XBRL As Process to Improve The Quality of Information and Efficiency of The Stock Market in North African Countries

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Summary: This research aims to emphasize the role of the **"Extended Business Report Language" (XBRL)** in the electronic publication of accounting information and its contribution to the efficiency of the stock market in order to sensitize the institutions of North African countries to the need to introduce this new technology in the accounting disclosure process. And therefore improve the effectiveness of their financial reporting because transparency and integrity are the basis of trust in both the financial and nonfinancial communities. The efficiency and transparency of financial reporting on the North African stock market would allow the attraction of effective investment and the preservation of the prosperity of global markets.
In order to achieve our goal, we conducted a field study to validate our plan. The questionnaire was distributed to certain professionals in the countries having worked with the language "XBRL" (South Africa, Malaysia, Jordan, Oman, Romania...). First, we intended to appreciate the close relationship between the "XBRL" language and the Quality of financial information. Then, in the second part, we wanted to understand the relationship between the "XBRL" language and the efficiency of the stock market .

Keywords: : XBRL, Efficiency of the stock market, Quality of financial information
Jel Classification Codes : M40 ; G14

I- Introduction :

It is certain that the technological development in the present century has influenced all disciplines and sectors. From these, the economic sector, that linked strong international relations, to achieve economic goals and interests under a political strategy. Some countries successfully achieved appreciated development in their economy, thanks to the tough control over their global financial market through by taking strategic decisions based on accurate financial information that were characterized by a high degree of transparency and reliability reaching the sites of the stock exchanges in other states.

Following the dramatic consequences of the global financial crisis of 2007 and the need to diversify the economy and ensure comfortable liquidity, many countries have opted for the digital economy, in order to restore customer confidence and thus reduce the negative impact on global financial markets and for dealers. The efforts of many international professional organizations have resulted in the development of a standardized electronic mechanism based on the universal standard language called "Extended Business Reports Language" or "The XBRL." In order to facilitate international exchanges on one hand, and on the other hand to improve and speed up the process of disclosure of electronic accounting by providing the financial community and the business environment with financial reports of high quality.

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This is why many countries, including the Arab countries, have accelerated their efforts to adopt this mechanism, and even made it mandatory, because of its proficiency and its effectiveness in the economy through the transparency and the credibility of its financial reports.
Oil exporters, among them North African countries, have been deeply affected by declining oil market prices ; therefore, needs for economic diversification and new income have become urgent. The state institutions and professionals should apply "XBRL" and digital technology in their economies to master the control process and defeat rampant corruption by providing accurate, high-quality financial reporting to ensure a healthy business environment, to be able to claim to attract foreign investment.
We try, through this article, to sensitize them and to motivate them through our study of the questionnaire, addressed to the professionals of certain States which have succeeded in the application of this mechanism. Then, to urge financial and business professionals to become familiar with information technology in the accounting disclosure process using the Extended Business Report Language (XBRL). The North African financial market should enter the competitive global financial market.

which rôle has XBRL played in enhancing accounting disclosure and refreshing financial markets?

To accustom ourselves with the aspects of this subject, we have decided to share it into four main steps:

- **Electronic accounting disclosure**
- **The language of the expanded business reports "XBRL"**
- **The contribution of XBRL to the efficiency of the stock market - Study (a questionner)**

I.1. Electronic accounting disclosure

The use of technology in accounting disclosure is a requirement, necessary for all parties, whether they belong to the financial community or not a part of it. Because it is not only necessary to achieve efficiency in the rationalization of economic decision-making and access to the largest base of investors and customers in the world, but also to maintain financial stability and facing financial crises.
To know if the institution is applying electronic accounting disclosure, we must see whether it publishes on its website the following items:

- A complete set of annual financial statements, including the clarifications, margins and the report of the auditor and the annual report of the Governing Council
- "Links": tools to link the information contained in the lists of financial reports issued on the institutional website to any other information of importance, whether on its own website or on any other public sites as for example, a database of the securities market.

a. Advantages of electronic accounting disclosure:

