

# **The Importance of Management Control in Monitoring the Pharmaceutical Industry Performance for Competitive Advantage**

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## **ABSTRACT**

*Management control and thus managerial accounting will adapt to the requirements of market economy in terms of knowledge. Another thought other action. The sustainability of a business depends on how we use resources but also can correct measurement of performance of a project or activity. The distinction between 'traditional' and 'innovative' management accounting practices can be illustrated by reference to cost control techniques. Traditionally, management accountants' principal technique was variance analysis, which is a systematic approach to the comparison of the actual (real costs) and budgeted costs of the raw materials and labor used during a production period. In this paper we wanted to show that the new management control procedures are part of knowledge management. Today is important for pharmaceutical companies to produce new products of advanced research results. This means that, for large companies, research expenditure budget is generous. More projects need to be monitored, evaluated and presented to the Board of Directors. What indicators will be kept for financial analysis? How prospective financial situation will look in five years? What will be the level of risk accepted by investors?*

**KEYWORDS:** *competitive advantage, management control, performance measurement, sustainability*

**JEL CLASSIFICATION:** *M11, M41*

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## **INTRODUCTION**

In this study the attention will be directed to control exerted by the management, shortly management control. The type and level of management control can be considered to be a resultant of organizational flexibility and control capacity. In most business organizations, accounting personnel is the largest staff unit, consisting of two groups: bookkeepers and accountants. Bookkeepers are clerical employees who maintain detailed operating records in warehouses and production departments. Accountants analyze and report data, design and operate the system of information and ensure that information is accurate. A management accountant is rather concerned with the actual cost of raw materials per unit of

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finished product, information that is use by management for the control of costs and for making decisions regarding quantities to be produced and product mix. Management accountants are rather assigned to production departments, while the financial accountants work in the central accounting department. In small businesses it is often the case that these roles are undertaken by the same person.

The American Accounting Association defined accounting in 1966 as: the process of identifying, measuring and communicating economic information to permit informed judgments and decisions by users of the information.

On one hand, (Anthony and Govindarajan, 2007) that management control is the process through which managers use their power to influence other members of the organization to implement strategies, to realize goals and objectives and, on the other hand, it integrates facts on long, medium and short terms, having well determined implications in human factors, objectives and assignments. This is an important definition because: it recognizes that accounting is a process: that process is concerned with capturing business events, recording their financial effect, summarizing and reporting the result of those effects, and interpreting those results; it is concerned with economic information: while this is predominantly financial, it also allows for non-financial information; its purpose is to support informed judgments and decisions: this emphasizes the decision usefulness of accounting information and the broad spectrum of users of that information.

Managers of pharmaceutical industry need financial and non-financial information to develop and implement strategy by planning for the future (budgeting); making decisions about products, services, prices and what costs to incur (decision-making using cost information); and ensuring that plans are put into action and are achieved (control). This function is called management accounting.

In time, developments and innovations appeared. Organizations confronted with automation of production processes and technological evolution developed new and complex cost and management systems. The decline of manufacturing and rise of service industries led to the need for “accurate knowledge of product costs, excellent cost control and coherent performance measurement” (Cooper and Kaplan, 1989). And the challenge of today’s competitive environment is to develop efficient and effective management and cost systems which also allows to measure performances and provides timely and accurate information to facilitate efforts to control costs, to measure and improve productivity, and to devise improved production processes.

In this way, management accounting is now implicated with (Collier, 2003): value-based management, non-financial performance measurement systems, quality management approaches, activity-based costing and management and strategic management accounting in order to help managers to increase the value of the business.

## **1. WHAT IS THE IMPORTANCE OF MANAGEMENT CONTROL IN MONITORING THE PHARMACEUTICAL INDUSTRY?**

Managerial accounting is an integral part of management which provides information that is used by management to formulate strategies, plan, coordinate and control the activity, make decisions, optimize the use of resources and safeguard assets. For example, by reporting variances from planned costs, managerial accounting enables managers to control costs and take corrective action. (Dutescu and Olimid, 2004)

**Management controls in pharmaceutical industry** are the organization, policies, and procedures used by agencies to reasonably ensure that: 1) programs achieve their intended results; 2) resources are used consistent with agency mission; 3) programs and resources are protected from waste, fraud, and mismanagement; 4) laws and regulations are followed; and 5) reliable and timely information is obtained, maintained, reported and used for decision making.

