Historical Evolution of Managerial Accounting Theories and Practice Development: Evidence from Kosovo

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ABSTRACT

The purpose of this paper is to describe the historical evolution of management accounting development because recognition of the history of management accounting presents a good foundation for the development and understanding of the future of this profession. Based on this, dynamic business environment, technological advancements, and globalization are among the key factors driving businesses to pay attention to the evolution of management accounting methods, techniques, and practices. The nineteenth century is considered a time during which there were significant developments in management accounting, and that most of the management accounting techniques and methods that emerged in this period are still used today by different companies. By studying the origins and evolution of management accounting, this study has successfully demonstrated the linkage of modern management accounting systems to traditional accounting management systems. In particular, this paper presents the development of management accounting in Kosovo, identifies the use of managerial accounting techniques by Kosovar firms, and empirically tests whether these techniques influence these firms' effectiveness in Kosovo. The results show that firms in Kosovo, clearly seen to be more oriented towards the use of traditional accounting techniques such as the financial statement analysis and cash flow analysis (used by 100% of all firms), budget control and marginal cost techniques (87.5%), absorbing costs (81.3%), standard costs (56.3%), SWOT analysis and Activity Based Costs (50%), Financial Asset Analysis and Cost-to-Volume Analysis (43.8%). Also results show that applying accounting techniques helps management in choosing the best decision-making alternatives, financial management, marketing, production, and other areas of business, the arithmetic average of respondents' responses in this category reached is 4.45, while the standard deviation is 0.60.

JEL Classifications: M40; M41.

Keywords: Managerial Accounting; Management Accounting.

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1. INTRODUCTION

Over the last two decades, firms have had to respond to changes in the business environment with new and better business management approaches. These new approaches are being implemented by companies in the name of: improving management quality, empowering employees, reengineering business processes, continuous improvement, and other important approaches. In today's competitive environment, the development and use of management accounting information has an important role in the enterprise's success.

The focus of this study is historical development in the field of management accounting, as based on the research of various authors (Botes, 2009), (Legaspi, 2014), (Atkinson, Kaplan, Matsumura, & Young, 2012) before examining the gap between theory and practice, a thorough understanding of the history of managerial accounting development is needed.

With the review of earlier studies regarding the management accounting origin, this seems to be a still questionable issue. Some authors (Gliaubicas, 2012); (Edwards, Boyns, & Anderson, 1995a); point out that the management accounting beginnings were founded during the Industrial Revolution in the United Kingdom, while other authors (Chandler, 1977); (Johnson & Kaplan, 1987) point out that management accounting appeared in the United States

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during the nineteenth century. Irrespective of management accounting's precise origin, the nineteenth century is considered the century when significant developments in management accounting emerged.

To understand the role of management accounting today, it is necessary to understand its history. The objective of this study is to explain the historical development of management accounting practices from its emergence to date. The study examines traditional and contemporary management accounting methods in order to predict the future of management accounting and find ways to promote it in scientific studies. The study presents the link between old and modern managerial accounting practices by providing a guide for scholars and students in the event of future research.

Table. 1. Comparison between financial and managerial accounting

Base for	Financial accounting	
comparison		
Definition	Financial accounting is that part of the accounting system that deals with the measurement and reporting of the financial position and of the business outcome over a given period in accordance with the general accounting principles.	Managerial accounting is an accounting system that provides relevant information for managers to make policies, plans and strategies for running business effectively. (Surbhi, 2014)
Is it compulsory	Yes	No
Information	Only monetary information	Monetary and non-monetary information
Objective	To provide financial information mainly to outsiders and management of the enterprise: (Investors, creditors, business partners, unions, state bodies)	Assisting management in the planning and decision making process by providing detailed information on various issues
Freedom to choose the reporting structure	Limited to general principles accepted accounting and standard	There are no other restrictions than the cost content and usefulness of management information
Time Focus and Reporting Period	Oriented to the past; Financial reports are prepared at the end of the accounting period that is usually one year, but can be prepared every six months, every three months	Towards the future Reports are prepared according to the needs and requirements of the organization
Influence of information in decision making	Pays due attention to the appreciation of economic events. Their influence on decision making is secondary	Pays due attention to the assessment and reporting that affect the decision making by the manager
The character of the reports	Summary reports about the financial position of the enterprise	Full and detailed reports on various information
Publication and audit of reports	It is required to be published and audited by statutory auditors	Not published or audited by legal auditors

Source: Authors' presentation adopted by (Ahmeti, 2008); (Surbhi, 2014).

