**Introduction**

Statement of the Research Problem, objectives & Study hypotheses

1- Preface:

“Today’s organizations, be they in private or public sectors, face an environment of intensive competition, rapid change and uncertainty. Managers therefore are continually searching for new structures and processes to help their organizations to keep pace with such developments” (Varma, 2005). Yazdifar (2003) had contended that “Over the past two decades, manufacturing industries have been affected by the fast pace of change, which has been viewed as a new industrial revolution. Manufacturing firms have had to adopt new management techniques to respond effectively to changes”.

“Industries, in both the service and manufacturing sectors are undergoing massive restructuring brought about by global competition, innovation,
application of technology to products, and processes. The increased emphasis on cost control and competitive pricing of products and services has brought about a renewed interest in cost accounting and management accounting” ¹ (Mansuy).

Over the past fifteen years Sudan’s economy has been highly affected by this revolutionary change, and organizations have had to adopt new management techniques to respond effectively to these changes which include the ever growing availability of information, the rapid development of new technologies, and the liberalization of markets. Management accounting in Sudan has not taken its role in helping entity managers in the achievement of organizational goals like its peer the financial accounting the matter was not widely recognized and practiced in the Sudan economic

activities. The existence of good management accounting systems and practices are critical to the successful performance of the entity. Successful management of an entity depends on the information provided by the company’s system. Commonly the accounting system of an organization is felt to perform two tasks:

1- Financial accounting;
2- Management accounting.

Financial accounts are prepared with the needs of internal & external users to an organization in mind. Limited companies, for example, must in the normal course of events, prepare financial statements for their shareholders every year. Financial accounts are normally of a historical nature, detailing the performance of an organization over a defined period. The financial statements must be prepared in accordance with the law, and with accounting standards, so that in principle the accounts of different organizations can be easily compared.
Hawari stated that "The future success of organizations depends to some extent on the investment decisions taken at current time"\textsuperscript{1}

"The functioning of modern financial markets relies on consistent information and better information".\textsuperscript{2} Equally important is the information produced by the management accounting system for purposes of the internal management of the organization. The needs of internal management of the organization are likely to be much more extensive than the needs of the external users as the management must control the organization’s current activities, plan for the future, and make any necessary decisions for choices relating to the organization’s present or anticipated operations. Such decisions might pertain to merger, expansion, out-sourcing, or evenly complete restructuring of the entity. Management accounting should help the organization change, or initiate the change.

\textsuperscript{1} Hawari, S. M; Obied, S. T "Financial Management : Long Term decisions & Financial Analysis" P. 193.

This was certainly true when the private sector in Sudan had undertaken an important change during the decade of the 90’s. By then so many enterprises were transformed from the public sector to the private sector, where they experienced very substantial changes.

To what extent do management accounting systems affect those enterprises availing the change safely and getting the maximum benefit from that new environment. The study shall investigate the magnitude of help that is facilitated by management accounting during the period of privatization and thereafter.

2. Definition of The Research Problem:

As it has been cited above the management of an organization should continually look for new ways and means to direct the organization to the right track, so does the role of management accounting. An effective management accounting system must provide information that assists managers and employees in identifying those courses of action that are in the best interest of the
organization and encourages the appropriate individuals to select and implement the desired courses of action. Equally important is that the departments of manufacturing firms, in order to cope with the fast changes, have engaged in team efforts and adopted new organizational structures and manufacturing methods, to be more responsive to their customer’s needs.

Organizations also tend to adopt the strategy of product diversification, higher quality, better delivery, and increased flexibility in order to satisfy new demands together with enhanced global competition. Seeking corporate survival, and enhanced market share companies use advanced manufacturing technologies and innovative product systems. Bromwich and Bhimani (1994) argued that “Operational changes arising from technological advances are not limited to manufacturing process but extend to post –
production back – up activities and particularly to the service sector”

Being highly surrounded by this flow of change has management accounting conveniently performed its role?

