

EDUCATIONAL APPROACH TO ACCOUNTING INFORMATIONAL SYSTEM AND BUSINESS ORGANIZATIONS

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Abstract:

In my report I define different approaches to Accounting Information Systems and Business Organizations. Today's professional accountants perform in a world that is dynamic and complex. Progress in information technology is being made at an increasing rate. Patterns of organizational behaviour are evolving rapidly. Economic and legal considerations are having a much greater impact upon the work of accountants. All of these environmental trends require the accounting student of today to be better prepared than ever before to enter the accounting profession. A central feature of accounting work in today's business world is the interaction of accounting professionals with information systems. As the major users of information systems in organizations, accountants must participate in their design and understand their operations. Accounting managers must measure and evaluate the performance of informational systems. Internal and external auditors must assess the quality of information output. The major share of the work of accounting consultants is in the design, implementation, and evaluation of information systems. In the first part of the report I present conceptual foundations of accounting information systems and their involvement in different business organizations. The records management, file processing and permanent control are significant part of accounting information system. In second part I introduce different learning systems, developed and prepared for expert candidates to pass the Certified Internal Auditor (CIA) exam. This designation is the only globally accepted for internal auditors and is the standard by which internal audit professionals demonstrate their knowledge and competence to facilitate and manage their responsibilities.

Keywords: accounting code, accounting principles, accounting standards, expert auditor.

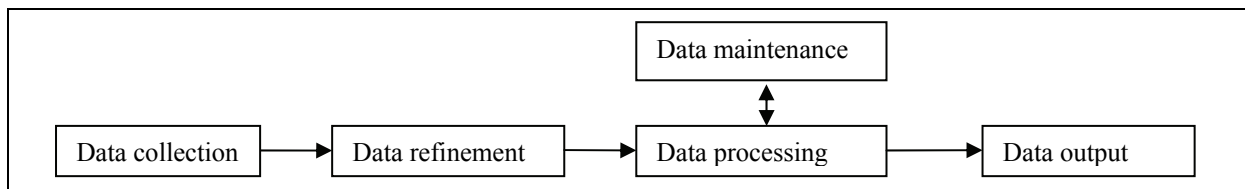
1. AN OVERVIEW TO ACCOUNTING INFORMATIONAL SYSTEMS

Accounting is an information system that accumulates records, classifies, summarizes, and reports commercial transactions with the aim of showing the financial condition of the business entity. This information, in the form of financial statements, is then communicated to those who make decisions concerning the operations of the enterprise (Minars, 1992, p. 1).

The main activity of informational system is transformation collected facts into information (Hoogheid, 1988, p. 13).

This general definition relate to all processes needed to be done in the successful organisation. It includes procurement process, production and service activities and also ensuring human resources necessary to fulfil business activities. The use of production elements causes costs which are necessary to be covered with revenues. Analysing that topics we are interdependent to the market principles and with depends of economics in activities. The organisation is confronted between costs of production and incomes or earnings.

Picture 1: The data processing cycle



Source: Barry E. Cushing, Accounting Information Systems and Business organizations, 1982, page. 12.

In every business arise a lot of different facts we collect with intention to put them in order. The first step of procedure known as a transformation process is data collection. The maintenances data refinement and data processing are the next stage that leads to data output. In transformation process the unarranged facts of operation activities change into orientated information as a final product or as a data output. Technique consist of systematic collection sifted facts into useful information. Those actions known as administration activities are part of business management. Information has three functions: as a mean of transformation, as a mean to administer and as a mean to manufacture.

Accounting information is essential to the efficient management of economic affairs. Within a business organization, accounting information is produced by a system with many elements. These elements include journals, ledgers, and other records, as well as the people who carry out the procedures necessary to the operation of the system. Knowledge of accounting is not complete without an understanding of accounting information systems. There are three questions to be taken in observation when we are discussing about accounting information systems, as how to account, how to report and how to audit the information (Cushing, 1982, p. 2).

The information used by accountants, managers, auditors requires a close involvement with the information system, nowadays based on contemporary computer based technology.