Therefore, the main purpose of this paper is to answer the question:

How have management accounting practices changed in the last century?

This study also highlights the use of accounting management techniques by firms in Kosovo and addresses the questions:

To what extent do firms in Kosovo use managerial accounting techniques and which techniques do they use most?

How do these techniques influence the effectiveness of Kosovar firms?

The paper is organized as follows. Section I and II, begins by presenting the historical perspective of accounting development, the historical development of managerial accounting, and the linkage between managerial, financial, International Journal of Economic Perspectives ISSN 1307-1637 © International Economic Society



and cost accounting. Section III, included a literature review and analysis of works by well-known authors in the field. Section IV includes the research methodology, hypothesis testing and analysis of the results, while the last section (V) includes the conclusion and recommendations derived from this research.

2. GENERAL ACCOUNTING REVIEW

Accounting as a discipline is divided into two main areas: Financial Accounting and Management Accounting. Financial accounting is that part of the accounting system that deals with the measurement and reporting of the financial position of the business outcome over a given period in accordance with the general accounting principles.

Management accounting, in contrast to financial accounting, is related to all kinds of accounting information that is collected, measured, recorded, processed and transformed to the entity's managers. Management accounting provides managers with information about the cost of manufactured products, entirely for specific products and in every business segment, with planning and controlling various operations, with the nature, location, and size of revenue for every unit product and segment, with capital budgeting etc (Ahmeti, 2008); (Collis, 2015).

2.1. Comparison Between Financial and Management Accounting

In Table 1, we see that financial accounting mainly provides information on financial transactions that have occurred in the past, while management accounting provides financial and non-financial information that influences future decision making. Management accounting is not subject to externally-imposed reporting rules (e.g., International Financial Reporting Standards). It provides businesses with more detailed information than financial accounting and is more multidisciplinary (has relationships with other economic sciences).

2.1.1. The interdependence between financial accounting and managerial accounting

Managerial accounting and financial accounting are part of the overall accounting information system (Hansen & Mowen, 2005). Though financial accounting and managerial accounting make up two different areas of study, they cannot exist independently. Both areas provide useful information: Financial accounting helps register countless transactions, and compare an entity's performance between two or more periods (or performance comparison between two entities). In contrast, managerial accounting helps analyze and evaluate performance, which enables management to make effective judgments regarding the establishment of strategy, plans, and policies for the future (Surbhi, 2014).

Table 2 Interdependence between Financial Accounting and Managerial Accounting

- 1 Both are part of the overall accounting information system.
- 2 Both collect and classify accounting information for the preparation of financial reports.
- 3. Both deal with financial statements, income, expenses, assets, liabilities, cash flows.
- **4.** Reports prepared in both systems: managerial accounting and financial accounting are both based on originally generated data to meet the requirements of accounting and financial reporting. That is why an accounting system in an organization collects and classifies information in a way and format that may be appropriate for both accounting methods.
- 5 Both make the determination and measurement of costs for different accounting periods.
- 6 The same principles and accounting concepts are used for accumulation and allocation of costs.

Source: Authors' presentation adopted by: (Botes, 2009); (Surbhi, 2014); (Hansen & Mowen, 2005); (Legaspi, 2014); (Sharma, 2016).

2.2. Cost Accounting

Cost Accounting provides both management accounting and financial accounting information. Cost Accounting measures, analyzes and reports financial and non-financial information about the cost of resources secured or used in an enterprise (Horngren, Datar, & Rajan, 2015).



(Surbhi, 2015), summarizes the differences between management accounting and cost accounting in the following table:

Table 3. Comparison between cost accounting and management accounting

Type of information	Quantitative	Quantitative and Qualitative	
Objective	Calculate the cost of production	Provide information to managers to determine goals and predict strategies	
Purpose	Concentrated in calculating, allocating and cost accounting aspects	Focused on affects in terms of costs	
Data	Records past and current data	It gives more importance to future analysis and forecasts	
Planning	Close planning range	Wide and close planning range	

Source: (Surbhi, 2015)

Cost accounting, when used to comply with financial accounting objectives, measures and determines costs in accordance with financial accounting objectives with GAAP. When used for internal purposes, cost accounting provides cost information for products, customers, services, projects, processes and other details that may be of interest to management (Ahmeti, 2011).

Historically, cost accounting emerged during the 1920s. The role of cost accounting was reduced when its value was distinguished, not only by reducing the costs of manufacturing enterprises, but also by its influential role in policies and processes decision (Chatfield, 1977).

