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THE IMPACT OF INFORMATION TECHNOLOGY ON THE AUDITING PROFESSION: CASE OF ALBANIA

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Abstract: Recently ICT and innovative technologies have had a major role in organizational performance and have been a major factor of efficiency. Technologies help to value the reliability of accounting systems. Accounting system it-self includes hardware and software to record financial information.

Information technology systems and innovative technologies require to be in coherence with the auditing role and its function. Organizational performance is represented in our study through the ability to meet the goals set, to manage finances and to increase profit.

We conducted a literature review in the area of implementation and usage of ICT in auditing and found

Correlation between information technology and organizational performance. We designed and conducted an empirical study for a sample of 80 statutory auditors and financial staff in Albanian enterprises.

Empirical studies were conducted as a study on the field. We received 57 responses. The correlation tests were executed using SPSS 22 software. A qualitative approach through questionnaire was designed to create a database of primary data in our study. Each interview was coded after a five-degree Likert scale and worked on Pearson' correlation analysis with SPSS.

All the collected data through qualitative analysis were processed to prove statistically a correlation between the ICT and organizational performance.

Keywords: Accounting Information Systems, ICT, SPSS, Auditing, Organizational Performance.

1. INTRODUCTION

IT has affected almost any aspect of the accounting profession (Eliot, 2002). Competence in information technology is crucial for the professional accountants, due its pervasive use in the business world. (IFAC, 2001.) Information technology has been widespread in the global business environment for decades.

The structure of doing business and the new challenges have increased the level of difficulties in the mode and quality of IT adoption in most enterprises and have introduced new challenges and risks to the professional accountants (Scapens and Jazayeri, 2003.) Businesses have increased their dependence on computerized information systems such as ERPS. External auditors are being required to evaluate the reliability of computer generated data supporting financial statements and analyze specific programs and their outcomes. (Abu-Musa, 2004). As a labor-intensive industry, audits require consistent consistency timely and efficiency to increase the auditor's productivity throughout the audit process. Recent auditing tendencies enhance productivity, provide faster communication and ensure the protection of costumer data. They have put in place rules that put more pressure on auditing firms to become more efficient and willing to compete on price.

The purpose of this study is to examine the auditor's perception of the use and importance of audit technology in the Albanian audit market, internal and external auditors as well.

This study has been set based on some objectives:

- evaluate the use of knowledge and the importance of audit technology by auditors, auditor at independent firms in Albania.
- (ii) explore some of the types of audit technology tools used in the audit process,
- (iii) determine determinants influencing the use of audit technology in the auditing process and
- (iv) investigate whether the use of audit technology in auditing procedures is relevant to the characteristics of audit firms.

2. BACKGROUND

Globalization has led to the transition from industrial society to the knowledge society in which information plays a critical role. A new era with great social change has been signaled with the development and application of information technology.

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In the 1980s the price of a personal computer became more accessible from more and more people. Since then business environment has been characterized by the use of IT in enhancing business management and supporting decision making regulations.

IFAC (2001) stated that accounting profession performs many roles where IT is used. As a user of information systems, accountants must be able to clearly convey their needs to the IT professionals who design the system. They should actively participate in system development projects to ensure appropriate systems designs. When they are in the position as a designer of information systems accountants are responsible for the conceptual system which determines the nature of the information, its sources, its destination and the accounting rules that must be applied. Accountant serves also as a manager of information systems, he must be able to perform appropriate analyses of IT investments, understand IT related benefits and risks and simulate and manage organizational change. Finally, as auditor of information systems it encompasses the function of internal audit, external audit and other evaluative roles.

(Elliott and Jacobson, 1987.) outline that audit technology refers to the tools that empower an individual to perform auditing tasks. (Manson et al. 1998) stated that audit technology in history is called automation. It includes the use of computers in processes for complete planning, implementation and auditing to ensure consistent audit quality. Audit standards encourage auditors to apply IT auditing tools in the audit process such as: fraud risk assessment, identify articles and other adjustments to be checked, inventory assessment and adequacy, select sample transactions from key files, arranging transactions with specific characteristics, examine the whole population instead of sampling, have evidence of effective control, check the accuracy of electronic files and repeat the procedure as Receivables Aging ()

Chang and Hwang (2003.) questioned whether auditors are sufficiently competent and educated in college and professional training in IT. Their concern supported by Chen's 2005 study revealed that accountants' capability in performing managerial, advisory and evaluative roles of IT deployment was still an issue of great concern.

