

## **IT role on proper Financial Statement Analysis**

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### **Abstract**

Financial statements are prepared reports to quantitatively describe the current financial situation of a company. Therefore, proper financial statement analysis is important for the managers to be able to observe the organization and make financial decisions as a result of achieving the right information about the company on time. Hence the company can obtain some benefits.

The tools used in the analysis and the staff motivation who performs the analysis are assumed in this research as the key variables to develop proper financial statements and therefore the analysis.

The paper's objective is to describe the current situation about the issue. Therefore, a developed survey was conducted on accounting department staff within several BiH companies. The data obtained were analyzed descriptively and the results were discussed accordingly.

The limitations and implications of the research are described and some further research points were identified.

**Keywords:** Financial Reporting, Survey, Information Systems

## 1. INTRODUCTION

A financial statement is a written report in order to quantitatively describe the financial health of a company including an income statement and a balance sheet, and also a cash flow statement. They are usually prepared on a quarterly and annually.

According to the Financial Accounting Standards Board's Statement of Financial Accounting Concepts No. 1 issued in 1978, the purpose of financial reporting is providing information that is useful in making business and economic decisions. Most financial reports were before insufficient, unreliable and confusing because of lack of rules having no precise terminology and not providing comparison of years and enterprises (Sinnott and Laing, 2009).

Information systems (IS) productivity has always been considered in academia and industry. There have been observed productivity of capital studies; however there is little research on the communication of the productivity of corporate information-creation and - consumption that is helpful to business executives in assessing, planning and budgeting (Shu and Strassman, 2003).

According to Thottan's (2004) definition, "Knowledge workers" produce, analyze, manipulate, and distribute information about business activities. Therefore, Bagranoff et al. (2005) considered accountants as knowledge workers and accounting information as important.

The users can perform financial statement analyses by using developed software programs to produce interactive statements in order to be used in mining the data. The statements which are included in the general ledger model are used to allow the user create the desired analyses independently. These applications help the users to identify and correct the possible problems and errors.

The paper has been organized into five sections. In the second part, the literature was reviewed. In the third part, the research methodology was presented. In the fourth part, the results were discussed. And finally, the paper was concluded in the last section.

## 2. Literature Review

A financial statement (or financial report) is prepared as a standardised record of the financial activities of a business, person, or other entity. For a business enterprise financial statements is used to refer all the relevant financial information which is presented in a structured and easy to understand form. Financial statements include four fundamental financial statements with a management discussion and analysis. Investors and company analysts use financial statements in order to obtain information about a business' financial situation. Financial statements may not provide them enough information to make reliable decisions because of

inconsistency in format, lack of continuous information from one statement to another, and grouping dissimilar items.

For large companies, financial statements are generally complex and may include some extensive notes about the financial statements and explanation of financial policies and management discussions and analyses describing each item on the balance sheet, income statement and cash flow statement in detail. Notes to financial statements are considered an integral part of the financial statements.

Financial statements should be prepared as understandable, relevant, reliable and comparable. Reported information is directly associated with the organizational financial position. Financial statements may be evaluated from different perspectives and for different objectives. Stakeholders need financial statements to make important business decisions about its operations. The next step is performed through financial analyses on them to understand deeply. Financial statements can also be considered as a management annual report to the stockholders. For also employees these reports are necessary to make agreements with the management while discussing the compensation, promotion and rankings. Financial analyses are often preferred by investors and prepared by financial analysts in order to provide them reliable information for investment decisions. Financial institutions use financial statements to evaluate for financing the company.

Government needs financial statements to make determination about the propriety and accuracy of taxes and other announced and paid responsibilities. Vendors use financial statements to evaluate the creditworthiness of the business.

### **3. Proper Financial Statements**

Accountants are responsible from the measurement on financial reporting to incorporate fair values into proper financial statements by recognizing an increased obligation to help investors in predicting future firm performance.

Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) have found together certain weaknesses of the previous guidelines and the boards are striving to improve the usefulness of financial information through the financial statement presentation project by considering many user concerns from different perspectives and aiming to establish a common standard to address and improve how information is organized and presented in the financial statements.