This increased cost accounting role resulted in the term changing from cost accounting to management accounting around 1960. The new name "management accounting" also included cost accounting and it was not considered necessary to distinguish between the two. These terms were used interchangeably. Previous accounting management developments (prior to 1960) are commonly recognized in terms of cost accounting, whereas after 1960 these developments are described as management accounting (Magdalena Shotter, 2006).

(IFAC, 2009), in the Guide to Good International Practices, presented the interaction of accounting information as a tool for assessing and improving the cost system within the enterprise.

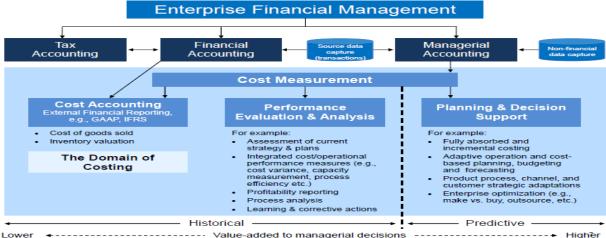


Figure 1. Inclusion of Accounting Areas in Cost Measurement. Source: (IFAC, 2009).

As seen in Figure 1, cost measurement embodies three areas. The first (on the left side), cost accounting is presented according to the financial accounting standards for its use in external reporting. Two other areas (i.e., performance appraisal and planning and decision support), as added value aspects, are part of managerial

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accounting in general. This guide encourages accountants to distinguish between cost accounting for external reporting (where historical performance is shown), and cost accounting for decision making (improving the performance of the enterprise). The Guide encourages accountants to choose and apply cost techniques that provide the most effective choice of information to make the best decisions (IFAC, 2009).

2.1.2. Origin and Accounting Development

The interdependence between these two areas necessitates a historical study of managerial accounting and its common roots within the financial accounting discipline. Accounting as a practice has existed since the earliest times. It first served to invent assets with simple tools. Documented records of single entry accounting have come to us from ancient humanity, five thousand years before the emergence of double accounting. The designations of Babylonian Chaldeans, Assyrian and Sumerian in Mesopotamia, are some of the oldest accounting records on trade and agricultural products (Alexander, 2002).

Table 4. Summary of Significant Historical Events Before and After the Emergence of the Double Accounting System

Summary of significant historical events before and after the emergence of the double accounting system				
Year	Period	Event		
3350 BC	Mesopotamia before writing	Accounting with symbols.		
3500 BC – 2000 BC	Mesopotamia	Hammurabi Code Price quotes for merchants		
3000 BC – 1100 AD	Ancient Egypt	Taxes on the king Use of papyrus		
	China	Evaluating the effectiveness of government programs		
	Greece Rome	The appearance of metal money "Codex Accepti et Expense" for household expenses		
1130 AD – 1485 AD	England	Feudal system (real estate, and real estate taxes) "Domesday Books" "The Great Role of Treasury"		
1494 AD – 1700 AD	Renaissance	Double system, Pacioli		
1700 AD – 1950 AD	Prior to the first Revolution of Management Accounting	No new contributions to the dual system accounting Ineffective period and does not contribute to managerial accounting		
1950 AD – 1980 AD	First Revolution in Managerial Accounting	Direct costs Mathematics		



Table 4. Summary of Significant Historical Events Before and After the Emergence of the Double Accounting System (continued)

Year	Period	Event
1980 AD – 1999 AD	Second Revolution	Measurement Control
	n Managerial Accounting	
2000-2017	Development of managerial accounting	Technological development (advanced programs) Contemporary Management Accounting Technique

Source: (Botes, 2009)

2.1.3. Definitions on Management Accounting

Academic accountants and accounting management organizations defined management accounting in various ways. According to, (Horngren et al., 2015), management accounting is a process of measuring, analyzing and reporting financial and non-financial information that helps managers make decisions to meet the goals of a particular entity. Managers use management accounting information for two main aspects: 1) developing, communicating and implementing strategies; and 2) coordinating decisions on designing products, producing and distributing it, as well as assessing the performance of the company.

(Atkinson et al., 2012), defined management accounting: As a process of providing financial information (such as product cost information, service delivery cost, and cost of an activity or business process), and non-financial information (such as information on satisfaction and customer loyalty, process quality and timeliness, innovation and motivation of employees) that helps enterprise management to make decisions, resource allocation, monitoring, and performance appraisal.