Has it provided the right information at the right time?

Management accounting is accused of not fulfilling its role properly and lagging behind.

It is stated in many organizations, that the most up – to date and efficient system fails to accomplish the anticipated results, because the accountants who are responsible for these systems are naïve.

Furthermore, it is often the case that these accountants are not even aware that a problem exists. Rather, they automatically assume that all is well and that managers and employees are responding to the accounting system in some

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predictable fashion which is consistent with the accountant’s view of the world.

At best, such management accounting systems make little contribution to the accomplishment of organization goals. At worst, these management accounting systems contribute to a wide range of undesirable attitudes and activities which actually serve as a deterrent to the accomplishment of organizational goals.

"Enhancing the role management accountant would require providing him with analytical software that permits data to be gathered, manipulated, projected and reported"1.

In their 1986 seminal book, Relevance Lost, Robert S. Kaplan and H. Thomas Johnson2 described how the emphasis on statutory financial reporting requirements had created a system that is both undeniable and unstoppable. Every quarter, accountants and their organizations are obliged to prepare and deliver reports to external parties. Yet there is no equivalent legal

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2 - Johnson, T, Kaplan, R (1991) "Relevance Lost" P. 129
requirement for accountants to do even an effective job in providing managers with proper information with which to operate the business.

Nevertheless, management accountants are described while they are becoming increasingly expert in using technical management accounting tools; they still tend to display an almost minor role in helping the management of the organization in taking important decisions as to the frequently changing circumstances. On the other hand the new business strategies have also questioned the conventional role of management accounting.

Ashton (1995) argued that “the exploration of this by industrialists, academics, and management consultants has produced an ideology of crisis and transformation in manufacturing, in which the role of conventional management accounting has come under increasingly critical scrutiny” ¹ 

The deficiency of management accounting is clearly exemplified in the following points:

1- Conventional management accounting has deficiencies in responding to the environmental change. It is a matter of paramount importance to use new communication forms and channels in understanding the implications of changing organizational structures are essential for the management accounting profession to understand how organizational structures are essential for the management accounting profession to understand how to react in the new manufacturing environment and perceptions of information requirements. Peavy (1990) had contented that “The revolution in manufacturing brought and effected by new technology, necessitates a new cost accounting model that is congruent with the phenomenon of decreased inventory levels inherent in Just-in-Time manufacturing philosophies” ¹

2- Deficiencies in cooperating with organizational strategic planning. The traditional management accountant instead of being a participant for strategic

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planning focuses on inventory valuation and external reporting.

3- Concentration of short – term measurement. Today management accounting systems provide short – term measurement, with consequent management and employee rewards focused in it.

4- Performance evaluation in traditional management accounting was based entirely on financial data, ignoring some major features of automation performance requirements such as customer satisfaction, flexibility and innovation.

5- Irrelevant and repetitious reports. Many manufacturers continue in their production reporting schedules to focus on labour efficiency and utilization. A half century ago when labour typically accounted for considerable magnitude of total costs the reports were relevant. Now-a-days, with adoption of the new manufacturing methods, labour is typically minimized as percentage of total costs and therefore labour utilization has been replaced as the main concern for managers by, among other factors, cycle time, quality, delivery, scrap, and inventory.
6- Poor job product costing. Traditional cost accounting systems often do a very poor job of product costing. Infact, many of these systems do a grave disservice to managers who do not understand their inadequacies and the product cost information as generated (Kaplan 1983)\(^1\).

Mohammed baik\(^2\) stated that "Cost accounting still concerned with the measurement of cost for stock valuation purposes". Furthermore, while the main form of traditional management accounting systems is on product cost, new manufacturing methods place the emphasis on the process of production and its impact on production costs.