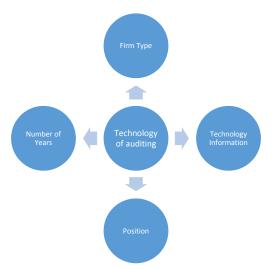
McKee's (2000) investigated IT knowledge among auditors when he did a study on Norwegian practicing auditing profession during 1998-1999. He could conclude that a large of professionals indicated either no knowledge or relatively low levels of knowledge for the 25 technologies surveyed.

The questionnaire consists of ten questions divided in four sections: (i) reasons for using audit technology in the auditing process (ii) use of IT and its importance in audit procedures, (iii) the type of technology audit tool used in the audit process (iv)limiting the use of audit technology.

Most of the answers of the questionnaire were measured by a five point Likert scale of 1 to 5, with 1 indicating "little effect" and 5 indicating "very significant".

Data Collection and research Model

In undertaking this query we sent questionnaires to the auditors and assistant auditors at independent audit firms. We focused on four relevant classification regarding:



The auditing firm convention is equal to 1 if the audit firm is a Big 4 firm and equals to 0 if other firm. Years of experience: 1 if the experience is 5 years or more, 0 if less than 5 years. Technology of information: 1 for university and postgraduate, and 0 for undergraduate. Position: 1 if the auditor, 0 if the assistant.

3. RESULTS AND DISCUSSIONS

By using **SPSS 22** we have worked primarily on a Preliminary Analysis and Descriptive Statistics and then we discussed the results of t in auditing procedures. The final section provides the result of the connection between the use of the perception of the audit technology in the audit procedures and the characteristics of the firm auditor. *Preliminary Analysis and Descriptive Statistics*

Table 1.

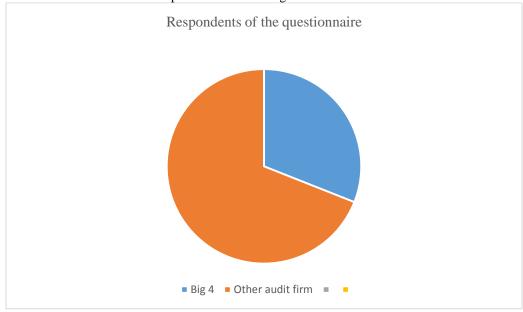
	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 5	27	47.3	47.3	47.3
From 5 to 10	13	22.8	22.8	70.1
More than 10	17	29.9	29.9	100.0
TOTAL	57	100.0	100.0	

Table 1 shows that the respondents were 47,3% experienced less than 5 years, 5 -10 years accounted for 22,8% and more than 10 years 29,9%.

Table 2. Types of Audit Firm

	Frequency	Percent	Valid Percent	Cumulative Percent
Big 4	18	31.0	31.0	31.0
Others	39	69.0	69.0	100.0
TOTAL	57	100.0	100.0	

Table 2- shows that about 31% of the respondents work in Big 4 audit firms and 69% work in other audit firms.



firms.

Table 3. IT expertise

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	College	University	After University	Independent Training	TOTAL
BIG 4	-	6	12	-	18
Others	-	21	12	6	39
TOTAL	-	27	24	6	57

Table 3 - shows that, from auditors from Big 4 audit firms 6 of them have IT knowledge from University and 12 of them have other specialization after University. And the respective numbers for auditors from other firms are 21 and 12 and 6 of them have had independent trainings.

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Table 4. Position of respondent

	Auditor	Assistant Auditor	Total
Big 4	13	5	18
Other	7	32	39
TOTAL	20	37	57

Table 4 - shows that, we had respondents from Big 4 and other and their classification was between certified auditors and assistant auditors who were currently under the professional period of taking the title of an auditor. The total of statutory auditors was 20 and the number of assistant auditor was 37.

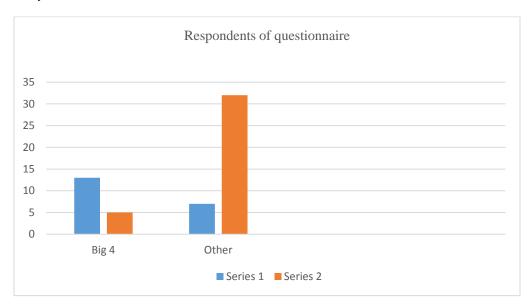


Table 5. Reasons for usage of audit technology in an audit.