Management controls, in pharmaceutical **industry**, include the plan of organization, methods and procedures adopted by management to ensure that its goals are met. Management controls include processes for planning, organizing, directing, and controlling program operations. A subset of management controls are the internal controls used to assure that there is prevention or timely detection of unauthorized acquisition, use, or disposition of the entity's assets. In management practice, control is often defined with a narrow scope, including monitoring and correcting (often in financial terms: budget control). However, the systems theory of control originates from a much broader paradigm as: "any way of goal-directed influence" (Kerremans, Theunisse, at al., 1991). In this broad concept, control can be conducted by different actors and agencies, such as an outside agency, the management or an information system.

**Management Control in pharmaceutical industry** has not to be seen as an activity of the administration area's exclusive competence, but rather as a process which involves, at the appropriate levels of responsibilities, all the company's functions. As with all processes, **management control** is constituted by different elements, connected to each other: *the structure* (personnel charged of the duty of control), *the tools* (general accounting, analytical accounting, budgeting, reporting, and income statement analysis) and *the procedures* (coordination, optimization).

**Organizational flexibility in pharmaceutical industry** refers to the ability of the organization to adapt to changing situations, reflected, for instance, in the level of rigidity of the administrative rules. It ranges from operational, via structural to strategic flexibility.

**Operational flexibility in pharmaceutical industry** refers to the ability of the organization to make routine adaptations to changes in the environment; structural flexibility to adaptive changes; whereas strategic flexibility refers to non-routine proactive changes of the organization and the environment. The extremes are roughly comparable to a mechanistic versus an organic organization, or a bureaucratic versus a normative culture. The control capacity refers to the quality and competence of the research management to achieve adaptations given the level of organizational flexibility. A highly competent research management may reach a high adaptation level, even if the organization is relatively inflexible, whereas a less competent research management may fail, even if the organization as a whole is highly flexible. In this study, „subjective” views and judgments of the research management regarding organizational flexibility and control capacity has been combined with „objective” measures regarding the innovative process, such as the number of incentives and the frequency of project team meetings.

The **Management Control** acts through the following phases in sequence (Johnson and Kaplan, 1987): **1) planning**, where for any company's unit a set of objectives must be defined, that is of specific expected results, which need to be: understandable, agreed, measurable in extent and time, reachable, consistent with one another and with the available resources, **2) programming**, where a program is drawn up in order to get the planned objectives, taking into account the internal and external restraints to the company,

3) **result checking**, where it is measured whether each company's unit has achieved or not the assigned objectives, 4) **shifting analysis**, where the possible shifting between objectives and results is analyzed and 5) **corrective action implementation**, in order to optimize the units behavior against the planned objectives.

To realize a project of **management control** it is necessary to carefully evaluate the reference context where it is intended to be applied and in particular: *the diffusion of the management control culture into the company and the availability of appropriate computer and accounting systems*. We have three basic types of control: **feed forward control** (Prevents "anticipated" problems, built in at the start or before), **concurrent control** (occurs while activity in progress, ensures standards being met; correct before they become too costly, often built into new technology), **feedback control** (control after action has occurred, good feedback on effectiveness of planning, most popular).

## 2. HOW CAN WE MEASURE THE PERFORMANCE OF A PROJECT OR AN ACTIVITY IN PHARMACEUTICAL INDUSTRY?

The application of standard-cost method in pharmaceutical industry has advantages such as rationalization of calculation work because the unitary standard cost determined with anticipation is counted as a real cost and one doesn't have to calculate anymore the actual cost of the end production and of the production on the stock at the end of each management time. The variations are considered as variations from the normal and they are put on the account of the financial results of the enterprise. The end production and the production on the stock may be discounted at the standard cost (Sgardea, 2009).

The standard-cost method is a modern and efficient method for pharmaceutical industry. This method offers undeniable advantages in what concerns the operative study and analysis of the production efficiency, being thus able to accomplish an important function in the leadership of the modern enterprise: it is an investigation and previsional tool and it represents a precious mean when you have to make a decision.

The standard-cost method makes part of the category of methods of previsional calculation and of efficient of the production process which allows the establishment of the production costs with anticipation regarding the beginning of the production process and the achievement of the budgetary control of the costs through the determination of the divergence between the real and pre-set costs taking into account the divergences and their causes in the same time with the development of the production process.

