### Management's Awareness for Implementation of Contemporary Accounting Concepts in Republic of Macedonia

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Abstract – Realization of the determined targets in drastically changed working conditions requires development of new approaches, new business models and ideas of management. As a consequence, managerial practice and methods significantly changed in the last decade of the 20<sup>th</sup> century and those changes have been continuing in the 21<sup>st</sup> century. In that context, contemporary trends present in the managerial accounting are associated with its strategic concepts, such as: activity based costing system, justin-time system and total quality management.

Starting from the a.m., the main objective of this research will be directed towards providing data for that if Macedonian business entities are familiar with these concepts and how much they implement them. For this purposewe carried out a survey on a representative sample of Macedonian companies. The examination conducted in this paper shows that business entities in R. Macedonia still apply these accounting techniques not sufficiently. Obtained results are presented within this paper in details.

*Keywords* – Management accounting, strategic techniques, ABC, TQM, JIT

### 1. Introduction

Dynamic competitive conditions are characterized increased business internationalization, augmented development of the information, communication and computerization production technologies, forcefully competency impact, flexibility organization structure and developed relations between the partners. Consequently, the contemporary enterprises confront with completely changed and new business environment.

The complex and dynamic business conditions force the managers to flexible behavior concerning the business changes and terms [11]. Under conditions of uncompromised struggle in the market, and increasingly higher competition with fast environmental changes, the need for adopting new strategic variables for targets formulating and business entities' mission, and accepting new competitive philosophy in their function, is imposed.

In such highly complex working conditions, successful can be only that business entity which

managing structures have succeeded to leave the old managing concepts and built new mental attitude for way of managing, the attitude that respects flexibility, speed and innovation.

As a consequence, managerial practice and methods significantly changed in the last decade of 20<sup>th</sup> century and in the start of21stcentury.

Contemporary trends present in the managerial accounting are connected to strategic techniques such as activities based costing system (ABC), Balanced Scorecard and Strategic Managerial Accounting, that have been designed to support contemporary technologies and managing processes, like Just-intime system and Total Quality Management (TQM). Numerous studies have shown that new techniques have had impacts in the total process of managerial accounting (planning, control, decision making and communication) and has moved their focus from the simple role for costs estimation and financial control up to the sophisticated role of the managerial accounting in function of creating values through more efficient resources utilization [1]. Furthermore, it is argued that these new techniques are consequence of the need for realizing competitive advantage in order to meet the global competition challenges and they are designed to provide support modern technologies and new processes.

### 2. Literature Review

In order to realize and maintain competitive advantage in the market, it is indispensable for the companies to adapt new business and production philosophies. New production environment is reflected into the structure of the companies' expenses and make pressure on the management to change the so-called traditional cost systems [8]. In that context, activity based system as a new cost model, solves the problem with allocation of rising general manufacturing costs. ABC system supporters think that its methods are indispensable for allocation of general costs per cost objects, as a result of precise evidence for a group of manufacturing costs on a defined level [7], special manufacturing costs and different business environments [6]. Furthermore,

some researches, such as those from Cagwin D. and Bouwman M. [5], provide proof that ABV system improves the financial performances.

JIT system is effected in decreasing the time of a production cycle, increasing of inventory turnover, which results in decreasing of inventory costs and working capital costs. For instance, - Coca-Cola enterprises and fast-food operators in USA adapt JIT strategy and that have led to costs reduction and acceleration of the ready product flow up to the final consumer. [2] Boyd's studies [4] and those of Biggart T. and Gargeya V. [3], analyze the effects of JIT system application on the set of financial ratio indicators and confirm its positive influence on the indicators.

The authors Hendricks and Singhal, in their book Don't count TQM out. Quality progress, 1999 [9], say that TQM was one of the most popular business models in 1980s of the twentieth century. TQM is a concept based on constant improvements of the performances of all processes in an organization connected with the quality of the products and services which are output of those processes. Many quality experts have confirmed the previous conclusions. In that context, Hendricks and Singhal, [9] highlight that TQM implementation results into improved performances, i.e. profit. The results of Kaynak's analyses [10] are in this direction, who has found out that financial and market performances are improved for the firms that implement TQM and JIT purchasing system.

### 3. Research methodology

Motivated by the potential benefits of the successful implementation of these systems and lack of researches of this kind in R. Macedonia, Macedonian companies grouped in three target groups have been taken as a target group for this study, and they are: selected stock companies that are quoted in the official and free market of the Macedonian Stock exchange, selected companies from 200 most successful companies and the group of other producing companies. The basic majority in this study comprises 167 companies which were adequate for this researching project. From this basic majority. we chose a representative sample of 39 companies with 6% risk level, 95% level of trust and maximal level of a mistake of 6%. This representative sample was decided by means of the software pack Decision Analyst.

