (2001a). "Transforming the balanced scorecard from performance measurement to strategic management: part I", *Accounting Horizons*, 15(1): 87-104;
- Kaplan R, Norton D (2001b). "Transforming the balanced scorecard from performance measurement to strategic management: part II", *Accounting Horizons*, 15(2): 147-160;
- Kaplan R, Norton D (2001c). *The Strategy-focused Organization*. Boston, Harvard Business School Press;
- Kaplan R, Norton D (2004). "Measuring the strategic readiness of intangible assets", *Harvard Business Review*, 82(2): 52-63;
- Kaplan R, Norton D (2005a). "The balanced scorecard: measures that drive performance", *Harvard Business Review*, 83(7/8): 172-180;
- Kaplan R, Norton D (2005b). "The office of strategy management", *Harvard Business Review*, 83(10): 72-80;
- Kaplan R, Norton D (2006a). "Building a strategy-focused organization", *Ivey Business Journal*, Vol. 65, No. 5, May/June, 12-20;
- Keller J (2007). "Best foot forward: SOX and financial standards", *University Business, Solutions for Higher Education Management*, July, 12-35;
- Kennerley M, Neely A (2002). "A framework of the factors affecting the evolution of performance measurement systems", *Inte. J. operations and prod. Manag.* 22(11): 1222-1245;
- Kraus K, Lind J (2010). The impact of the corporate balanced scorecard on corporate control - A research note, *Management Accounting Research* 21(4): 265-277.
- Lohman C, Fortuin L, Wouters M (2004). "Designing a performance measurement system: a case study", *European Journal of Operational Research*, 156(2): 267-286;
- Lyons B, Gumbus A (2004). "How Unilever HPC-NA sold its employees on the balanced scorecard", *Strategic Finance*, 85(10): 42-46;
- Malina M, Selto F (2001). "Communicating and controlling strategy: an empirical study of the effectiveness of the balanced scorecard", *J. Manag. Account. Res.* 13: 47-90;
- Malmi T (2001). "Balanced scorecards in Finnish companies: a research note", *Management Accounting Research*, 12(2): 207-220;
- Modell S (2005). "Triangulation between case study and survey methods in management accounting research: an assessment of validity implications", *Management Accounting Research*, 16(2): 231-254;
- Mooraj S, Oyon D, Hostettler D (1999). "The balanced scorecard: a necessary good or an unnecessary evil?", *Eur. Manag. J.* 17(5): 481-491;
- Norreklit H (2000). "The balance on the balanced scorecard - a critical analysis of some of its assumptions", *Management Accounting Research*, 11(1): 65-88;
- Nørreklit H (2003). "The balanced scorecard: what is the score? A rhetorical analysis of the balanced scorecard", *Accounting, Organizations and Society*, 28(6): 591-619;
- Nørreklit H, Mitchell F (2007). *The Balanced Scorecard*, In Hopper, T.,

- D. Northcott e D.Scapens (Eds.), *Issues in Management Accounting*, 3rd Edition, Harlow: Prentice Hall, 175-198.
- Olson E, Slater S (2002). "The balanced scorecard, competitive strategy, and performance", *Business Horizons*, 45(3): 11-17;
- Olve N, Petri J, Roy S (2003). *Making Scorecards Actionable*. Stockholm, Wiley.
- Olve N, Petri C, Roy J, Roy S (2004). "Twelve years later: understanding and realizing the value of balanced scorecards", *Ivey Bus. J.* 68(5): 1-7;
- Papalexandris A, Ioannou G, Prastacos G (2004). "Implementing the balanced scorecard in Greece: a software firm's experience", *Long Range Planning*, 37(4): 351-366;
- Papalexandris A, Ioannou G, Prastacos G, Soderquist K (2005). "An integrated methodology for putting the balanced scorecard into action", *Eur. Manag. J.* 23(2): 214-227;
- Pettigrew A, Whipp R (1991). *Managing change for competitive success*. Cambridge, Blackwell;
- Pforsich H (2005). "Does your scorecard need a workshop?", *Strategic Finance*, 86(8): 31-35;
- Pimentel L, Major MJ (2009). *Management Accounting Change: A Case Study of Balanced Scorecard Implementation in a Portuguese Service Company*, *Portuguese J. Account. Manag.* (8): 89-109.
- Pineno C, Cristine C (2003). "The balanced scorecard: a vision report card", *Management Accounting Quarterly*, 4(4): 28-40;
- Radnor Z, Lovell B (2003). "Success factors for implementation of the balanced scorecard in a NHS multi-agency setting", *Inte. J. Health Care Quality Assurance*, (16/2): 99-108.
- Richardson S (2004), "The key elements of Balanced Scorecard success", *Ivey Bus. J.* 69(2): 7-9.
- Roberts M, Albright T, Hibbets A (2004). "Debiasing balanced scorecard evaluations", *Behavioral Research in Accounting*, 16: 75-88;
- Ryan B, Scapens R, Theobald M (2002). *Research method and methodology in finance and accounting*. London: Thomson;
- Sioncke G (2005). "Implementation of a balanced scorecard in a care home for the elderly: Useful or not?", *Total Quality Management*, 16(8/9): 1023-1029;
- Smith M, Smith D (2007). "Implementing strategically aligned performance measurement in small firms", *Inte. J. Prod. Econ.* 106(2): 393-408;
- Speckbacher G, Bischof J, Pfeiffer E (2003). "A descriptive analysis on the implementation of Balanced Scorecards in German-speaking countries", *Management Accounting Research*, 14(3): 361-387;
- Stake R (1994), *Case studies*. New York, Sage Publications;
- Sundin H, Granlund M, Brown DA (2010). Balancing multiple competing objectives with a Balanced Scorecard, *European Accounting Review* 19(2): 203-246.
- Thompson A, Strickland A (2001). *Strategic management: Concepts and cases*. Boston: McGraw-Hill.
- Venkatraman G, Gering M (2000). "The balanced scorecard", *Ivey Bus. J.* 64(3): 10-14;
- Voelpel S, Leibold M, Mahmoud K (2004). "The organizational fitness navigator: enabling and measuring organizational fitness for rapid change", *J. Change Manag.* 4(2): 123-140;
- Yin RK (2009). *Case study research: design and methods*. 4th Edition, Thousand Oaks, CA: Sage Publications.