The use of the information technology in accounting had a positive impact on the development of accounting and financial disclosure methods by delivering accurate and high-quality accounting data and information to users of financial reports, in comparison to the traditional manual accounting disclosure.
Beyond the advantage mentioned above, we can add that: [1]

- ✓ The electronic accounting disclosure reduces the cost of distribution of information, avoiding the costs of traditional disclosure;
- ✓ The electronic accounting disclosure is a tool of expansion for the company, since it is addressed, to an unlimited number of users, and thus, may attract many investors, either domestic or foreigners
- ✓ The electronic accounting disclosure improves traditional disclosure, both in terms of quantity or quality of the information imparted, it also contributes to the provision of information more useful and updated periodically.
- ✓ Improved access to information by users quickly and with less effort.
- ✓ Electronic accounting disclosure provides the possibility of integrating annual reports into several sections because there are close relationships between their financial statements. The thing that cannot be achieved in traditional disclosure.

- ✓ Electronic accounting disclosure allows constant and continuous dialogue between the company and users since we can provide information specifically designed to meet the special needs of the users.

b. Stages of development of the electronic accounting disclosure:

Electronic accounting disclosure has passed through several stages where each stage different from its predecessor since it introduces a new mechanism to meet new requirements.

First stage: This phase was characterized by using the Internet to distribute financial reports, using electronic paper "PDF" form as an alternative to the paper manual. However, this mechanism lacks interactive links, a feature which allows movement within the site between the parts of the report or between sites. Moreover, the financial statements are difficult to analyze by the user, because this file is not allowed to copy the financial lists or re-loading the electronic charts to make it easier to deal with. This requires re-entering the data again, what takes a long time[2]

Second stage: the emergence of the programming language and the Hypertext Markup Language "HTML" is used as the basis for designing websites and interactive texts in the encoding to display information on the financial positions of the companies. This enables the use of interactive links, a feature that is not available in the PDF file, along with the possibility of indexing information within the financial report, but its role is limited to providing information on how to display the page without providing any information about the content of the data and how to prepare it. Besides, it does not address the problem of the analysis of the information, which faces the user when doing so. This requires the re-entry of data as we have seen in the case on the "PDF" File.

Third Stage: This stage has witnessed a remarkable technological development. The users of the financial statements were able to analyze the information contained in the reports without having to re-enter it again. A thing that was not possible in the previous stages. This stage started with the emergence of "XML" or (Extensible Mark up language), when an accountant (Charles) working in an American company, was supported and funded by the American Institute of Certified Public Accountants to study the possibility of using this language in order to exchange information on the Internet and design a program to prepare electronic financial statements. After several attempts, they created the "XBRL" the expanded business report language. "XBRL" is a standard format that helps enterprises to report financial and non-financial information in electronic format, thereby facilitating the comparison of different institutions.[3]

« XBRL » has contributed to increase the effectiveness and development of the role of electronic accounting disclosure by: [4]

• Providing financial statements, which consolidate the form of disclosure in the financial statements, making them more uniform, more consistent and more understandable, thus increasing their benefits to users.

• « XBRL » has the ability to read computer signs and apply financial information to business reports, by converting reports into blocks of information that can be understood and processed through the computer program.[5]

• Reducing the costs, when obtaining and analyzing information by organizations, when addressing the problem of discrepancies and inconsistencies in financial statement formats. It also helps users of non-professional financial statements to obtain information related to financial statements and integrating them to supplementary disclosures when making decisions.

• Providing technological independence by allowing the automatic exchange and reliable summaries of financial and non-financial information.

• Enabling users to translate elements of financial reports with utmost accuracy and efficiency in more than a language, which increases the benefit of electronic lists posted on the web sites of the organizations.

• Allowing the XBRL currency to be changed in the user's desired conversion mode and to the required currency, creating financial reports denominated in more than one currency to help users make decisions as quickly as possible.

• « XBRL » allows the analysis of various competing firms, making it more efficient for financial analysis.