7- Overhead planning, control and allocation. One of the major areas of dissatisfaction with management accounting methods in practice relates to the accounting for, and allocating overheads. Allocation of overheads based on labour hours is a significant feature of traditional cost accounting. Due to the decreasing share of labour and variable

\(^2\) Baik, Mohammed E. (2007) "Cost Accounting in the Oil Producing Companies" P.251
costs in overall costs based on the new manufacturing technologies, this method is no longer a good one. Howell & Soucy (1988) illustrated that “in many new manufacturing methods, labour represents only 5% - 10% of a manufacturer's total cost. In addition, automation is increasing the spread between variable and full costs” \(^1\). With labour & overhead costs moving in the reverse direction, allocating overheads based on labour costs or hours, and using cost accounting techniques based on a disappearing manufacturing environment is no longer appropriate. Hashim contented that "Lack of control upon a big percentage of overhead costs due to the growing percentage of those overheads on some industries as new technologies were used"\(^2\). Management accounting in Sudan is not an exception to this general description of the drawbacks of management accounting worldwide. The liberalization of Sudan markets, the transfer of some public enterprises to the private sector, the local competition, and the technological revolution have

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pressurized those enterprises to seek ways and means in order to cope with the new situation. This matter put a heavy burden on management accounting to offer a great deal of support to managers. Therefore a strong need arose to analyze the currently practiced role of management accounting in the private sector in Sudan. Also the need is extended to examine the anticipated help that management accounting may facilitate to managers in light of those challenges.

3. Statement of the Problem:

The study is intended to deal with the growing gap between management accounting and managers as organizations face an ambiguity in taking decisions of expansion or undertaking new projects. Managers became worried about the real role of management accounting when considering the entire task fulfilled by the accounting profession as a whole. The study tries to make it clear by stating the problem researched as follows:

1. Does management accounting provide relevant information for organizational managers to take rational decisions?
2- Does management accounting play an important role in formulating strategic plans in organizations?

3- Does management accounting provide trusted help to organizational managers initiating a change, coping with the change, or benefiting from the change?

The problem of change is feared by managers as it is considered a new experiment that may carry with it huge losses. Therefore a gap exists that needs to be bridged by management accounting taking strong actions that make managers trusting and confident.

4. Importance of the Study:

The contemporary economic and manufacturing environment demands excellence from organization management accounting systems. Vigorous global competition, changes in technology and the management of innovation requires accurate and timely information to facilitate management decision making in fashioning competitive advantages. Success in today’s markets depends upon many factors, compromising the type of products and services that
organization introduces in order to meet the customers needs. Therefore, the marketing strategy, and superior to this is an effective management accounting system which assists more in realization of the organizational objectives. An ineffective management accounting system on the other hand, will undermine product development and, process improvements and marketing efforts.

Sudan private sector is invited by the Government to open its borders to regional and international investors where new capital is expected to cross the borders in. Much more incentives were offered by Sudan Government for expansion and well contribution towards the improvement of processes and establishment of new projects.

The study shall constitute a rich meal for the following categories:

1- The study is intended to give wide recognition among organization managers to the value of building economic business decisions on scientific grounding.
2- Systematically organized private sector and scientifically prepared managerial decisions lead to a pioneer private sector and a good contributor which in turn leads to an improvement in the whole Sudanese economy.

3- The study will constitute an academic reference for students and those who look foreword to further tackling an important area of management accounting.

5- Objectives of the Study:

The objective of this study is to fulfill the following:

1- Scrutiny of the current situation of management accounting systems, if any, in the private sector in Sudan.

2- Investigation of the draw backs that emerge due to the lack of management accounting in the Sudanese private sector.

3- Analysis of the organizational managers and owners views towards management accountants and management accounting systems.
4- Describing the determinants of an effective management accounting system and the benefits that an organization may recoup by maintaining such an efficient system.

6- Research Questions:

The idea of the study is highly and heavily centered around the answers to the following questions:

1- Are business decisions in the Sudanese private sector based on financial or management accounting tools?