According to the concept of this method, the production costs must be calculated with anticipation and one must use pre-set measures. In the same time with the development of the production process, the operative follow-up of expenses is organized as through a comparison with standard costs in order to establish the divergences regarding the expenses and their causes so that the budgetary control of the cost should be accomplished.

In the original conception of the standard-cost method, one doesn't need to calculate the effective cost because the standard cost is considered both scientific and real cost. This is the reason why any divergence of the efficient costs from the standard ones is considered as a divergence from the normality and must be put on the account of financial results. However, one may calculate the actual cost of the production obtained. This is made through the addition or, according to the case, the diminution from the standard cost of the deviations taken from the bookkeeping which will be followed not only by taking into consideration the types of expenses and their causes, but also the products.

The function of the *indicators* is then that of representing complex phenomena on the basis of synthetic measurements; they are parameters expressed by simple algorithms where measurable variables are put in relation to one another. The *indicators* must, therefore, satisfy the following essential requirements (Kaplan and Norton, 1992): 1) the *measurability* of the phenomenon in terms of the existing correlation among the variables that determine the phenomenon itself; 2) the *completeness* and *timeliness* of the information in terms of possibility of monitoring the phenomenon itself in a complete way, according to required frequency; 3) the *essentiality* of the datum, in terms of capability of catching the essential features of the observed phenomenon; 4) the *inexpensiveness* of the elaboration in terms of *cost/benefit*, that is the costs sustained for the elaboration of the indicator and the added value obtainable by its knowledge. Finally the *indicators* can be: *efficacy* related, when they are expressible as a relationship between the obtained result and the expected target and *efficiency* related, when they are expressible as a relationship between the obtained result and the resources spent to obtain it.

Management control is divided into **system, process and external** control (Omta et al., 1995). **System control** refers to the control over the personnel and material resources of the double unity cell. It is divided into personnel and resources control.

Personnel control refers to the 'objective' quality of the reward system (organizational flexibility: number of (material and immaterial) incentives, career policy etc.) on the one hand, and the competence of the top management to react on changing situations (control capacity: e.g. pace and manner of conducting reorganizations). The challenge of technology management is to create the conditions conducive to meet the corporate goals of scientific performance (system-technical performance) as well as the scientists need for satisfaction and motivation (socio-technical performance).

Resources control refers to the level of control over the resources in the double unity cells. It is assessed by the subjective assessment of the adequacy of personnel and material resources, the laboratory equipment, devices and space. For obvious reasons the assessment of adequacy is expected to associate with the 'objective' size of the research budget.

### 3. HOW TO MONITOR RISK IN PHARMACEUTICALS CORPORATIONS?

Every entity faces a variety of risks from external and internal sources that must be assessed. A precondition to risk assessment is establishment of objectives, linked at different levels and internally consistent. Risk assessment is the identification and analysis of relevant risks to achievement of the objectives, forming a basis for determining how the risks should be managed. Because economic, industry, regulatory and operating conditions will continue to change, mechanisms are needed to identify and deal with the special risks associated with change.

For R&D companies, this will mean registering all clinical and human trials in a central location, as well as voluntarily disclosing all relevant information. This could possibly include compulsory reporting—directly by researchers—of all data to a third party. On the commercialization side, direct marketing would be redefined as comparative data became common and readily available.

Should executives fight growing pressure for increased transparency? Before answering, consider the fate of the asbestos and tobacco industries. By taking action now, companies will have a greater say in how the industry achieves full transparency. Better to define your

own future than have someone else do it for you. Companies that embrace information transparency will benefit from renewed public trust, fewer and smaller settlement payouts, improved P/E ratios, and lower costs of capital. Transparency also means that society will begin to share the risks inherent in the pharmaceutical business. Ultimately, as pharmaceutical companies give to society, society will balance its need for innovation against the risks involved in new drug therapies.

For the future we are not so bold as to believe that this vision of the future is either completely accurate or will be passionately embraced by the industry. Debate and spirited discussion should occur. The important point is that companies, and the industry as a whole, begin to design and prepare for a new environment. Companies must prepare for these changes today to ensure that they can use the upcoming shifts to their advantage. The following steps are offered as a guide (O'Meara and Ryan, 2011):

➤ **Review competitive positioning.** Is our company stronger in research and development or manufacturing and marketing? Rethink your strategic goals and choose a business model that best supports them.