ITEMS	Mean
To improve the quality of the audit	3.241
To minimize the time and cost of audit tasks	3.852
To survive in an IT-based audit environment	3.764
To gain competitive advantage over other firms	3.764
To allow auditors to operate anywhere	3.404
To better manage the audit process	3.642
To unite globally	3.504
To meet the expectations of customers	3.601
To minimize the risk of auditing	3.726
To simplify the audit process	3.852
To pay more attention to risk areas	3.811

Table 5- shows the reasons for usage of audit technology in an audit process. Most of the respondents said that the most important reason for using audit technology during the audit process is to minimize the time and cost of auditing tasks and to simplify the process, while other respondents find that the most important reason for the use of audit technology is to minimize the time and cost of auditing tasks, to simplify the audit process and pay more attention to risk areas (i.e. 3.852 and 3.811).

Table 6. Limitations of usage of audit techniques from auditors

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ITEM	Mean	
Lack of IT audit training	2.617	
Lack of knowledge / expertise on IT by auditors	3.100	
Difficulty in applying software in real situations	3.406	
The risk of losing sensitive information is stored in the computer	3.379	

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Difficult to quantify the benefits and costs of IT	3.601
Lack of enthusiasm for IT in senior auditors	3.542

Table 6 shows that the difficulties to quantify the benefits and costs of IT and Lack of enthusiasm for IT in senior auditors have a great impact. (3.601 and 3.542). Meanwhile, the lack of training in IT audit does not affect the audit process (mean = 2.617).

Table 7. Results of usage increase of audit technique

ITEM	Mean
The assessment of the partner/ manager's work was done in a timely manner	3.345
Experienced staff has more time to focus of high risk areas	3.793
The assessment of partner work has been made easier	3.662
Emphasis is put on recruiting audits with IT skills	3.590
Many audit tasks have been simplified	3.725
Job satisfaction of auditors is increased	3.789
Other IT professionals recruited by audit firms	3.798
IT auditors hold higher positions in audit firms	3.888

At Table 7, we find that auditors are aware of the importance of information technology in auditing, leading IT auditors to hold higher-level positions in auditing firms. The higher the clutch (mean = 3,888).

Table 8. Characteristics of audit firms vs. perceptions of audit technology usage

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ITEM	R2	
Accept customers	0,097	
Preparation of audits	0,565	
Audit planning	0,225	
Preparation of audit programs	0,134	
Check compliance with accounting standards and auditing	0,578	
Internal control rating	0,1	
Risk assessment	0,255	
Sample	0,355	
Fraud evaluation	0,448	
Evaluation of audit evidence	0,025	
Calculate, physical examination	0,019	
Analytical review	0,292	
Check the details	0,225	
Write a report	0,315	

Table 8 illustrate the connection between the perception of the use of audit technology in auditing procedures and the characteristics of the firm/auditor. The coefficients of interceptions are not reported.

Table 9. Characteristics of audit firms vs. determinants impacting audit technology

There is the state of the state	
ITEM	R2
To improve the quality of the audit	0,239
To minimize the time and cost of audit tasks	0,2
To survive in an IT-based audit environment	0,27

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To gain competitive advantage over other firms	0,132
Allows auditors to operate anywhere	-0,023
To better manage the audit process	0,225
To unite globally	0,277
To meet the expectations of customers	0,246
To minimize the risk of auditing	0,214
To simplify the audit process	0,248
Pay more attention to risk areas	0,252

Table 10. Consequences of audit technology usage in audit performance

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ITEM	R2
The assessment of partner/manager's work was done in a timely manner	0,19
Experienced staff has more time to focus on high risk areas	0,301
The assessment of partner / manager work has been made easier	0,129
Emphasis is put on recruiting audits with IT skills	0,282
Many audit tasks have been simplified	0,162
Job satisfaction of auditors increased	0,12
Other IT professionals recruited by audit firms	0,218
IT auditors hold higher positions in audit firms	0,264

4. CONCLUSIONS

Through the above, some conclusions can be summarized as follows:

- 1. Technology contributes in developing auditing profession, it increases the speed of audit process, reduce the audit risk, increase the probability of discovery and it delivers the result faster.
- 2. Audit technology is used in both administrative and technical audits.
- 3. Auditors consider audit technology to be most important in risk assessment and sampling. Audit technology is mostly used in administrative auditing procedures.
- 4. Using of audit technology can improve the quality of auditing process and can minimize the expenses. The main reason that limit the usage of technology is the difficulties to quantify the benefits and costs of IT. Meanwhile, the lack of training in IT audit does not affect the audit process

One of the limitations to this study is the relatively small number of responses. Although respondents may be the ones who are most concerned about the issues being investigated and therefore, as can be said, are also the most informed, their views may not represent those people are not respondents. Second, the sample was not balanced because respondents from other audit firms were over represented by Big 4's big firms.

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