2- Do organizations in the private sector in Sudan adopting management accounting tools?

3- What magnitude of effect do management accounting systems have on organization change.

7. The Research Hypotheses:

In pursuit of finding an answer to the questions stated above the study shall test the following hypotheses:

1- The use of a balanced scorecard as a management accounting tool is associated with larger organizations than with smaller organizations.
2- Maximum benefit from using balanced scorecard lends itself to organizations with products at the early life-cycle stage other than organizations with products at the mature stage.

3- The effect of the balanced scorecard reliance on the organizational performance will be more beneficial for organizations with strong market position than for organizations with a weak market position.

4- There is relationship between profit realization and the balance scorecard implementation.

8. The Structure of the Study:

The study is intended to be divided into five chapters as follows:

Chapter One : This chapter will concentrate on the definition of management accounting and its importance in guiding the managers of organizations towards better decisions. It will be divided into four sections as:

1- Definition of management accounting.

2- The importance of management accounting in
providing managers of the organization with adequate information for the achievement of its objectives.

3- Definition of the organization change.

4- Management accounting’s role in helping organization to change or initiate a change. Chapter Two: The essence of this chapter is reviewing past studies in the field of management accounting and its effect in carrying out organization change. It will show the role of some professional institutions in guiding the profession. This chapter is intended to be divided into:

1- Literature review of the previous studies pertaining to management accounting.

2- The role of some professional institutions in maintaining the profession through formulation and application of rules and principles to be followed by practitioners; and members who had gained certification and those who practice management accounting.

Chapter Three: The research methodology and the balanced scorecard definition, aspects and structure will be shown in this chapter.
The research questions that shall be tested through the application of the “Balanced Scorecard Model” which is a newly established model formulated by Kaplan & Norton in 1992. The balanced Scorecard had four perspectives being mainly:

1- The financial perspective which uses the financial indicators to measure the organization’s performance along the specified period.

2- The customer perspective that measures the loyalty by using the advertisement expenses in terms of sales.

3- Learning and growth perspective.

4- Internal business process which mainly highlights the company productivity and cost reduction. This model uses the traditional statistical tools, mainly the mean, median and standard deviation to manipulate the data under study. The balanced Scorecard model allows organizations to build a management system that manages strategy, making them strategy-focused organizations.

Chapter Four: The empirical work will be carried out
in this chapter.

The sources of data and samples of companies intended for the study will be shown in this chapter. Data is meant to be collected from the financial statements and periodical reports issued by organizations in the private sector in Sudan. Another source are newspapers and magazines that advertise some of the relevant news.

The data collected will be subjected to the financial tools mentioned in the Balanced Scorecard model for calculation of the required indicators. After an entire data manipulation and calculation of the financial indicators, we then come to apply the statistical tools, by extracting the mean, chi-square test, and the correlation of the sample data to arrive at the results and relationships between the variables of the data components.

This fact will help in understanding the magnitude of the role played by management accounting systems in helping organizations to undertake a change. Chapter Five : This chapter is devoted to the outcome of the empirical study in chapter four and gives conclusions and recommendations thereafter.
9. The Data Choice:

The study shall deal with manufacturing firms for the following reasons:

1- Manufacturing firms are regarded as the cornerstone of Sudan’s economy, as their contribution to the Gross Domestic Product is quite considerable.

2- Implementation of management accounting systems in manufacturing organizations is quite workable and fruitful as their output is measurable.

3- Measurement of their performance is attainable in light of the clear indicators, be it financial or non-financial.

4- Linking rewards to the output performance can be done with less effort and clear targets.

As a developing country Sudan’s economy is highly dependant on the traditional sectors that contribute to its Gross Domestic Product, mainly agriculture, livestock, forestry and fisheries. Recently the country has undergone a massive change by which the manufacturing sector became the pioneer.
The study shall look at about 6 manufacturing organizations at different levels as the data sample.