# SMALL FIRMS MANAGEMENT: USE OF ACCOUNTING INFORMATION FOR MANAGERIAL PURPOSES

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#### **ABSTRACT**

This paper deals with some aspects of the use of accounting systems in the context of small firms. Some relevant topics from the theoretical background are discussed synthetically. Afterwards we present some results of a survey with a group of small companies from Southern Brazil. We concluded that these companies use accounting information for managerial purposes, but with some limitations. One of these limitations is the low level of their management team.

## 1. INTRODUCTION

Over the last twenty years, more specifically throughout the 90s, the growth of global competitiveness and the introduction of Brazil in the globalization process have significantly increased the dynamism of our economy and the exposure of our companies to foreign competition, compelling them to assume a commitment with so-called business excellence. In this context, Brazilian companies are being forced to adapt and to review their competitive strategies and management models.

In the same fashion, the growing turbulence of the scenario has led companies to invest in the development and use of information, which is applied in the form of tools to support control and decision-making processes.

Thus this work is developed with a basis on the theory allied to the empirical observation of the use of accounting as a source of information and a useful tool for the decision-making and control process of small companies, which will henceforth be described as SC's. As regards the chosen companies, the justification becomes relevant as they play a considerably representative role in the economic and social panorama of the country, as you will see in this article.

With a basis on the survey developed by IBGE (Brazilian Institute of Geography and Statistics) in 1994 (last economic census – published in 1998), referring to the Brazilian Corporate Productive Structure, it is possible to certify that, according to the criterion of size based on the number of employees, 99.33% of industrial establishments, 99.68% of commercial establishments and 98.67% of service providers were micro, small and medium-sized companies. Of this distribution, 11.11% from industry, 6.04% from trade and 10.25% from the service sector were represented by those classified as small.

The three grouped sectors demonstrate that as a whole the companies classified as micro, small and medium represent 99.63% of the total amount of industrial, trade and service providing companies from Brazil. And those considered small (from 20 to 99 employees) represent 8.06%.

Furthermore, this census also shows that this group of companies (micro, small and medium) accounts for 54.87% of commercial sales, 38.91% of industrial production, 35.86% of the income from services rendered and 58.49% of the national workforce. In the same order, the small companies alone account for 22.30%, 10.30%, 14.06% and 20%, respectively.

In the Brazilian context, this group of companies, according to SEBRAE (1997:34), represents 4.0 million installed establishments, 48% of the national production, 60% of total job offers and 42% of salaries paid. They also contributed with 21% of the gross domestic product.

Based on these figures we can also affirm that there is a certain census related to the real importance of smaller companies in the economic and social development of the country.

This economic and social importance of small and medium companies is not limited to developing countries like Brazil. Authors such as Resnik (1991), Iida (1986), Baty (1994) and Schell (1995) have pondered in a convergent manner that regardless of the level of industrialization or development, small and medium-sized companies are of vital importance in the evolution of society, contributing from the economic, social and even political viewpoint of nations.

According to the authors mentioned above, various people believe that historical experience has shown that this group of companies is proving essential and indispensable for developed or developing economies. As a result, they have become one of the main pillars of economic development in modern industrialized nations.

## 2. THE PROBLEM

Nowadays with technological development the growth of organizations and the complexity of the economic scenario can be verified by a certain difficulty in understanding and managing business at SC's. The natural consequence of this process is the increasing need for information that help managers during decision-making and in their organizational controls.

Accounting as an information system is characterized as recording all the transactions occurring in organizations.

constituting a large "database". Its data is useful for management, besides representing an effective management toll for the decision and controller process. The differentiation – between the meaning of data and information – is portrayed by the definitions presented by Matarazzo (1998:18), which define these terms as follows: "Data consists of figures or descriptions of objects or events that on their own do not provoke any kind of reaction in the user. For receiving parties, information represents a communication that can produce a reaction or decision, frequently accompanied by a surprise effect".

With a basis on the literature studied, it can be perceived that in most organizations, principally due to the fiscal influence, the accounting information undergoes relevant distortions. The managerial aspects of legal financial statements are difficult to understand. The image (principally in SC's) of something that exists only to comply with fiscal requirements can be perceived, thus relegating the satisfaction of business management needs in second place.

Firstly, those with a knowledge of accounting and business managers should face the challenge of reverting this situation, since accounting, viewed as a system in an organizational environment, can contribute extensively to the management corps of organizations.