According, (Webster, 2004), management accounting involves identifying, collecting, classifying information that helps in assessing and analyzing cost, performance, and making timely decisions. The Institute of Certified Management Accountants (CIMA) in the UK defines management accounting as: an internal system that provides data on planning and controlling activities that are important for decision making. According to CIMA, management accounting is the kind of accounting that helps entities to operate more efficiently.

The US Accounting Institute's Institute (IMA, 2008), has defined management accounting as a knowledge domain that assists the decision-making process, planning, implementing performance management systems, and enhancing financial reporting and control capability. According to IMA, an essential component of management accounting is the formulation and implementation of the strategy to help the enterprise succeed. But according to, (Shuo & Jian, 2015), despite the many definitions that describe management accounting, all these definitions have a common aspect that explains management accounting as a discipline that provides information to support managers in making decisions."

As we see and based on the definitions of different authors, it is evident that the decision-making process in the enterprise depends in most cases on the information flowing from the management accounting.

3. DEVELOPMENT OF MANAGERIAL ACCOUNTING

Until the first industrial revolution, the forms of bookkeeping in ancient times did not provide any help in the decision-making process. Accounting records did not allow for cost-sharing through production lines and did not distinguish between capital expenditures and revenue expenditures. This resulted in the company's inability to assess profitability for a product, or a capital investment (M Shotter, n.d.).

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With literature review, we notice that the origin of management accounting appears to still be questionable. According to (Edwards, Boyns, & Anderson, 1995) and (Maher, 2000), the management accounting first came into demand during the UK Industrial Revolution to fulfill the need for information to optimize economic resources. Professors Dick Fleischman and Lee Parker, have come up with evidence of the existence of management accounting practices since the 1700s. The evidence was found from the archived data of 25 firms operating in the iron and textile industries in this period in Great Britain (Parker, 2002). In addition, according to (Chandler, 1977); (Johnson & Kaplan, 1987), management accounting appeared for the first time in the United States during the nineteenth century. During this period, management accounting was developed as a sophisticated craft that provided information for determining price (Edwards et al., 1995), the direct and indirect cost of converting raw material into goods, (Johnson & Kaplan, 1987), indirect cost allocation, inventory control (Edwards & Boyns, 1992), cost comparison, costs for specific decisions, budget, and accountability (Parker, 2002). The new accounting system was aimed at controlling and recording cash disbursements, which provided management with accurate and timely reports on spending.

According to (Waweru, 2010), the origin of managerial accounting is seen from two perspectives: 1) the economic perspective, supported by authors (Chandler, 1977); (Johnson & Kaplan, 1987); (Kaplan, 1984); (Atkinson et al., 2012) and; 2) the non-economic perspective, supported by (Hoskin & Macve, 1988); (Hacking, 1990). Proponents of economic approach argue that management accounting practices have come from the private sector to support business operations. According to (Atkinson et al., 2012) at the end of the nineteenth century, Andrew Carnegie, in his steel company, developed detailed systems to record the cost of material and work. Carnegie intensively studied cost behavior, and on the basis of information from cost systems, constantly reduced the costs at his factories, and at the same time, the sectors that were unpleasant enough to close. Carnegie took advantage of his cost advantage by lowering his prices to levels that competitors could not match. Thus, Carnegie's excellent cost systems gave him a viable competitive advantage in the market and boosted the growth and success of his company. Innovative companies in management accounting practice are termed DuPont, General Motors and General Electric (Caplan, 2006). The DuPont Corporation (1903), and the corporate reorganization of General Motors (1920), brought innovations in the field of managerial accounting, including the use of ROI for performance appraisal (Kaplan, 1984).

According to (Waweru, 2010), the non-economic perspective, supported by (Hoskin & Macve, 1988); (Hacking, 2015), emphasizes that management accounting practices have been developed for disciplinary purposes and academic rating and are not intended to support business as posited by proponents of economic approach. In the nineteenth and early twentieth centuries, control by measuring individual performance and analyzing it in accordance with norms or standards was developed in government institutions such as the military.

(Loft, 1995), distinguishes five different approaches that analyze the evolution of managerial accounting: (1) traditional, (2) neoclassical, (3) Johnson-Kaplan, (4) work process and (5) Marxist:

Traditional Approach – Supporters of the Traditional Approach argue that continued development is one of the key accounting features and improving the methods used is the factor that it determines the current management accounting status. This approach has a mechanical orientation, also known as closed, descriptive, rationalist, functionalist, apolitical, ahistorical, and reductive and positivist system (Puxty, 1993).