ICT aims to enable accountants to perform effectively in their positions by (1) making accountants happy in preparing financial statements, (2) training them by necessary basic information and communication technology tools, (3) providing them with the required accounting and technical skills, (4) training the participants with presentation skills.

Bawaneh (2011) suggested that IS and accounting studies should be integrated in order to increase the students' accounting information evaluation capability accurately and timely.

Alsos et al. (2006) suggested financial resources as key resources for gaining and configuring other resources. The literature highlighted the importance financial resources acquisition from investors. However, remaining financial management activities have received little consideration. Entrepreneurial financial management reduced the acquisition of external financing, while other important areas of financial management are ignored. According to Brinckmann et al. (2008), Delmar and Shane (2003) and Gruber (2007), planning-related competencies such as strategic financial competence and financial controlling are important in a broader sense.

Financial resources are accepted as the fundamental resources in order to obtain and configure other resources. Brinckmann et al. (2011) wanted to show the resources used to analyze the role of related financial management for firm growth. According to them, it is hard to get resources due to information asymmetry between entrepreneurs and external stakeholders.

Gilbert et al. (1999) and Glynn (1997) suggested IT in today's competitive constantly increasing marketplace as a distribution channel and interaction medium.

Howcroft and Durkin (2000) questioned if IT can fully replace interpersonal relationships in financial services. Larpsiri and Speece (2004) aimed to examine perceptions of SFA in the context of life assurance in Thailand by conducting a qualitative exploratory research. They concluded that understanding customer response to SFA is the challenge in order to effectively integrate technology-based sales applications into the selling process.

Xiao and Sangster (1996) examined the role of IT in supporting relationship among customers and suppliers in the industry of financial service, interrelationship among sectors in the industry such as: Brokerage houses, retail banks, institutional banks, mutual funds and others. Furthermore, the role of IT and electronic service in creating and supporting interorganizational integration across sector boundaries is important. The researchers aimed to help in the financial services to analyze opportunities and assets risks of building relationship between their customers and through electronic commerce. They preferred wide range interviews as the research methodology to identify the role of IT in supporting relationship among customers and suppliers in the financial services. Each questionnaire presented on their own prospective from supplier and customers for expanding this relationship with electronic commerce.

Their results showed that the participants have some processes such as process of thought, planning process and implementation process. Therefore, they have grouped the results into five categories: (1) How IT supports currently existing relationships among customers and suppliers, (2) The opportunities to expand these relationships, (3) The threat to expand these relationships, (4) Drivers of change, and (5) Managers' envision.

Xiao and Sangster (1996) stated that the literature reported a large number of investigations about the impact of IT on accounting. Accordingly, it has impact on the accountants. They suggested that the studies focused too much on accountants, but users of accounting information and corporate financial reporting are not considered. Information asymmetry between corporate managers and external stakeholders has been accepted as a fundamental issue in economics and accounting resulting problems such as moral hazard and adverse selection. Therefore, they suggested the use of IT in order to complicate these issues. They concluded that IT use is necessary for accounting in order to identify asymmetry.

Mulligan and Gordon (2002) studied the role of IT in the customer and suppliers relationship in the financial service industry.

According to Laitinen (2005), analyzing financial assets, interest expenses and revenues, taxation and dividends presents the financial behavior of the company.

EVA is considered as the best method for evaluating the performance of the firm. Adjustments of accounting items are commonly used in order to manage earnings (Lee et al., 2008). Lee et al. (2008) suggested that firms were inconsistent when applying traditional accounting measures and therefore there is a relationship between IT investment and increased wealth creation. They reported after analyses that not all financial firm performance measures correlate positively with IT spending. Furthermore, their results show that all financial performance is significantly correlated to IT spending except ROI and ROA. Finally, the relationship with the ROS is found to be negative.

Senik and Broad (2011) examined the results of factors which are perceived to mitigate educators from integrated IT skills on three main categories of barriers: academic staff, environmental, and student.

Sohn et al. (2007) in their study proposed a structural equation model and commented that technology evaluation is worthy when the result can be related to financial performances of the recipient of credit funds. They developed a FPI (financial performance index) and analyzed relationship between technology evaluation factors and financial performances. They proposed enterprise FPI and suggested some strategies to improve financial performance.