In order to play its role as a source of useful information for the decision-making process, accounting should involve managerial fundamental characteristics, such as: being useful, timely, clear, intrinsic, relevant, flexible, complete and predictable (provide trend indicators), besides being business management oriented.

Thus when defining the problem that orients this article we seek to explain it, considering that it will discuss the use of accounting as an Information System applied to the management of SC's. In addition, the methodological orientation was founded on the verification of whether, and if affirmative, how, the management of small companies makes use of information provided systemically by accounting as a decision-making tool.

The main objective of the work was therefore to identify whether and how small companies, through those in charge of their management, employ information furnished by the Accounting Information System in the management of administrative processes.

Secondly, we sought to verify:

- 1) The degree of use of information extracted from accounting, in order to conclude on the intensity of this use;
- 2) The predominant management style at these companies and whether it, in turn, influences the degree of usage of information generated by accounting as a decision-making tool.

#### 3. DEVELOPMENT

# 3.1. THE ACCOUNTING INFORMATION SYSTEM AND ORGANIZATIONS

One of the aims of accounting is to provide information on the mutations suffered by company's assets. Besides generating information, accounting also permits them to explain the equity phenomena, to construct projection models, conduct analyses and control, as well as serving for budgetary monitoring among other functions.

With respect to the systemic vision applied to accounting, inserting it in a system situation, Kroetz et. al. (1999) says that: "Everyone is aware of the similarity existing between a company and a live organism. In this organism we can distinguish a brain, which deals with decisions, the limbs in charge of action, the nervous system that transmits commands from the brain to the limbs and the Information of the senses to the brain ".

Starting from this organizational focus, by analogy one can view accounting as a nervous system, which serves as a link between and among management and the performance areas and vice-versa. Actually, the parts are interdependent, as they are all intentionally connected to maintain the organism functioning.

Thus it is not sufficient to have a good nervous system if the brain does not respond to stimuli or vice-versa, i.e., the company organism, in order to function, depends on a good management assisted by accounting as a source of useful information for decision-making and control processes; with an emphasis on managers' need to use the information produced by the Accounting Information System.

Applied accounting, in practice, can be understood as a subsystem within an organizational system (company system). This, in turn, is part of a larger system – the environmental system.

The management of companies, in view of the contingencies of life in society, has changed lately, both in size and in complexity, making accounting increasingly essential.

The existence of accounting stems from the need to know and control equity components and variations. Whenever equity activities suffer variations generated by human work, developed on the elements that form it, we are in the presence of an economic organization.

Besides equity and the human work developed with a basis thereon, there is also the administrative system that coordinates work and equity components, both directed at equity.

Therefore accounting is a management component, focused mainly on providing information for the decision-making process and even for the formulation of strategies.

# 3.2. THE APPLICABILITY OF ACCOUNTING INFORMATION IN THE MAIN MANAGERIAL PROCESSES OF SMALL COMPANIES.

Every company, regardless of its size, is within a social, corporate and economic scenario (Oliveira, 1997:25), where which it should be fully adapted to play its role effectively, whether by satisfying the needs of its customers or by generating resources that remunerate the capital invested by the owner.

Thus to play its role, the company must seek, through its managers, to attain success with a basis on its plans and objectives and the efficient administration of its resources; employing the tools considered essential for management, with an emphasis on the current importance of information (Kaplan, 1996:3).

Resnik (1991:3) refers to the theme related to the management of small companies with clarity, by outlining a comparison between the success and failure of this type of company and the actions deployed and decisions made by management.

As a foundation for his ideas, this author refers to the result of a survey conducted in the United States by Dun & Bradstreet. The survey indicated that in small companies poor management accounts for more than 90% of the failures, and that approximately half of these failures are attributed to incompetence while the other half is due to inadequate prior experience.

The art of managing – the capacity to efficiently understand, run and control small companies in view of Resnik's statements corroborated by authors such as Schell (1995) and Pereira Jr. (1995) – is the preponderant factor for their maintenance in the group of companies that attained success, within the scenario in which it is inserted, playing their role and reaching planned objectives.

As regards small companies, the problem consists of deficient controls and a lack of useful information for decision-making. Thus accounting is a tool that when used correctly, will furnish management with this basic requirement.