Neoclassical Approach - The Neoclassical Approach agrees with the fundamental principles of the traditional viewpoint, but with an emphasis on historical analysis. This approach is known for inactive observation of accounting methods that help companies achieve their goals. Except (Loft, 1995) also by some authors such as: (Neimark, M. & Tinker, 1986); (Kelly & Partt, 1992); (Puxty, 1993), the origin of accounting management is based on the neoclassical approach.

Johnson-Kaplan Approach - According to the Johnson-Kaplan approach, management accounting has lost its importance because the methods used in the 1980s were developed before 1925. This approach encourages the opinion that traditional management accounting does not provide proper management information (Johnson & Kaplan, 1987).

Marxist Approach – The Marxist Approach argues that the accounting system is a practical mechanism that helps the company's management to save every day work and resources to create additional economic value (Hopper & Armstrong, 1991). Management accounting development is considered to be a tool that appropriately distributes income and wealth among social classes.

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Whereas, The International Accounting Federation (IFAC, 1998) has described the evolution of managerial accounting through four phases, as can be seen in the Figure 2:

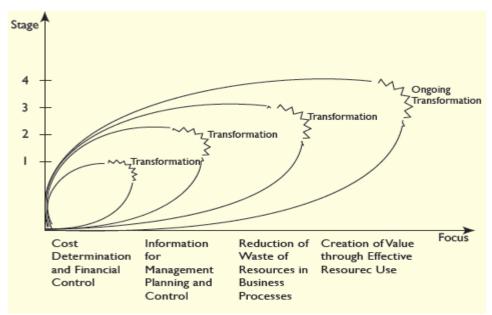


Figure. 2. Evolution of managerial accounting. Source: (IFAC, 1998)

The first stage (prior to 1950), cost determination and financial control - at this stage the development of managerial accounting according to (IFAC, 1998) was oriented to determining costs and financial control of business processes. IFAC describes this period of Management accounting as "the technical activity needed to achieve organizational objectives". (Abdel Kader & Luther, 2006) Managerial accounting before the 1950s was mainly focused on determining the cost of the product. Production technology was relatively simple, with products passing through a number of distinct processes (Lamani, 2009). Societies produced relatively homogeneous products that consumed the same amount of resources and identifying the cost of work and material was easy and the processes were driven by the speed of manual operations.

The second stage (1950-1965), information for management planning and control - in the 1950s and 1965s the main focus of managerial accounting was to provide information on planning and control issues. This phase is characterized by the use of traditional accounting management techniques that support decision making and responsibility accounting. (Sunarni, 2014), management accounting techniques such as: Standard Costs and Profitability Analysis Analyzes have been introduced during this period. According to IFAC, the second phase is described as "management activity, but in the role of staff". ¹Management during this period was focused and paid more attention to the company's production process and internal analysis than to the strategy and external business environment (Gliaubicas, 2012); (Abdel Kader & Luther, 2006).

The third stage (1965 - 1985), reduction of waste of resources in business processes - this phase focuses on reducing the waste of resources used in the production process by eliminating "no-value activities" ²(Sunarni, 2014). According to (Gliaubicas, 2012), during this period, Japan's economic progress (Abdel Kader & Luther, 2006), the overwhelming technological developments, contributed to the growth of global competition. The priority for the companies was to adapt to the new business environment. Companies began to seek both cost reduction and quality improvement at the same time. The use of robotics and computer-controlled processes enabled companies to improve their quality and in many cases impact on cost reduction.

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¹Involving of staff in support of the first line manager through the use of technologies such as: decision making and responsibility accounting (Kader & Luther, 2006).

² Seven sources of losses in the production environment: Reception; Product change and non-change of processes; defects; excessive movements (the inadequate job position); transport; over Products, excess Inventory.

Fourth Stage (1985-2000), creation of value through effective resource use - during this period, technological innovations were at the forefront, competition was intensified, companies, as they were faced with major business uncertainties, and thus made them focus on value creation through effective use of resources, which according to (IFAC, 1998), could be achieved "with the use of technology that drives companies to create costumer value, shareholder value, and organizational innovations". (Sunarni, 2014), the managerial accounting techniques that dominated this period are: Activity-based Cost (ABC); Production just in time (JIT); Target cost; balanced scorecard; Value chain analysis and strategic management accounting.

The distinction between Phase 2, Phase 3 and Phase 4 is the focus shift from providing information to resource management in the form of loss reduction (Phase3) and value creation (Phase 4). The focus on providing information in Phase 2, however, does not disappear, but is refreshed in Phases 3 and 4. Information becomes a resource, along with other organizational resources. Management Accounting in Phase 3 and 4 is seen as, "An integral part of the management process because timely information is directly attributed to management and the distinction between staff and management of the first line becomes invisible" (IFAC, 1998). The use of resources to create value today is an essential part of the management process in contemporary organizations (Abdel Kader & Luther, 2006).