I. 2. The language of the expanded business reports "XBRL"

Under the new technologies, "XBRL" has been able to ensure the quality of financial reports for business owners. The Institute of Chartered Accountants of America (AICPA) has indicated that the language of the financial report on the Internet will become the digital business language, as it is a framework that will enable the preparation and publication of financial reports in a variety of formats. Besides, the exchange and analysis of the data contained in it will also enable the language of automated exchanges and extraction[6], is also called the language of electronic communication.

In this context, Let's have a look at the "XBRL", its mechanism and its wide range of advantages .

a.The concept of the Expanded Business Reporting Language (XBRL)

Because of the distinct particularity of the "XBRL", which enhanced the level of accounting disclosure and allowed its spread around the world in more than 50 countries, there is not only one definition but many, as it follows:

- **Samer Quntakji (2012): «** defines it as a standard, scalable electronic language that is an adaptation and development of XML. Its goal is to improve and speed up the process of electronic accounting disclosure for business reports at the lowest cost of preparation and publication to provide the financial and business environments with financial reports prepared in Standard format for users so as to extract financial data, or extract and exchange any part of it, reliably and automatically **»**[7]
- **The Chairman of the International Accounting Standards Committee and Chairman of «** XBRL **International », Kurt Ramin on the International Accounting Summit held in Dubai in 2006, said:** "It is an international electronic standard that relies on coding information items under international accounting standards so that they can be sent, stored and processed electronically in any system, within a standard format used in financial reporting presentation[8]

Through the above definitions, we can say that this mechanism is based on the easy delivery of financial information, through the use of information technology, to provide financial reports, in a standard electronic format. Then, they can be to be classified and presented in the same manner to avoid human errors and thus, ensuring transparency and reliability of the financial statements.

b. Components of Extensible Business Reporting Language (XBRL)

« XBRL » has three basic components:

b .1. The tariff Card "Tags"

The language "The XBRL" is based on the computer process of linking between data and the confirmation of the figures " metadata " through the development of the Tariff Card "Tags", which is considered a means to encode the definition Filed under: Financial reports. It works on linking the element in the financial report and its corresponding element in the scheme of the dictionary XML Schema, which in turn provides all the information for this element on the terms of: (how the Calculation occurs - standards and rules that were applied to access to it - how to curate and present it, and other landmarks illustrated by the rules of the link) [9]

b.2 Classification dictionary XBRL Taxonomy

The "XBRL" is a classification system that describes the contents of financial statements and other reports. It is an extension of « XML Schema ». Taxonomies are concepts of the hundreds of individual actions that are linked through mathematical and identification relations exchanged between them through textual relationships and data. Concerning the presentation of the knowledge for the user[10]. Countries have now adopted a general "XBRL" rating to suit local standards and accounting and reporting standards, since many countries have now recognized ratings, by "XBRL" International.

The classification dictionary consists of two basic elements:
Linkbases: Their role is to provide additional information about "XBRL" elements, particularly inter-information relationships, and the" XBRL" binding rules which are consistent with the XML language recommendations[11]
"XBRL" Schema: Designed to be business-friendly and needs for the preparation and publication of financial reports, it represents the Tag tool for logic and intelligence, identifying and defining key elements, names, attributes, default and fixed values, sub-elements, Is it empty or not?

b.3 Proposed document «XBRL»

After coding the financial statements correctly, « XML » tools are used to analyze data, structure databases, reports, and to convert to HTML, in addition to other functions. The information will then be ready for exchange and processing,
The proposed document is an « XML » file containing «XBRL» elements, which it considers as a set of financial facts represented by data cards such as the income statement. For example, after the completion of the «XBRL» dictionary, the application phase is the translation of the company's financial statements based on the glossary. Electronic Financial Approvals For conventional financial reports, once you click on any number in the electronic financial reports, provided in the language "«XBRL»", all the information for this number through the Tariff Card[12], conclude that users can access to open files, reading and analysis electronically.