Necessity for this kind of research is a consequence of the lack of information for implementing the strategic techniques of managerial accounting in Republic of Macedonia, i.e. for the implementation level of the strategic techniques of the managerial accounting in Macedonian companies.

The main objective of this research is finding out how many Macedonian business entities are acknowledged with these concepts, if they are aware for the importance of their applicability, and how much they implement them.

For realizing this research, a large number of methods for providing necessary data were used:

- Investigation with structural questionnaire,
- Interviews with financial managers,
- Internet research,
- Other methods.

For data analyzing, the current investigation uses descriptive statistical analysis such as the standard deviation, and regressive analysis for testing the link of the level of awareness for the importance of the strategic initiatives application and the level of application of those initiatives.

## 4. Data analysis and interpretation of the research results

In order to reach a practical application of the strategic initiatives (ABC, TQM and JIT), there is a need to get support from the top management. The top management can do that should it is aware for the importance of the strategic initiatives application. The top management is responsible for the strategic planning, setting of the global company targets, approval of the strategic initiatives and resources allocation, in order to enable the implementation and all plans and initiatives. support to management's awareness and responsibility are indispensable for implementation and continuous quality programme, and at the same time, it represents essential element for enabling successful implementation of the strategic initiatives.

The results from the answers to the questions related with the awareness level of the importance of using strategic initiatives such as ABC, TQM and JIT, were used to measure the top management's awareness and they are shown in figure 1(ABC), figure 2(TQM) and figure3(JIT).

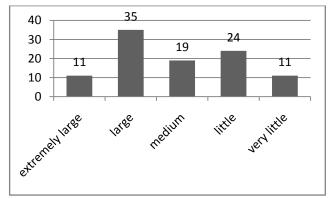


Figure 1. The awareness level of the importance of using ABC

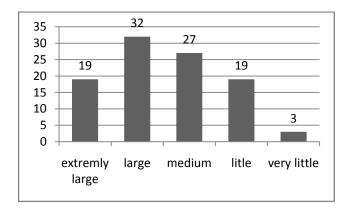


Figure 2. The awareness level of the importance of using TQM

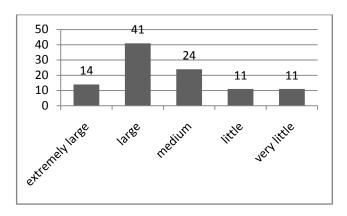


Figure 3. The awareness level of the importance of using JIT

Table 1. Level of awareness for the importance of the strategic initiatives application

	ABC	JIT	TQM
Mean	2,93	2,73	2,73
Std.	0,39	0,37	0,38

According to the processed answers to the question regarding the management's awareness for

the importance of ABC, TQM and JIT implementation, as shown in table no.1, we can conclude that the awareness of the financial managers of the companies concerning the benefits that can be realized through the application of these strategic initiatives, has reached some level, that is in fact one of the basic assumptions for their higher implementation.

In continuation, the research subject is testing of the link between the level of awareness for the significance of the strategic techniques application and the level of their implementation. Namely, it can be said that if the financial managers are enough aware for the importance of the strategic initiatives, then the level of application of these initiatives will be higher compared to the lower level of awareness.

In order to examine this connection, we need data on that how much the respondents implement ABC, JIT and TQM, and to compare the obtained results with the level of awareness for implementation of the examined concepts.

The processed answers to the question regarding the application of ABC, TQM and JIT, are shown in figure 4 (ABC), figure 5 (TQM) and figure 6 (JIT).

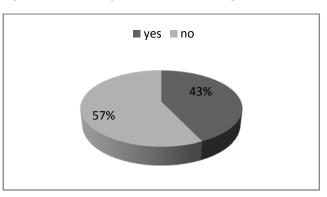


Figure 4. The Implementation Level of ABC

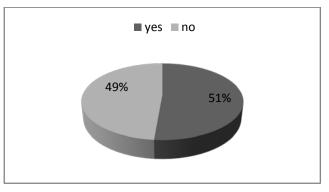


Figure 5. The Implementation Level of TQM

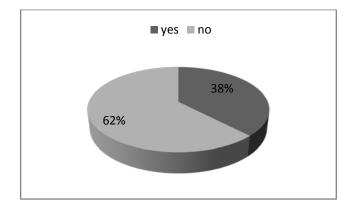


Figure 6. The Implementation Level of Just in Time

From the obtained answers, it can be concluded that about 43% of the examined companies implement the activity based system, 38% implement JIT system and most of them, i.e. 51% of the respondents apply TQM.

