

## COMPUTER-ASSISTED ACCOUNTING

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**ABSTRACT:** *What is computer-assisted accounting? Where is the place and what is the role of the computer in the financial-accounting activity? What is the position and importance of the computer in the accountant's activity? All these are questions that require scientific research in order to find the answers. The paper approaches the issue of the support granted to the accountant to organize and manage the accounting activity by the computer. Starting from the notions of accounting and computer, the concept of computer-assisted accounting is introduced, it has a general character and it refers to the accounting performed with the help of the computer or using the computer to automate the procedures performed by the person who is doing the accounting activity; this is a concept used to define the computer applications of the accounting activity. The arguments regarding the use of the computer to assist accounting targets the accounting informatization, the automating of the financial-accounting activities and the endowment with modern technology of the contemporary accounting.*

**KEY WORDS:** *accounting, accountant, informatization, computing, automation, computer applications*

### 1. INTRODUCTION

The computer is currently used in many areas and every day it gains ground by breaking in other fields or subfields in order to prove its helping ability and the offered advantages. Computers are more efficient than people in the areas where there is a large volume of calculus because of the speed and the precision this calculus is done. In accounting computer is very useful, because with its help can be achieved much faster different calculations and results may be obtained in an acceptable format. Dulu (2006) says the following: computer-based accounting can be done to a company in a few days, while a man does the same accounting in a few weeks. Thus, the computer was transformed in an indispensable instrument for the daily activity of the contemporary individual. Popovici and Scheau (2005) tell us that today only Nobody

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can doubt the computer's usefulness, its capacity to speed the solving of problems, to ease the work of man and to facilitate the human relationships.

The invention of the computer has determined a powerful change in all the social life, with society stepping on a new path: the path of informatization, entering the age of informatization. At first, in most units the computers were used for three types of works: general accounting, collecting-disbursing bills and personnel remuneration, three areas with specific features, fostering the automation through: an important volume of procedures of the same type, with a repetitive character and a feature to lay-out the specific tasks. The informatization of the enterprises started in the 1960's with billing and payments, continuing with accounting.

The strong economic rise of the western economies involved a large work volume in the big enterprises. Because the growing number of employees and the purchasing of mechanical-graphical equipments (machines that preceded computers and that allowed billing and keeping the books through calculus of the data, but they weren't programmable or parametric) didn't prove efficient, Bocksbaum (2002) said that the only solution to solve the problem was the computer, regardless of its cost.

Going from manual labour to automatic labour by using the computer was fundamental. In a French food company, the accounting department reduced its personnel from 150 people to 5 people between 1965 and 1980; the management of the organization became aware of the computer's importance and placed the informatics department above the administrative departments.

For a long period of time the improvement of the payment, billing and accounting information instruments was the priority, the computer entered the territory of other functions only later and in a progressive manner (text processing started only in the beginning of the 1980's). The transition was made from the accounting done completely by hand to an informatized accounting. The computerization of accounting occurred. In the dictionary (DEX, 1998) to computerize means to process with the help of the computer; to introduce the computer in various areas of activity.

## **2. PRESENTING THE CONCEPT. DISCUSSIONS**

Before approaching the concept of computer-assisted accounting, we will discuss about the terms of computer and accounting.

According to the dictionary, the term of calculator (electronic) is synonym with digital computer, namely computer, the digital computer being defined as follows: universal digital computer, consisting of a variable number of units specialized and commanded by the same recorded program, which allows the performance of arithmetical and logical operations without the human intervention, and solves problems of scientific calculus and of management for the commercial or industrial enterprises.

For Oprean et al. (2007), an electronic calculator is a set of integrated circuits that can ensure the satisfaction of the informing demands at superior technical and qualitative parameters by connecting it to power energy and by programming it.

The computer dictionary (Microsoft Press, 1997) sees the computer as any type of machine capable to achieve three things: to accept structured entries, to process according to the pre-established rules and to supply the results as exists.

Another dictionary (for computers, 1994) defines it as equipment for the systematic processing of the signs and series of signs based on algorithms. The authors of this paper assess that the name of “calculator” is not adequate, because it only renders one of its use possibilities, meaning the calculus of complicated operations with big numbers in a short period of time (with an high processing speed). Looking from an abstract angle, the computer represents a universal machine that stimulates all the specialized machines. In practice, the specialized machines are represented with the help of the programs and the computer represents the machine at the time of the execution.

According to the dictionary, accounting is explained as the set of recording operations based on special norms and rules, of the movements of funds and materials in an institution, reflecting its practical side. On the other hand, accounting is the science that manages the theory of these operations, emphasizing the conceptual side.

Accounting is defined by Meigs et. al (1996) in a simple manner as being the mean through which we measure and describe the results of the economic activities.

Another congregate of authors (Economy dictionary, 1999) considers accounting a field and a knowledge instrument of the economic reality, regarding the economic resources separated in a patrimonial manner.