C. The operating mechanism of the "Extended Business reports Language "XBRL"

« XBRL» uses "tags", providing a link that joins the information to its original source and determines its relationship to other data.
« XBRL » is free of data from paper reports. «XBRL» data flows seamlessly between different software applications such as "MS Excel". Computers can read reports in «XBRL» language, select the required data, and transfer them to different programs for automatic analysis, with a variety of formats and reports. This means that using «XBRL» will allow users to compare and analyze data from hundreds of organizations right away[13]

D. Benefits of Extensible Business Reporting Language (XBRL)

"XBRL" provides valuable benefits that enhance the quality, coherence and facility of use of the financial reports because[14]

- ✓ "XBRL" facilitates convergence in accounting standards through the ability to align financial concepts between general classifications.
- ✓ Using "XBRL" gives companies a better representation of their financial position in the market and better circulation of corporate data in the public domain
- ✓ "XBRL" better enables the CPA profession to proactively fulfill its primary mission to protect the public interest by improving investor access to the capital markets[15].
- ✓ "XBRL" helps to increase efficiency and improve the accuracy and reliability of all participants in the provision or use of financial statements[16].
- ✓ "XBRL" improves the efficiency of capital markets by reducing costs associated with company coverage and making the market accessible to SMEs.
- ✓ "XBRL" has been able to achieve the task of protecting the public interest by improving investors' access to capital markets.

- ✓ "XBRL" can also be used for internal reporting purposes, streamlining data management and analysis to provide senior management with timely information.
- ✓ This system allows investors and financial analysts to analyze data quickly and accurately thanks to its ability to arrange and classify financial data in a way that facilitates comparison, vertically and horizontally, leading to high quality and accuracy and in-depth analysis[17] .
- ✓ Make use of open data for analytical purposes, provide better risk management information in the enterprise, and enable integrated reporting.
- ✓ Allows the use of "XBRL" support for an integrated reporting framework for investors with the best information that captures past, present, and future busines.

II– Methods and Materials:

The extent of the contribution of the "XBRL" language in the revitalization of the efficiency of the Securities Market (a questionnaire)

In the past two steps, we have seen how the use of the «XBRL» language has greatly contributed to enhancing the development of the role of electronic accounting disclosure by improving the quality and transparency of information. Because market efficiency depends primarily on financial information and the degree to which it is disclosed or disseminated.
Therefore, we are trying, through the following field study, to analyze the role of the "XBRL" in financial information and its impact on the activation of financial markets. Our mere intention is to raise the awareness of the North African professionals in the stock market and to encourage them to adopt this technology in their work so as to achieve efficiency and catch up with the successful global markets.

1. Design of the questionnaire

We have divided the form into two main parts:
Section I : Includes personal data of the sample of the study, where this section contains data on professional qualification, scientific specialization, years of experience.
Section II : This section contains (24) questions, we asked the sample of the study to determine their response to what each question describes in the five-level Likert five-step scale (strongly agree, agree, neutral, disagree, strongly disagree), and these questions were distributed on the hypotheses of the study.

2. Research hypotheses

Hypothesis1 : It is not important to use "XBRL" as a tool for electronic disclosure;
Hypothesis2 : There is no statistically significant relationship between the expanded business reporting language "XBRL" and the quality of financial information ;
Hypothesis3 : There is no statistically significant relationship between the use of "XBRL" in accounting disclosure and the efficiency of financial markets ;

3. variables of the study :

After encoding and unloading the questionnaire and entering it into the computer, using the symbols **X/ Yi.j**
Where**"X"** is the independent variable, and **"Y"** is the following variable and **"i"** is the number of dependent variables
- **y1:** represents the first dependent variable which is the financial information
- **y2:** represents the second dependent variable which is the efficiency of the stock market

The symbol**" j"** is the gateway number

4. Methodology of research

The researcher describes the method and procedures followed in the implementation of this study. This includes a description of the community studied and its sample, the method of preparation of its tools, the procedures taken to ascertain its validity and stability, the method followed for its application, and statistical treatments.