2. ADMINISTRATION AND ACCOUNTING

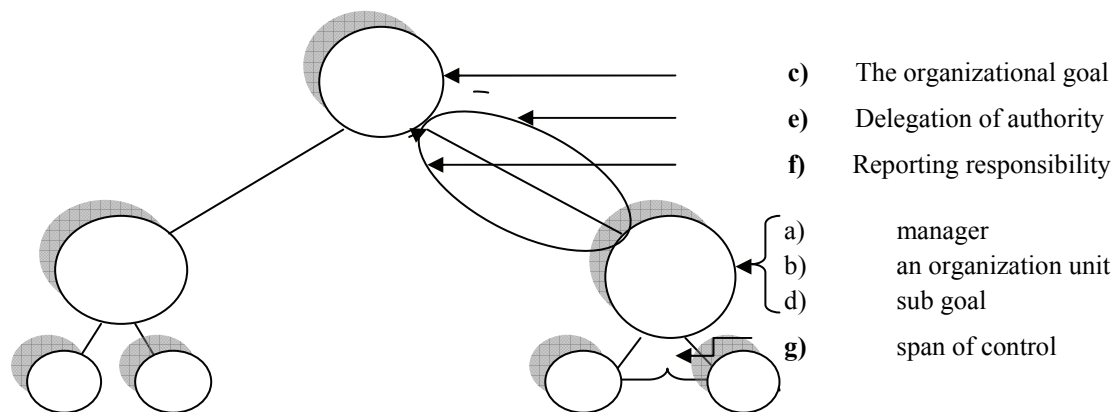
The application of both terms is often wrong used as synonym. Accountancy processes financial data evaluated on a monetary basis in four accounting proceedings. They consist of bookkeeping, accounting estimation, accounting analyse and accounting control.¹

The method is regulated by accounting standards. International Financial Reporting Standards had been adopted in the EU and introduced in to Slovenian Accounting Standards (SAS).²

2.1. Organization and Accounting Information System

The basic contribution of activities in Accounting Information System lies in providing management which sheds light on the issues and impacts of alternative decision choices referring product line information on costs of production, the cost of obtaining and holding resources but also the probable sales volume of various products in deciding for specific production line. Goals of activities are in conflict between profit maximization and societal goals, salaries for example. The typical business organization has three major subdivisions-marketing, production and administration. Accounting system is involved in budgeting, in reporting on actual expenditures, and in data processing of revenues and expenditures. Accounting information system is data processor and information supplier.

Picture 2: An organizational hierarchy



Source: Cushing, 1990, p. 18.

2.2. Accounting Information Processing: Elements and Procedures

Accounting Information Processing is concerned about more elements, budgeting, reporting and data processing. Between those elements must be restored permanent span of control.

The two principles are flexible budgeting and controllability of costs. Flexible budgeting should be incorporated into financial performance reports. The principle of controllability provides that manager's financial performance report should only include elements of costs and revenue over which the manager has some control.³

¹ (Slovene accounting standards (SAS) (SAS No 20, SAS No 23, SAS No 28, SAS No 29).

² (KPMG Slovenia limited liability company and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative (KPMG International), a Swiss entity. 2010, All rights reserved.

³ (Cushing, Eric L. Denna: Accounting Information Systems and Business Organizations, 1990, Addison-Wesley Publishing company, Inc, p. 20.

Duties and responsibilities associated with the controllership position include (Cushing, 1990, p. 27):

- Accounting for planning and control, including interpretation of results.
- General accounting.
- Cost accounting.
- Internal and external reporting.
- Tax administration and government reporting.
- Establishment and maintenance of accounting information system, including internal control.

2.3. Chart of Accounts

A chart of accounts (COA) is a created list of the accounts used by a business entity to define each class of items for which money or the equivalent is spent or received. It is used to organize the finances of the entity and to segregate expenditures, revenue, assets and liabilities in order to give interested parties a better understanding of the financial health of the entity. The list is typically arranged in the order of the customary appearance of accounts in the financial statements, balance sheet accounts followed by profit and loss accounts (Wikipedia, The free encyclopedia).

A list of the benefits of a chart of accounts might include the following (Cushing, 1990, p. 32):

- Simplifies the processing of accounting data.
- Facilitates the preparation of balance sheets, income statements, and other financial summary reports.
- Enables classification of data into many levels of detail for specific reports by department, by project, by item, etc.
- Improves the efficiency and profitability of an organization's management through the improved quality and timeliness of financial reports.

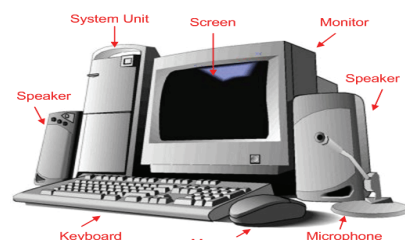
Costs of a chart of account include initial development of the chart, expansion and refinement.

2.4. Computer Hardware, Software Concepts, Data Communication and Data Base

Computer hardware is the collection of physical elements that comprise a computer system. Computer hardware encompasses the physical interconnections and devices required to store and execute the software.

Computer software is a collection of computer programs and related data that provides the instructions for telling a computer what to do and how to do it. Software refers to one or more computer programs and data held in the storage of the computer for some purposes. In other words, software is a set of programs, procedures, algorithms and its documentation concerned with the operation of a data processing system.⁴

Picture 3: Computer



Source: Simpson, retrieved from www.coolnerds.com/

The key to reliability is the quality of the system, the control used to ensure accuracy, and the people operating the system. With respect to system controls, the accountant should be concerned with the effectiveness and efficiency of the data entry (Cushing, 1990, p. 50).