The results of the evolution of management accounting are seen with the development of management accounting techniques and methods. According to (Gliaubicas, 2012), all managerial accounting methods and techniques that have been developed in the United States, Great Britain, and Japan present a common picture of management accounting evolution.

Table 5. Results of Management Accounting Evolution

Stage Techniques	Cost determination and financial control	Information for management planning and control	Reduction of waste of resources in business processes	Creation of value through effective resource use
Techniques	1760-1950	1950-1965	1965-1985	1985 – until now
	Standard Cost Accounting	Double standard cost accounting		
Determination of	Direct cost accounting			
costs and	Records of cost accounting			
accounting	Allocation of indirect	M : 1	A circulation	
	Uniform cost accounting Absorption cost	Marginal cost accounting Target cost accounting	Activity based accounting Activity based management	
	accounting		retivity based management	
Planning	Budgeting	Discounted cash flow		
		Transfer costing		
Control	Budgeting control	Responsibility accounting		
	Return on investments (ROI); Ton-mile ratio	Gentani system	Constant improvement method	
	Variance analysis	Kaizen system	Just in time system	
			Life cycling costing	Value chain analysis Five forces model
Strategic Analysis				PEST, SWOT analysis Customer profitability and
				Competitors analysis Balanced scorecard

Source: (Gliaubicas, 2012)



Table 6. Characteristics of Management Accounting Practices in Four Stages of Evolution

Description Stage	Stage 1: Cost Determination and Financial Control	Stage 2: Provision of Information for Management Planning & Control	Stage 3: Reduction of Waste in Business Resources	Stage 4: Creation of Value Through Effective Resources Use
Representative period	1760-1950	1950-1965	1965-1985	1985 – until now
Where positioned in organization:	Similar to company secretarial	A 'staff' management activity	Management accounting an integral part of management 'owned' by all managers as the distinction between 'staff' and 'line' management becomes blurred.	
Role:	A necessary technical activity in 'running' an organization.	Providing info to support 'line' management's operations.	Managing resources (including information) to 'directly' Enhance profits by bearing down on inputs.	Directly enhance outputs and add value through the strategy of 'leveraging' resources (Especially information).
Main Focus:	Cost determination & Controlling expenditure.	Information for management Planning, control and decision making. Including basic model building	Reduction of waste/loss in business resources through process analysis and cost Management technologies.	Creation of value through using resources effectively to drive customer value, shareholder value, and Innovation.

Source: (Kamal, 2015);

Each stage involves methods and managerial accounting techniques that meet company management requirements such as planning, control, cost analysis and strategy. The information focus in the first phase is further developed and used in other phases.

According to (Berisha, 2017), "these techniques are vital for long-term success. Prevailing in the short term is not the only success criteria firms should try to succeed in the long term by strengthening relationships with customers".

Table. 7. Classification of some of the traditional and contemporary accounting management techniques

Traditional Techniques	Contemporary Techniques
	Activity based costing (ABC)
Financial statement analysis	Target Cost
Cash Flow analysis	Just in time
Marginal Costing	Total Quality Management
Absorption Costing	Theory of Constraints
Standard Costing	Value chain analysis
Opportunity Cost	Benchmarking
Budgeting	SWOT analysis
Cost-volume-profit (CVP) analysis	Balanced scorecard
	Continuous Improvement

Source: Authors' presentation adopted by: (Kamal, 2015); (Gliaubicas, 2012)



Table 8. Classification of management accounting techniques based on the activities being used.