5. The sample community studied

The sample community is the total group of elements that we seek to generalize the results related to the problem studied and consists of all individuals belonging to the following groups:
- Bank accountants
- Financial advisors and auditors
- Financial analysts and financial managers

The sample of the study was randomly selected from the study community.
Eighty-eight questionnaires were distributed, of which **50** (**covering 62.5%**) were targeted. This sample was selected due to extensive experience and knowledge in the use of new technology which can improve the decision-making process and financial reports. The table below shows the number of questionnaires distributed to the survey sample members and retrieved from them.

III- Results and discussion :

1. Stability test:

The alpha-cronbach test was used to measure the stability of the measuring instrument with an alpha value of **99%. (Table01)**

2. Descriptive Characteristics of the Study Sample

A.Professional qualifications

From the table above, and through the statistical analysis of the sample of the study, we found that the post of the financial manager represents **40%** of the sample size, while the function of financial analyst and accountant banking both represent **20%** each, whereas the proportion of financial auditor is **10%** of the sample size, The financial advisors represent **6%** of the sample size. **(Table02)**

B. Specialization

In this survey, we consider that the specialization of finance and accounting has the dominant percentage of **40%** of the study sample. This means that the holders of this specialization use the «XBRL» language frequently in comparison with the other disciplines, while the auditing specialization is **28%** and the specialization of finance and banks represents **22%** of the sample size. The other groups represent the remaining **5%.(Table03)**

C. Experience

The results of the analysis of the sample of the study indicate that **70%** of the study sample have long experience. This reflects the validity of the results presented. The **20 %** range from 5 to 10 years experience and only **10%** have under five years of experience. This, also, indicates that the elements of the sample of the study have strong and good experience . **(Table04)**

3. Results of the study: The results of the study were presented through the tables of the direction of the phrases forming the questionnaire (see annexes)

- **For the first axis terms :** To achieve the research objectives, we analyzed the sample on the first axis of the questionnaire, which explains the importance of the use of «XBRL». We calculated the mean and the standard deviation.
  The results of the statistical analysis concerning the responses of the sample members, displayed in **the table (5),** showed the importance of using the «XBRL» language as a tool for electronically disclosing the financial information. The mean of the variables ranged from **(X1.1 - X1.6)** between **(4,20 - 4.04) .**

The study authors agreed that the first three variables **($X_{1.1}$)**, **($X_{1.2}$)** and **($X_{1.3}$)** were the most important, indicating that the study sample members benefited greatly from the «XBRL» role. There is general agreement among all respondents on the importance of these variables which represent the usage of this language.There is no dispersion between the responses of the sample as all the results of the standard deviation are less than the correct one.

- **Concerning the expressions of the second axis :**

  They are expressed in **Y_1** and the expressions that measure this question are expressed by the symbol **($Y_{1.1}$ - $Y_{1.9}$)** summarized in **Table (06).** There is a consensus among the individuals in the sample that «XBRL» enhances the quality of financial information, since the mean varies between **(3.90 - 4.52),** where the fifth expression corresponds to the top of the mean **(4.52)** towards the "**strongly agree**" trend in the estimated measure of the five-point scale. The eighth term is the lowest arithmetic mean **(3.90)** which corresponds to the " **agree** " trend.

Based on the above features, we reject the null hypothesis which says that "there is no statistically significant relationship between «XBRL» and the quality of financial information" and we accept its alternative hypothesis that says**: there is a statistically significant relationship between «XBRL» and the quality of financial information**.

- **Concerning the expressions of the third axis :**

They are expressed in **Y_2** and the expressions that measure this question are expressed by the symbol **($Y_{2.1}$ -$Y_{2.9}$)** summarized in Table **(07)**. There is a consensus among the individuals in the sample that «XBRL» language improves the efficiency of the stock market , since the mean varies between **(3.70 - 4.40)**, where the third expression corresponds to the top of the mean **(4.40)** towards the "**strongly agree**" trend in the estimated measure of the five-point scale. The fifth term, is the lowest arithmetic mean **(3.70)** which corresponds to the " **agree** " trend.