As a specialized activity in measuring, assessing, knowing, managing and controlling the assets, debts, and equity capitals, as well as the obtained results, according to the Accounting Law no. 82/1991 (2008), accounting must ensure the chronological and systematic recording, processing, publishing and keeping of the information regarding the financial position, the financial performance and the treasury flows for their internal demands and for the relationships with the current and potential investors, financial and commercial creditors, clients, public institutions and other users.

According to article 1 in the Accounting Law no. 82/1991, republished, the business enterprises, the national enterprises/companies, the autonomous administration, the national research-development institutes, the cooperative businesses and other corporate bodies have the obligation to organize and manage their own accounting, namely the financial accounting, according to the mentioned normative document, as well as the management accounting adapted to the specific of the activity.

Public institutions, associations and other corporate bodies with or without patrimonial purpose, as well as the corporate bodies that run activities resulting in incomes, have the obligation to organize and manage their own accounting, namely the financial accounting and, if needed, the management accounting. The subunits without legal personality, with business offices abroad, which belong to the mentioned entities that have headquarters in Romania, as well as the subunits without legal personality that are in Romania and belong to units abroad have the obligation to organize and manage their own accounting.

From the point of view of the used instruments, the management of the accounting in any patrimonial entity is done through two methods: either manually, using a paper and a pen, or with the help of the computer, where filling the documents and processing the accounting data is done with the help of the informational equipments, therefore the accounting is automatic. Currently, accounting is done in a manual or an automatic manner, but the tendency is to give up the pen used to fill the documents because of the substantial contribution of the computer in the financial-accounting field, through the indisputable advantages it brings.

We have seen what accounting does and what a computer is. But what is computer-assisted accounting?

The definition in the dictionary (DEX, 1998) writes that to assist means to be at the site, to take a part (in...), to stand by somebody in order to help him, to defend him, etc. In our case, it is about accounting and the computer, namely the practical activity run by the person responsible about it: the accountant; and an ingenious machine that automates this activity and gives support for an easier achievement of the objectives and tasks of this science.

In our opinion, computer-assisted accounting is a term with a general character; it refers to the accounting kept with the help of the computer or to the use of the computer to automate the operations in the activity of the person in charge of accounting, the accountant; it is a concept used to define the computer applications in the accounting activity. It's about a calculus system (electronic calculator) which is used for the partial or full management of accounting. The computer-assisted accounting systems are interactive and serve to keep the financial books and are represented by general programs (office packages), but also by special programs (packages with economic programs, with an accounting application) and the information application can be simple, such as the cash order application, but it can also be complex.

In general (Ban et. al, 1994), the application is a program or a set of programs that uses the operating system and manipulates files of data, allowing the user to solve a certain problem. It can be a program for text processing, for tabular calculus or graphical presentations, and the software applications designates the general term regarding all the programs that are not part of the operating system. With the help of these programs, the user can solve his problems. According to Ursăcescu (2002), the information application represents a correlated set of software programs, which works to automate the processing operations of the information in a certain area.

At its base are two essential features:

- an applicability area, which is defined structurally (a service, a department) and functionally (the management of the materials, of the clients, the costs' calculus, etc.);
- a certain number of functionalities (general, specific), meaning a set of tasks to be executed (manually, automatically, mixed) within an area.

The informatization of the financial-accounting activities in an organization needs to revise the organization method of the system, so that the necessary environment for the transition from the manual approach to the automatic approach of the data, by benefiting from the opportunities of the calculus systems. Through

informatization, accounting is on a road with no return. Today nobody conceives managing the accounting of any unit without using the financial-accounting information applications and other programs meant to provide a modern technical support to this science.

### 3. CONCLUSIONS

Accounting, as an applied science, implies its organization and management for all the corporate bodies, who, according to the law, must run it. At the present time, the accounting management of the patrimonial units has become dependent on the computer, the electronic calculator is assisting the practical accounting and the accountants step by step, from entering the data about the economic-financial operations, which determine changes in the patrimony of that unit, to the drawing-up of the synthesis documents, from the opening to the closing of the accounting cycle, from the start till the end of the financial exercise, from the founding of the unit to the ceasing of its activity.

The informatization of accounting doesn't mean that the financial books are monopolized by the computer. We must understand that organizing and managing the accounting activity requires a series of tasks, and they can be accomplished in different ways, among which is the use of the computer. Currently, the computer has become a component of running the entire accounting cycle, used by economists-accountants as a result of its superior outcomes in comparison to the classic method.

Pântea (1998) thinks that in the present conditions, with all the progress made in the area of computers, the economy of a country can't spare accounting; it remains the most exact form of keeping the financial books. Pântea says the following: until now, nor is foreseen in the close future, another mean to replace accounting at the level of the economic agents was not found. Only accounting can provide precise information for the decisions of the manager. He must have this "control panel" with multiple dials that represents modern accounting.

We agree and we don't challenge the place and the role held by accounting in the economic life, regardless of the level we refer to: government, patrimonial units, etc. But just as indisputable are the place and the role held by the computer in the modern society, in accounting and in the work of the accountant. The computer makes the life of the accountant easier. We believe that a modern accounting is the only one that fulfils its tasks by using modern instruments, information equipments, among which the central position is held by the electronic calculator.

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