The management accounting techniques commonly	
used to make operational decisions within a firm are:	Time driven ABC
	Activity based costing (ABC)
	3. Overhead allocation
	4. Integrated cost and financial
	accounts Throughput accounting
	= -
	5. Variable or marginal costing
	6. Variance analysis
	7. Standard costing
	8. Kaizen costing
	9. Life cycle costing
	10. Target costing
	11. Quality costing
	12. Full (absorption) costing
	13. Costing for jobs, batches,
	processes or contracts
Management accounting techniques used to make	Cost-plus pricing
district pricing decisions:	Market sensitive pricing
	3. Segmental pricing
	4. Price Skimming
	<u> </u>
	5. Penetration Pricing
	6. Transfer pricing between BU
The budget techniques used in making decisions are :	Beyond budgeting
	Priority based budgeting
	Activity based budgeting
	Rolling forecasts
	Cash forecasts
	6. Zero based budgets
	7. Incremental budgeting
	8. Financial year forecasts
Management accounting techniques for profitability	Product/Service profitability
analysis:	analysis
	2. Customer profitability analysis
	3. Relevant costing for decisions
	4. Breakeven (CVP) analysis
	5. Economic value to customer
Management accounting techniques for making	Post completion audits
investment decisions:	2. Real options
	3. CAPM (beta analysis)
	4. Sensitivity analysis
	5. Non-financial issues
	6. Net present value
	7. Internal rate of return
	8. Accounting rate of return
	9. Discounted payback
Management accounting technique for making	1. Theory of constraints
operational decisions:	2. Linear programming
1	3. Learning curves
	4. Benchmarking
	5. Decision tree analysis
	6. Customer relationship
	7. Value chain analysis
	8. Total quality management
	o. Total quality munugement



Management accounting techniques for performance	1.	Balanced scorecard
measurement:	2.	Business process re-
		engineering
	3.	Activity based management
	4.	Total performance scorecard
	5.	Value based management
	6.	Six sigma
	7.	Value mapping
	8.	Performance prism

Source: Authors' presentation adopted by: (Kovachev & Ross, 2009)

4. RESEARCH METHODS AND HYPOTHESES

4.1. Research Methodology

This research is based on primary and secondary data. The data are provided through references from extensive literature. Primary data are provided through a questionnaire, which was designed in accordance with the elements of the problem discussed in this paper (Respondents were asked to rank their responses on the Likert scale from 1 to 5 - the level of compliance with the assertions made, where 5 represents full compliance) (Gliem & Gliem, 2003). The literature review is mainly done in two ways: 1) browsing numerous books and scientific journals; 2) Online research has been used for relevant references such as research of various electronic journals and magazines, from research databases such as Web of Science, EBSCO, JSTOR and EMERALD.

Hypothesis:

Over the last decade or so, academics and accounting scholars in many countries around the world have been interested in the nature and practice of managerial accounting techniques. This interest was initially driven by the perceived gap between the theory and practice of managerial accounting, and many scholars concentrated on the fact that the theoretical aspects of accounting discussed in books were not widely used in practice (Cooper and Scapens, 1983). Therefore, the purpose of this study is to identify the accounting techniques most commonly used in Kosovo and how the extent of compliance by Kosovan firm's managers impacts the firms' effectiveness.

H0: Managerial Accounting techniques do not influence the firms' decision making

H1: Managerial Accounting techniques influence the firms' decision making

Characteristics of respondents and research results

A total sample of 16 respondents participated in the survey. In the questionnaire sent to managers of Kosovar firms, the characteristics of the respondents were as follows:

Table 9. Demographic Dissemination of Respondents

Variables	Categories	Absolute Frequencies	Frequencies in %
		Frequencies	
	High School	0	0 %
Qualification	Bachelor	4	25 %
	Master	12	75 %
Position	Financial Manager	13	81.3 %
	General Manager	3	18.8 %

Source: Author's field research

Based on the data obtained from the first part of the questionnaire, it can be seen that 25% or 4 respondents have completed the Bachelor level, while 75% or 12 respondents have completed the Master level. Among the respondents 81% are financial managers, and 18.8% are in the position of general manager in their firm.



In the assertion that "Use of accounting techniques helps management in making efficient decisions" 48% of respondents answered affirmatively with full agreement, 46% agreed to a lesser degree, and 6% have been neutral, and none of the respondents has been involved this statement.

Rate of use of accounting techniques

In the context of identifying the use of accounting techniques by Kosovar firms, a list of accounting techniques was provided to respondents, who were then asked to specify with a check, all the techniques they use in their firm. The responses are summarized in tabular form as shown in the table below:

Table 10. Presents the managerial accounting techniques used by Kosovar firms

Managerial Accounting Techniques	Frequencies in %	Absolute Frequencies
Financial statement analysis	100%	16
Cash Flow analysis	100%	16
Value chain analysis	93.8	15
Marginal Costing	87.50%	14
Budgeting	87.50%	14
Absorption Costing	81.30%	13
Standard Costing	56.30%	9
SWOT Analysis	50.00%	8
Activity based costing	50.00%	8
Cost-volume-profit (CVP) analysis	43.80%	7
Total Quality Management	25.00%	4
Opportunity Cost	6.30%	1
Target Costo	0	0
Just in time	0	0
Reingenering Proces	0	0
Constrain Theory	0	0
Balnced scorecard	0	0
Continuous Improvement	0	0