The accounting function can be viewed as a financial management tool at SC's. On this theme Resnik (1991:136) states that the lack of an efficient accounting system is not only an accounting issue but a management problem with a negative affect on the entire organization.

With a basis on the information drawn up, prepared and provided by accounting, the company management – through techniques such as the analysis and interpretation of balance sheets, audits, cost accounting and controlling – can make decisions about investments, loans, the payment of obligations, the time for substitution of obsolete assets (such as machines, for example), the ideal inventory level, and others (Iudícibus, et. al., 1998:26).

It is worth mention that with respect to the company, financial managers are concerned with maintaining its solvency and maximizing its affluence, commencing with the information originating from accounting. This affirmation is founded on the outlook of Baty (1994:130), in which he demonstrates the importance of accounting in the management of small companies in a summarized fashion by describing: "(...) it is more than a function; it is a language, a means of communication among the various segments of the financial community".

These concepts regarding accounting and management in relation to SC's are not usually verified in practice. What must be criticized above all is the limited use of accounting and financial area objectives. Accounting has been viewed as a tool for the sole need of meeting a series of legal and bureaucratic demands, and not as a decision-making and control support tool for managers. Resnik (1991:137-138) demonstrates the view of some owners and managers of small companies that consider data and the accounting function as "a necessary evil". This is because they are content to see only the sales and net income figures.

We must stress that accounting does not exist merely to comply with legal obligations. Further to this function, which does in fact exist, accounting is also important for the managerial orientation of administrators, constituting what various authors call management accounting.

# **Inventory Control**

Some companies, especially those from the industrial sector, believe that inventories represent an important part of the working capital. A correct stocking policy has a direct effect on the efficiency of a company's production and sales flows, besides having a normally significant impact on business profitability.

Controlling and administering this asset means a rapid inventory turnover to minimize the respective costs and to maintain it at a sufficient level to satisfy the company's needs. This will evidently generate amounts receivable originating from the sales resulting from its increased turnover.

In other words companies need to determine an optimum inventory level to achieve these objectives, which is not always an easy task. The inventory levels interest different areas such as marketing, finance, production, sales and purchases, and these areas have different viewpoints regarding the "optimum" inventory level.

Therefore it is necessary to control and manage inventories. For this purpose, the SC manager can employ some tools which are in fact utilized by large companies also. Two of these tools are the ABC System and the Economic Purchase Batch Model (EPB).

The ABC system prioritizes inventory items, segregating them as A, B and C items. Those classified as A imply a larger investment, followed by B and C items in this order. The latter require the smallest investment.

The advantage of this system lies in the fact that the company can determine different inventory levels and controls for A, B and C items. In other words, A items, which represent a larger investment and generally a slower turnover, should be provided in a minimum amount and receive a rigid control. B items imply a normal level of quantity and control, while C items can be more numerous and demand a less intensive control.

The Economic Purchase Batch model allows companies to determine an optimum purchase order quantity for an item from stock in order to minimize the total storage costs (this is why it is called Economic Batch).

Within this model graphic and mathematical approaches (formulas) are utilized with variables such as the cost of maintaining the inventory, demand for the item, the ordering cost, order quantity and total cost.

Utilizing these and other more sophisticated tools, SC's can satisfactorily administer and control their inventories to avoid unnecessary costs.

## Financial Economic Planning

Another basic management tool, which in view of the SC characteristics already described is not employed to its full potential, is planning.

Thus given its characteristics, we can affirm that most SC's do not perform short or long-term planning. They do not plan, among other aspects, sales, production, inventories, purchases, labor, expenses, revenue, costs, income, raw materials, facilities, cash or the company's strategic position in the market.

In this manner these companies are always trying to solve problems when they appear, instead of seeking to anticipate and avoid them, which consequently leads them to assume a merely reactive instead of a proactive posture, not anticipating facts. In fact, they do not establish goals and strategies to attain the desired situations.

From a financial viewpoint, the majority of SC's does not conduct budget forecasts that would permit them to surmise future scenarios, striving to prepare for their possible implications. There are various budget models that can be utilized and executed by SC managers. Simple tools such as cash flows, for example, can provide useful in the preparation of cash budgets, while planning these flows signifies forecasting future inputs and outputs of money over a given period.

Resnik (1991:5-6) enumerates the ten decisive conditions for the success and survival of SC's, and discusses the need to maintain the accounting records and controls necessary for their management, enabling them to plan their future consubstantiated on information.