➤ **Adopt new financial tools.** Assess the feasibility, costs and benefits associated with various financial tools and then understand the implications that each alternative brings.

➤ **Plan for information transparency.** At the most basic level, companies must identify and mitigate the risks inherent in sharing information. Recent examples of personal data threats in consumer finance and retail banking offer good lessons about the difficulty of maintaining data integrity. By working with public advocacy and legal groups you can help shape data transparency.

➤ **Encourage patients to become active partners in their health care.** Patients are becoming increasingly active partners in their health care decisions. Companies can facilitate this trend through better consumer education and by stressing the importance of two-way communication. Also, all marketing strategies should reinforce this partnership message.

➤ Ultimately, it is up to all pharmaceutical companies **to begin managing their challenges to emerge as part of a better**, more productive and stronger industry. The future will depend on confronting each challenge and on a new mindset—it's time to think beyond the next blockbuster.

#### **4. THE IMPACT OF MANAGEMENT CONTROL ON STRATEGY AND PERFORMANCES**

To maintain a competitive position a company must generate the information necessary to define and implement its organizational strategies. Strategy is the link between an organization's goals and objectives and the operational activities executed by the organization. In the current global market, firms must be certain that such a linkage exists.

Strategy can be defined as: the art of creating value. It provides the intellectual frameworks, conceptual models, and governing ideas that allow a company's managers to identify opportunities for bringing value to customers and for delivering value at a profit. In this respect, strategy is the way a company defines its business and links together the only two resources that really matter in today's economy: knowledge and relationships or an organization's competencies and its customers. The accomplishment of a strategy reclaims taking in consideration the different management horizons: First is the strategic horizon – settles the goals and objectives on long term, 5-10 years, and as a result of these elaborates

strategic plans. Second is budgetary horizon – translates into practice the established goals and objectives on medium term using budgets and operational plans. And the end is operational horizon – elaborates, applies, pursues and analyses action plans.

Management control acts within each horizon using specific instrument on every level and the controlling process is bounded to the decision making process. The Management Control Systems (MCS) enables managers to perform strategic analyses on issues such as determining core competencies and organizational constraints from a cost-benefit perspective and assessing the positive and negative financial and non-financial factors of strategic and operational plans.

Within organizations performance measurement has been and still is dominated by management control systems that are focused on control and then improvement. Performance measurement goes beyond the boundaries of traditional management accounting and could be achieved by accountants having a better understanding of the operational activities of the business and building this understanding into control systems design; connecting control systems with business strategy, which has to some extent been addressed by the proponents of strategic management accounting (see below); and focusing on the external environment within which the business operates, through a value-chain based approach.

## **CONCLUSIONS**

Traditional cost and measurement systems in pharmaceutical industry have sprung from the finance function and focus on control. These systems specify the particular actions they want employees to take and then measure to see whether the employees have in fact taken those actions. In that way, the systems try to control behavior. New and complex cost and performance measurement systems, on the other hand, put strategy and visions to the centre. Financial and non-financial measures must be part of these systems for employees at all levels of the organization. Front-line employees must understand the financial consequences of their decisions and actions; senior executives must understand the drivers of long-term financial success. These systems are more than a collection of quantitative and qualitative measures; they represent a process driven by the mission and strategy of the business units.

Facing the intensive competitive pressure and environment, knowing the managerial needs regarding costs, strategies and performances each company needs to consider what cost and management system and performance measurement system contributes to their unique needs. These systems must help organizations to improve and achieve quality costs and quality management, to develop cost systems and evaluate managerial efforts that accurately measures costs, profitability and performances. In management control systems accounting information provides a window through which the real activities of the organization may be monitored.

An organization's strategy must be appropriate for its resources, circumstances, and objectives. The process involves matching the company's strategic advantages to the business environment the organization faces. One objective of an overall corporate strategy is to put the organization into a position to carry out its mission effectively and efficiently. A good corporate strategy should integrate an organization's goals, policies, and action sequences (tactics) into a cohesive whole, and must be based on business realities. The performance measurement systems, on the other hand, should encourage managers to act in

the best interest of the organization and its subunits and to support organizational missions and competitive strategies.

In the end we can say that management control is a core business function and exists as a separate, well established discipline within the management field. The extension of this discipline to business ethics and its partial merging with legal risk management has been one of the more important developments in international business of the last two decades.

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