⁴ Alan Simpson, www.coolnerds.com/Newbies/.

Software concept enable the auditor can use computer to conduct parts of the audit and to process information gained during the audit. The computer can be used to access or to extract data from client database stored at remote locations. The auditor must be aware of the client's computer system in order to conduct a proper audit. The auditor must test the client's EDP controls and the client's computer programs to assure that they are operating properly (Cushing , 1990, p. 66). *lectronic Data Processing (EDP)* can refer to the use of automated methods to process commercial data. Typically, this uses relatively simple, repetitive activities to process large volumes of similar information. For example: stock updates applied to an inventory (Wikipedia, The free enciclopedia).

Data communication concerns the transmission of digital messages to devices external to the message source. They are generally accomplished through the facilities of the communication companies on leased lines, switched lines, and Wide Area Telephone Service (WATS) (Cushing, 1982, p. 262).

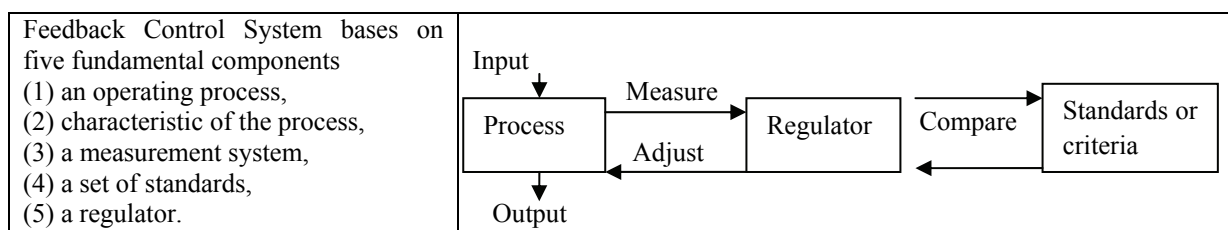
A database is an organized collection of data, today in digital form. The data are organized to model relevant aspects of reality in a way that supports processes requiring this information.

2.5. Control and Accounting Information System

Control is the process of exercising a restraining or directive influence over the activities of an object, organism, or system. Assisting management in the control of business organizations is one of the primary functions of accounting information system. Accountants often use the term internal control as a synonym for control within business organization. The term was first defined in 1949 by American Institute of certified Public Accountant (AICPA). According to AICPA, the primary concern of independent auditor is accounting controls (Cushing, 1982, p. 76).

Effective supervision may be the most important element of control because of its benefits. There are three elements in cost-benefit trade-off in implementing internal controls: Preventive element, Feedback element and Feed forward element (Cushing, 1990, p. 273).

Picture 4: A Feedback Control System



Source: Cushing: Accounting Information Systems and Business Organizations, 1982, p. 79.

2.6. Auditing of Computer-Based Information Systems

Auditing is a systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of correspondence between those assertions and established criteria and communicating the results to users (Cushing, 1982, p. 454).

The scope of the internal audit encompasses the examination and evaluation of the adequacy and effectiveness of the organization's system of internal control and the quality of performance in carrying out assigned responsibilities (Cushing, 1982, p. 455).

Auditing process may be divided in following four steps (Cushing, 1982, p. 458):

1. Planning.
2. Evidence Gathering.
3. Evidence evaluation.
4. Communication of results.

3. PROFESSIONAL COMPETENCES

I presented Accounting Information System as a specific science with the elements they contain, the ways in which they are designed, and the role they play in supplying information. In this part I present internationally based procedures of education for an expert accountant and present competence and conditions to become certified expert in accounting profession (Cushing, 1982, p. 2).

3.1. Ethical Responsibilities of Accountants

The accounting profession gains access to businesses and individual's personal financial information. When working with this financial data, the accountant maintains an ethical responsibility to act with the highest level of professionalism. The AICPA and the IMA, two professional accounting organizations, maintain a list of ethical standards for accountants (Cushing, 1982, p. 2).

Independence: Professional accountants need to maintain a level of professional independence. That means that he holds no stake in the results of the work being performed.

Confidentiality: Professional accountants need to respect the privacy of the company they work for and maintain a level of confidentiality regarding the company's financial operations and its strategies. He only should discuss the financial information of the company and with parties authorized to know that information. The only acceptance is required by law.

Competence: Professional accountants need to maintain a level of competence in the work they perform and their skill level and verify earned certification through continuing education.

Integrity: Professional accountants need to always consider which action represents the right thing to do and take that action. The right action follows all laws and regulations, adheres to accounting reporting standards and fairly represents the company's position.