As planning is one of the ten conditions listed by Resnik (1991), it is worth emphasizing that the SC's that utilize this tool create an important differential in comparison to the others as regards the management of their problems and survival in the market.

#### Cost Control and Management

To glean an idea of the importance and necessity of accounting in its full management extension we have cost accounting, which permits us to classify and control costs, form asking prices and verify how much each product contributes towards the company's income.

With a basis on the characteristics attributed to SC's, and among these those that relate to the lack of control and information, we have empirically observed that the managers of the large majority of SC's complain about costs, a lack of control over them, the difficulty establishing the sale price of products and a lack of knowledge in relation to the contribution of these products to total income. In this manner small entrepreneurs have another important tool, i.e., cost accounting and analysis.

As an example of cost we can mention expenditures at the plant in the case of industry such as: raw material, wear and tear of machinery, labor, plant rental, etc. If the company is a service provider, it has to defray costs with labor and material and other expenditures applied to the services rendered. An example of these expenses includes: interest, rental of the office area, labor of the administrative personnel and management fees.

#### The Formation of Sales Prices

Knowing the exact real cost of products is of vital importance for the price to be charged to provide a minimum necessary profit margin necessary and not to be considered so abusive as to keep the company out of the market (Sebrae, 1997:48).

No easy and accurate formula exists to calculate the sale price of products and services. In fact each product or service requires a single decision regarding the price. The determination of price levels is more an art than a science (Resnik, 1991:86).

The literature by Resnik (1991) contains the approaches employed for the formation of sales prices as well as other factors to be considered, including the image the company intends to portray of itself and its products in the market.

According to Resnik (1991), the approach adopted most frequently by SC's is based on costs. This method suffers some criticism that point, for example, to the fact that the elasticity of demand is ignored when establishing prices (i.e., the percentile alteration of demand is ignored in terms of quantity sold per period, caused by a price alteration). When the elasticity changes due to seasonableness or the life cycle of the product, the margin should also be altered.

The demand oriented approach covers with the demand/price ratio in such a way that when the demand is intense a high price is charged and when the demand is small a low cost is charged. In this case, costs end up by assuming secondary importance.

A third approach is also emphasized: the competition oriented approach. With this approach the company strives to

maintain its prices higher or lower than the prices of its competitors, depending on the situation. The competitors' policy of maintaining or altering prices is followed by the company. It can be noted that this approach does not maintain a relation among prices/costs/demand, as it is restricted to the price policies of competitors.

In view of the limitations of each approach, the adoption of only a few of them can even create problems for the company. It is a fact that most companies place a greater emphasis on costs. However, the ideal is to utilize an integrated model that takes cost, demand and competition situations into account.

Other variables such as strategic objectives, cash needs and an analysis of possible effects resulting from price alterations must not be forgotten. The larger and more personalized the method to be utilized in pricing, the better the results.

In addition, the prices to be established should be coherent with the image the company is trying to project of its products and of the company as a whole. With respect to this variable (Resnik, 1991:93) explains: "If the image you intend to relate to the goods is a sober and simple image, then you will obviously have to adopt low prices or prices equal to those charged by competitors. However, if the goods are luxury superfluous products targeted at consumers with a high income, then it is equally obvious that low prices would sabotage this image."

Thus the formation of sales prices is closely related to the short, medium and long-term strategy of the company. It can, at a given moment, opt for income through a small volume of sales with a high margin or vice-versa. It is a question of adapting prices to the adequate strategy.

Basic Financial Analyses: The Role of Financial Ratios

With a basis on the information provided by the Accounting Information System through its communication media, we can say that once they have the data drawn up and prepared by accounting, SC's, through their management areas, can develop financial analyses to identify their performance and to outline comparisons with other companies from the same sector of activity, whereby they can make the decisions necessary in a secure and well-founded manner.

Thus as regards these financial analyses, financial ratios assume an important role. It is worth once again observing that accounting and financial management are fully interconnected, as the basic inputs for the use of ratios are the financial statements prepared and provided by accounting, which all told are part of their communication media.

Since the data utilized to calculate the ratios is extracted from financial statements, these must essentially be prepared in a reliable fashion, as there would be no point whatsoever in utilizing financial ratios for decision-making if the data could prove unreliable.