Source: Author's field research

The table shows the extent of the use of different accounting techniques by the 16 firms surveyed. In all of these firms, Kosovo is clearly seen to be more oriented towards the use of traditional accounting techniques such as the financial statement analysis and cash flow analysis (used by 100% of all firms), budget control and marginal cost techniques (87.5%), absorbing costs (81.3%), standard costs (56.3%), SWOT analysis and Activity Based Costs (50%), Financial Asset Analysis and Cost-to-Volume Analysis (43.8%). From the table it is seen that contemporary accounting techniques are used by a few Kosovar firms or are almost unused at all.

Accounting techniques for making efficient decisions

To assess the impact of applying accounting techniques in decision making, the fourth table presents the results of the questionnaire. By means of the results of this questionnaire, it can be concluded that applying accounting techniques helps management in choosing the best decision-making alternatives financial management, marketing, production, and other areas of business. It also helps the firm in cost management, thereby improving product quality, and helps management identify unnecessary costs in production to achieve lower cost performance and efficiency, all leading to value-maximizing activities within the firm. The arithmetic average of respondents' responses in this category reached 4.45, which is closer to the fifth alternative 'completely agree', while the standard deviation is 0.60.



Tabela 11. Accounting techniques for making efficient decisions

Paragraph	Mean	Standard deviation
Applying accounting techniques helps management in choosing the best		
decision-making alternatives.	4.69	0.60
Applying accounting techniques helps management make financial decisions, marketing, manufacturing, and other business areas.		0.63
	4.56	
Applying accounting techniques helps the firm manage costs and improve product quality.	4.44	0.51
Applying accounting techniques leads to maximizing the value of the firm's activities.	4.31	0.70
Applying accounting techniques helps management to identify unnecessary costs in production and achieve lower cost performance and higher efficiency.		
	4.25	0.58
Total	4.45	0.60

Source: Author's field research

5. TESTING HYPOTHESES

In this scientific research - hypothesis testing results are reported using the algebraic average metric method and absolute variation indicators, using sumif & countif tools. The objective of this research is to empirically test how accounting techniques help managers in Kosovo firms make effective decisions.

Based on the results obtained in Table 11, the use of accounting techniques helps to make efficient decisions, the presented results are: the overall average is 4.45 the standard deviation 0.60 leading to a positive result of the determinant factor for this research. Based on these coefficients it is accepted as scientifically verified hypothesis 1.

H1: Managerial Accounting techniques influence the firms' decision making

According to this research and the achievement of the main objective we conclude that the most accepted factor of respondents is that the application of accounting techniques helps management in choosing the best decision-making options with 4.69.

6. CONCLUSIONS AND RECOMENDATIONS

During the 1990's, management accounting had fallen under the criticism that its practices during the period 1950-1990 did not effectively serve management needs. The year 1990 is considered as a time in which management accounting practices experienced some significant. In the latter part of the 20th century, management accounting practices have progressed a great deal in order to withstand the radical changes in the business environment. Many field experts advise that management accounting should be adapted to changes and business environment requirements. For this reason, many advanced managerial accounting techniques have emerged to accommodate the rapid and dynamic changes in the business environment. Contemporary management accounting techniques are being used to cope with complex situations, although in most developing countries this can still be considered an inalienable need for the following period, since the level of economic development, even trade, does not provide adequate space to make the use of advanced management accounting techniques successfully and accurately, according to contemporary approaches to a more visible success.

Management accounting provides tools / techniques to support all processes in the enterprise. For each decision, there is a management accounting tool or technique that can be used to make better decisions. Management accounting methods and techniques are used to provide relevant information. However, managerial accounting techniques can only be used if considered successful in providing the information required for efficient decision-making.



The result of the analysis of accounting techniques shows that traditional accounting techniques dominate in Kosovo manufacturing firms. It is also asserted by managers that accounting techniques are of great importance for efficient decision. The use of accounting techniques is very important, even indispensable, in making the right decisions.

Management accounting in Kosovo needs to change the system, and become more strategic than administrative and operational. The result shows that managerial accounting in Kosovo is more focused on the traditional system. In order to increase the quality of accounting information, the use of modern advanced accounting techniques should be promoted. Several factors that influence the postponement of these changes include technology and demand for more qualitative information. Accounting techniques should be employed more robustly because firms that don't utilize these techniques will be disadvantaged with respect to better decision making.

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