Having in mind the previous statements, i.e. the obtained information on the level of implementing ABC, JIT and TQM and the awareness level of the financial managers for the importance of implementing these techniques/systems, testing of their connection has been made, by applying the following regression model:

$$ABCit = a + 1AABCit + eit,$$
 (1)

where

ABCit represents the level of adopting the ABC

AABCit represents the awareness level of financial managers of the importance of using the ABC

eitrepresents the unexplained error of the regression model utilized

$$JITit = a + 1AJITit + eit$$
 (2)

where

JITitrepresents the level of adopting the JIT

*AJITit* represents the awareness level of financial managers of the importance of using the JIT

eitrepresents the unexplained error of the regression model utilized

$$TQMit = a + 1ATQMit + eit$$
 (3)

where

*TQMit*represents the level of adopting the TQM

ATQMitrepresents the awareness level of financial managers of the importance of using the TQMeit represents the unexplained error of the regression model utilized

The results obtained from the applied regressive analysis are following:

$$ABCit = 0.74 + 0.28x + 0.37$$

$$JITit = 1,22 + 0,15x + 0,47$$

$$TQMit = 0.71 + 0.31x + 0.3$$

Table 2. Implementation of the strategic techniqueses and the level of awareness for the importance of ABC, JIT and TQM implementation.

Regression model	Adjusted R <sup>2</sup>	F	Sig.
Regression model 1 (ABC)	0,6924	17,2782	0,000276
Regression model 2 (JIT)	0,3484	30,2182	3,56E-06
Regression model 3 (TQM)	0,6642	27,6256	7,39E-06

As it can be seen from the above table, the results obtained from the applied regressive analysis confirm that there is a positive correlation between the awareness level of the financial managers from AA companies in Republic of Macedonia for the importance of ABC and TQM application, from the one hand, and the level of their implementation on the other hand, but there is not distinctive correlation between the level of awareness for the importance of the just-in-time system and the level of its implementation. This result shows that high level of awareness is connected with practicing ABC and TOM, while absence of such connection with the just-in-time system may be a consequence of the fact that high level of awareness of the financial managers is probably not sufficient for implementing this strategic technique. So, high level of awareness of the financial managers does not mean high level of awareness of the top management (that makes strategic decisions in each company), and most probably, the top management does not undertake real action for adapting this technique. Besides the previous reason, there is a large number of other assumptions which should be met for successful practicing of the 'just-in-time' system. The problem can be located to the absence of will for collaboration between the management and the employees, and absence of a necessity to change the system for remuneration of the employees, way of equipment layout, its preventive maintenance, development of close relations with the suppliers.

# 5. Proposals and measures for higher implementation of the strategic techniques of the managerial accounting in R. Macedonia

Experience of the companies that implement accounting techniques shows improvement in their performances and realization of competitive edge in the market. The examination conducted in this paper shows that business entities in R. Macedonia still apply these accounting techniques not sufficiently.

In this context, the following proposals are in the direction of higher implementation of the strategic techniques of managerial accounting:

- 1. Top management should be given an explanation of the benefits from applying the advanced techniques of managerial accounting by organizing workshops and seminars. Promotion of these courses should be carried out on all management levels, starting from the general manager up to all sector managers, especially those from the accounting-financial sector.
- Need to provide software applications and techniques of the managerial accounting at acceptable prices,
- To improve quality of teaching programs of the subjects in the area of managerial accounting in high schools and universities through involvement of last techniques of managerial accounting.
- 4. To make more researches on the effectiveness and success of the strategic techniques and to use them to inform and stimulate the managers of business entities for their implementation.

### 6. Conclusion

On the basis of previous facts, it can be concluded that in the drastically changed working conditions, the management accounting of business entities is faced with numerous challenges and obligations as well.

Implementation of the contemporary accounting techniques provides a guarantee for costs decreasing, optimal use of the resources, improvement of products quality and better financial results. The research has shown that the business entities implement these techniques in a very small degree besides the managers' awareness of the indispensability of their application. Therefore, it is necessary, through organized seminars and workshops by the academic community, to emphasis

the benefits for the managers from the implementation of accounting techniques, and to enrich the studying programs for managerial accounting, which will enable the young population to be informed in time for their importance and benefits they provide.

The next research which would enrich this issue is detection of the problems during implementation of the researched concepts (ABC, TQM and JIT) into practice in Republic of Macedonia.

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