## 4. RESULTS OF THE SURVEY EMPLOYED

Through the treatment and analysis of data we were able to conclude, by means of the univaried analysis (an analysis based on the result of a single variable), that the companies surveyed have centralized decisions and a predominantly family management, as they are mostly managed by the owner (65.5%) or by family members (24.1%).

These are relatively stable companies as regards their time of existence, since they have on average been operating for 16 years. Profitability in turn, – with a basis on the companies that answered –measured by the ratio between average net income and stockholders' equity over the last three years (96, 97 and 98), amounted to 13.2% on average.

In relation to the academic background of the people in charge of management, there is a predominance of professionals who have not graduated from university (62.1%).

In general (90%), the companies declared their satisfaction with the computerization level, besides considering themselves the possessors of high quality operating control systems. 65.5% of the respondents considered the accounting-financial systems as good.

Utilizing their administrative financial systems, the companies also use, although they do not know the level of usage, balance sheet analysis techniques (97.0%), besides the utilization of strategic planning and corporate budgets (41.4%).

The information generated by accounting and employed by the companies to support their decisions is apparently extracted more frequently from trial balance sheets (perhaps as they contemplate the equity and income system in a single statement), as this was contemplated as the financial statement used most frequently by professionals in charge of management at these companies.

Furthermore, by comparing the studied variables (bivaried analysis – crossing of two or more variables) we can also conclude that in relation to the reason why companies use information generated by the Accounting Information System, whether to meet physical or management needs, it was noted that 90% of the companies effectively use the AIS to cope with administrative needs of a fiscal and managerial nature, and that contrary to the quasi-consensus of using this tool more intensively to satisfy needs of a fiscal nature, we discovered that it is used predominantly (55%) to satisfy managerial requirements.

We can also verify a certain association between the form of usage of the AIS (Accounting Information System) and the type of management. As regards the intensity (degree) of use of this tool to meet managerial needs, we can observe that the 16 companies (55% of those surveyed) that use it in this manner are concentrated in the categories of companies that almost always or always utilize the AIS, regardless of their type of management.

In relation to the fact of: "the level of use of the AIS to meet management needs is related to the level of affinity of

the company manager with accounting reports and terminology, which is more intense in the areas the manager is more familiar with", we verified the existence of moderate associations and positive co-relations among the variables: form of use of the AIS, degree of use of the AIS to satisfy managerial needs and the affinity of the company manager with accounting reports and terminology. The positive correlation coefficients confirm that the greater the manager's affinity, the higher the level of use of the AIS.

With respect to the question of whether companies administered by professionals – with an academic background in the area of Applied Social Sciences - (Administration, Economy or Accounting Sciences) utilize the information furnished by the AIS more frequently, we verified a moderate association among the variables – academic background and level of use. In relation to the preconceived idea that professionals graduated in the area of Applied Social Sciences utilize information generated by the AIS more intensively, this is confirmed by the discovery that among the companies managed by professionals without academic formation (62.07%), 50% never utilize the information generated by the AIS for managerial purposes, while among companies managed by professionals graduated in the area of Applied Social Sciences, this percentage drops to 20.0%, demonstrating that these professionals, perhaps due to greater proficiency in accounting, really utilize the information generated thereby with more intensity than other professionals in charge of management.

We also discovered that in relation to the sufficiency or insufficiency of information generated by the AIS as a tool to support decision-making, most of the companies surveyed (65.5%), manifested their satisfaction with the level of information obtained to meet their requirements.

#### 5. CONCLUSION

The results of our study indicate that small companies, particularly those that were more directly involved in our survey, also use the information generated by the Accounting Information System for managerial purposes. The better use of accounting information obviously takes place in situations where the company mangers have a certain level of technical qualifications, which does not tend to predominate in small companies.

Although in a limited fashion, it is encouraging to see that small companies are gradually viewing the company accounting as a function that plays a managerial role. However, we cannot ignore the reality of some large companies, including from Brazil, that have already passed the stage of using accounting for managerial purposes and are pacing towards a more strategic use, including the aggregation of new concepts originating from the area of corporate finance.

In order to extract all the potential of management information contained in their accounting systems, small companies need to resolve two fundamental issues: changing an archaic managerial mentality based on old and outdated concepts, improving the technical qualifications of their managers through a professional training process and utilizing the necessary information technology to make the company's information system fast and reliable.

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