3.2. Reasons for Certification

There are many reasons to obtain an official IIA certification designation. It is the hallmark designation of internal audit- the Certified Internal Auditor (CIA) and professionalism defined. Certification elevates standing in the audit community, boosting career opportunities and earning increased credibility and respect within the profession and organization. With certifications, their clients and employer know that they are motivated, knowledgeable, committed to quality, and a valuable asset to the team.

3.3. Certification Authority

The Institute of Internal Auditors (IIA) is recognized as the worldwide leader, authority, and principal educator for internal auditing professionals. Earning an IIA certification symbolizes competency, commitment to and achievement in internal auditing.

3.4. Certification Assortment by the Institute of Internal Auditors (IIA)

The IIA offers the leading certification programs that can enhance their credibility. IIA certifications set them apart from others, providing them with greater career opportunities.

- The Certified Internal Auditor (CIA)
- Certified Government Auditing Professional (CGAP),
- Certification in Control Self-Assessment (CCSA)
- Certified Financial Services Auditor (CFSA),
- Certification in Risk Management Assurance (CRMA)⁵

In resume we present the most desirable certification for the Certified Internal Auditor (CIA). The CIA designation is the only globally accepted certification for internal auditors and remains the standard by which individuals demonstrate their competency and professionalism.

3.5. CIA syllabus

The candidate must get over 75 pt to pass four parts of the exam that compass as follows:

Part 1 — The Internal Audit Activity's Role in Governance, Risk and Control

- Comply with The IIA's Attribute Standards;
- Risk and Control Knowledge Elements;
- Establish a risk-based plan to determine the priorities of the internal audit activity;
- Plan engagements;
- The nature of internal audit work in risk management, control and governance.

Part 2 — Conducting the Internal Audit Engagement

- Conduct engagements;
- Conduct specific engagements;
- Monitor engagement outcomes;
- Fraud knowledge elements;
- Engagement tools.

Part 3 — Business Analysis and Information Technology

- Business processes;
- Financial accounting and finance;
- Managerial accounting;
- Regulatory, legal, and economics;
- Information technology.

Part 4 — Business Management Skills

- Strategic management;
- Global business environments;

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- Organizational behavior;
- Management skills;
- Negotiating.

3.6. Certification Preparing Aid- The educational methods and study results verification

Pearson Education is the world's leading education company. They use the classic method of education by providing educational materials and electronic learning programmes, test vouchers and electronic testing development. Candidates are able to sit for exams at any IIA-authorized Pearson VUE testing center worldwide.⁶

The Institute of Internal Auditors uses computer aid method named The IIA' CIA Learning System with interactive print and online review program. It provides comprehensive training, turn-key implementation, customization, performance tracking and volume discounts prices to CIA candidates worldwide⁷. The IIA's CIA Learning System is premier-quality CIA review course. It was designed by the experts to teach the entire global Certified Internal Auditor four parts exam syllabus to CIA candidates looking to enhance their knowledge and skills. It combines printed textbooks and interactive study tools as online tests and study tools with optional facilitator-led courses to help candidates prepare to pass of the CIA exam.⁸

YAEGER system, introduced by Dr. Phil Yeager, CPA and founder of Yaeger CPA Review. Thanks to ore delivery options- DVD for TV or PC, USB drive or Online, by superior content quality emphasis on understanding concepts not just blind memorization. For customer friendly price they guaranty the highest quality study product at a fair price.⁹

4. DISCUSSION AND CONCLUSION

Accounting Information System involves decisions about advantageous utilization of system resources in future and requirements for hardware, personell and financial resources. The basic building block of information system planing is the project development plan (Cushing, 1982, p. 294).

The first step to scheduling the project is to determine the tasks that the project requires and the order in which they must be completed. The order may be easy to record for some tasks while difficult for others. The Program Evaluation and Review Technique, commonly abbreviated PERT, is a statistical tool, used in project management, that is designed to analyze and represent the tasks involved in completing a given project and commonly used in conjunction with the critical path method or CPM (Wikipedia, The free enciclopedia).

Both financial accounting and managerial accounting depend upon s strong information system to reliably capture and summarize business transaction data.¹⁰

⁶ About Pearson VUE Copyright © 1996-2012 Pearson Education, Inc. www.pearsonvue.com

⁷ The Institute of Internal Auditors' CIA Learning System.

⁸ www.LearnCIA.com/prepare 2010 IIA All rights reserved.

⁹ © 2012 Yaeger CPA Review

¹⁰ Larry M. Walther, Christopher J. Skousen, *The Accounting Cycle*, 2009, Ventus Publishing ApS, p. 10.

Analysing education approach in USA we realised that aim for expert certification is successfully passing examination. The use of modern information techniques their advantages are flexible solutions, effective time scheduling and motivation for additional study work.

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