#### 4. Research Methodology

The prepared survey with a 7-point Likert scale was distributed and the data was collected from accounting firms and accounting offices in schools in one month period. The respondents are all from accounting departments. The data then was analysed by the help of SPSS program. The following section consists of the demographic information of the respondents including the position, education, gender and city and the descriptive examination of the survey questions.

The male and female responses are almost equal (Table 1).

**Table 1** Respondents' Gender

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
f	106	53,0
m	94	47,0
<b>Total</b>	<b>200</b>	<b>100,0</b>

The respondents are mainly accounting managers and the others were accountants (Table 2).

**Table 2** Positions of the Respondents

<b>Positions</b>	<b>Frequency</b>	<b>Percent</b>
Missing	99	49,5
Manager	101	50,5
<b>Total</b>	<b>200</b>	<b>100,0</b>

There is a well educated sample space that the study achieved (Table 3).

**Table 3** Education Level of the Respondents

<b>Education Level</b>	<b>Frequency</b>	<b>Percent</b>
Bachelor	22	11,0
Master	154	77,0
PHD	24	12,0
<b>Total</b>	<b>200</b>	<b>100,0</b>

The respondents are mainly from Sarajevo (Table 4) and the companies are located at four different regions of Bosnia and Herzegovina.

**Table 4** Company Locations

City	Frequency	Percent
Mostar	12	6,0
Sarajevo	93	46,5
Tuzla	39	19,5
Zenica	56	28,0
Total	200	100,0

## 5. Findings

The respondents believe that the used accounting software program was satisfactory and helpful in improving their accounting work. Furthermore, they believe that the expensive programs will help more (Table 5).

**Table 5** IT Support for Accounting Work

IT Support	N	Mean	Std. Deviation
Information technologies (IT) helps my accountant do his work more effectively and efficiently.	200	6.18	.825
I am very satisfied with accounting program at my work.	200	6.33	.658
The more expensive the program is, the more effective it will be.	200	6.53	.626
Valid N (listwise)	200		

Financial statements analysis is necessary in order to see the financial health of the organisation. Small firms do not usually prepare financial statements regularly and therefore employ analyses on them. Accordingly they may lose the control of the financial activities. The respondents are quite agreeing with this statement. On the other hand, they believe that the preparation of financial statements for small firms is easy. Moreover, the task for bigger organisations is believed to be more complex (Table 6).

**Table 6** Beliefs about the Size of the Organization and Financial Statements

<b>Size of the Organization</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
Many small businesses fail because the owner loses the control on the firm's financial position.	200	6.58	.543
It is easier for a smaller company to prepare financial statements.	200	6.57	.590
Big organizations have extremely large beliefs, traditions, rules and regulations	200	6.56	.616
Valid N (listwise)	200		

The companies seem to have software programs in order to prepare financial statements and it is helpful and satisfactory in doing their work. They agree the importance of dates for financial statements. They agree on the statement that financial statement information is both important in order to see and compare the performance of the company with and among the others. However, they also think that the accountants make mistakes on purpose. Finally, they agree that proper financial statements and their analyses are obtained as a result of teamwork (Table 7).

**Table 7** Proper Financial Statement Analysis

<b>Proper Financial Statement Analysis</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
I have a specific program to do Financial statements. It helps my accountant do work more properly.	200	6.45	.787
Dates are very important on Financial Statements.	200	6.49	.618
Managers analyze Financial Statements to capture a company's financial position for a given period to allow users of financial information to analyze and compare the health of one company to another.	200	6.57	.669
I am satisfied at how my system is set up at this time.	200	6.54	.664
Sometimes it happens that accountants make mistakes purposely.	200	6.64	.521
When the employees work together as a team, it increases revenues and it decreases mistakes in financial statements.	200	6.52	.567
Valid N (listwise)	200		

## 6. Discussion

The research achieved a considerable number of respondents in BiH firms. It can be accepted as a representative picture of BiH scenario since the respondents are from five different regions of BiH and more than half were managers. They observed to be extremely agreed on the survey questions which were developed to measure whether the companies in BiH have software programs to prepare financial statements, believe the necessity of preparing financial

statements for small and big enterprises and the role of IT on this issue. As reported in earlier section, the study firstly identified that the companies have and use the program for the preparation of financial statements. Additionally, they are satisfied with the installed system.

## **7. Conclusion**

First of all, it should be stated that the research on the identification of IT role on financial statement analysis are observed to be quite weak in the literature. The developed survey questions for further studies can be evaluated again by considering the current results. The results may be analysed through different statistical techniques and the strength of the statements should be increased.

For practice, the importance of information systems in every aspect of the life is increasing more and more. Therefore, the companies should leave the old and slow financial statement analysis and prefer some quicker and more accurate ways in order to be aware of the most current situation within and outside the company and therefore stay competitive in today's fast changing business environment.

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## Financial Statements Survey

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### Instructions for completing the questionnaire

- Please answer all questions
  - For the questions with a numeric scale
    - 1:** Strongly disagree, **2:** Moderately disagree, **3:** Slightly disagree, **4:** Neutral, **5:** Slightly agree, **6:** Moderately agree, **7:** Strongly agree, circle the number that best describes the factor being judged.
  - **Circle only one number for each scale**
  - Read the specific instructions under each section where applicable
  - This survey is expected to be completed in **10 minutes**.
- 

<b>I. Demographics</b>					
a.	Name of your department/unit:				
b.	Your position/role:				
c.	Your education level:	e.	Gender:	f.	Age:

d.	ID number:	g.	City/Canton	
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<b>IT Support</b>		<b>Disagree</b>	<b>Agree</b>
a.	Information technologies (IT) helps my accountant do his work more effectively and efficiently. It helps him find major mistakes and helps correct them.	1 2 3 4 5 6 7	
b.	I have an accounting program at my work, I am very satisfied with it.	1 2 3 4 5 6 7	
c.	The more expensive the program is, the more effective it will be.	1 2 3 4 5 6 7	

<b>Size of the Organization</b>		<b>Disagree</b>	<b>Agree</b>
a.	Many small businesses fail because the owner loses a grip on the firm's financial position.	1 2 3 4 5 6 7	
b.	It is easier for a smaller company to prepare financial statements.	1 2 3 4 5 6 7	
c.	Big organizations have extremely large beliefs, traditions, rules and regulations	1 2 3 4 5 6 7	

<b>Staff Motivation</b>		<b>Disagree</b>	<b>Agree</b>
a.	When the staff is satisfied with their work and very excited about coming to work, the properness of the work increases.	1 2 3 4 5 6 7	
b.	The more support and space managers give you, the better motivation you will have in order to do your work more properly.	1 2 3 4 5 6 7	
c.	When the employees work together as a team, it increases revenues and it decreases mistakes in financial statements.	1 2 3 4 5 6 7	

<b>Organizational Culture</b>		<b>Disagree</b>	<b>Agree</b>
a.	Organizational culture consists of shared beliefs and values established by the organization's leaders and then communicated and reinforced through various methods, ultimately shaping employee perceptions, behaviors and understanding.	1 2 3 4 5 6 7	
b.	The efficiency and effectiveness of the employees depends on the way the organization is set up. The stronger the culture of the organization is the more motivation the employees will have.	1 2 3 4 5 6 7	
c.	The bigger the company is, the more organizational culture there is, When there is more organizational culture, employees are more likely to do their job with more motivation.	1 2 3 4 5 6 7	

<b>Proper Financial Statement Analysis</b>		<b>Disagree</b>	<b>Agree</b>
a.	I have a specific program I use to do Financial statements. It helps my accountant do work more properly.	1 2 3 4 5 6 7	
b.	Dates are very important on Financial Statements.	1 2 3 4 5 6 7	

3<sup>rd</sup> International Symposium on Sustainable Development, May 31 - June 01 2012, Sarajevo

c.	Managers analyze Financial Statements to capture a company's financial position for a given period. This allows users of financial information to analyze and compare the health of one company to another.	1	2	3	4	5	6	7
d.	I am satisfied at how my system is set up at this time.	1	2	3	4	5	6	7
e.	Sometimes it happens that accountants make mistakes purposely, the only solution for this is termination.	1	2	3	4	5	6	7

**Thank you for your participation.**