This is why we reject the null hypothesis, which says that there is no statistically significant relationship between «XBRL» and the efficiency of financial markets and we accept the alternative hypothesis that says, **there is a statistically significant relationship between «XBRL» and the efficiency of financial markets**

4 . Test the hypotheses of the study

- The First hypothesis test: " It is not important to use "XBRL" as a tool for electronic disclosure"

The results of the **" One sample T-Test"** tests for one sample indicated that the total value is **(27,834)** which is greater than the **T** value of the scale at **49** degrees because Sig is less than **5% (Table08)**

- The Second hypothesis test: "There is no statistically significant relationship between «XBRL» and the quality of financial information:

The correlation between " XBRL" and the quality of financial information reached **R=96.5%**, corresponding to the binary correlation coefficient between the two variables, indicating that there is a positive relationship between "XBRL" and the quality financial information . This means that "XBRL" will enhance the quality of financial information. The value of the coefficient of determination reached **R^2 = 93%**. This, also, indicates the strength of the relationship and the ability of the "XBRL" language to enhance the quality of financial information

(Sig = 0,000 ≤ 0,05). which means that the regression is significant and therefore there is a relationship between the independent variable "XBRL" and the dependent variable (financial information).
The simple linear regression equation for **Y= 17.264 + 0.886 x** leads to a language that leads to the efficiency of the stock market

- **The Third hypothesis test: " There is no statistically significant relationship between the use of "XBRL" in accounting disclosure and the efficiency of financial markets :**

The correlation between " XBRL" and stock market efficiency reached **R= 99.5%** corresponding to the binary correlation coefficient between the two variables, indicating that there is a positive relationship between "XBRL" and stock market efficiency. This means that "XBRL" will improve the efficiency of the stock market. The value of the coefficient of determination reached $\mathbf{R^2 = 99\%}$. This, also, indicates the strength of the relationship and the ability of the "XBRL" language to improve the stock market.
(Sig = 0,000 ≤ 0,05). which means that the regression is significant and therefore there is a relationship between the independent variable "XBRL" and the dependent variable (stock market efficiency).
The simple linear regression equation for **Y= 6.802 + 1.267 x** leads to a language that leads to the efficiency of the stock market.

IV- Conclusion:

To conclude, we can say that the financial information is the heart and the driving force of dealing in the stock market, and that we cannot discriminate between the efficiency of the capital market and the accessibility of data and the necessary information on which investors depend on making their investment decisions appropriate,
This hints at we cannot disconnect the disclosure of financial information from «XBRL», since the accounting disclosure is the spirit of financial markets, and that market transparency is one of the pillars of confidence in these markets. «XBRL»'s financial accounting is revealed by the quality of its financial reports: in their transparency, their objectivity and their integrity, making it efficient and well-organized in providing financial information and a crucial for attracting both local and international investors with confidence and liveliness. "XBRL" guarantees the entrance to an efficient and competitive financial market.

Through our theoretical and field study, we draw the following conclusions:

1. "XBRL" is a way to ease the preparation of crystal clear and impartial electronic financial reports that make it accessible to users, in a clear and reasonable manner that can be analyzed by financial analysts and exchangeable among the various institutions of the world.
2. Besides, the rapidity and the effectiveness of the financial information provision and electronic accounting disclosure in «XBRL» enhances investors' confidence, the revitalization and the sustainability of the stock market.
3. "XBRL" reinforces the different characteristics of the financial information and supports its core principles, playing a key role in serving all stakeholders (analysts, auditors, institutions...) by boosting the quality of financial information and thus, validating the quality of decisions taken
4. There is a strong relationship between the «XBRL» language and the efficiency of the financial markets.»XBRL» is helping them to satisfy the conditions of creating information homogeneity, achieving shared governance principles, increasing trading volume, improving liquidity and accuracy in pricing.... Etc.
5. The number of institutions listed on the stock market, using the "XBRL" Language or reported in "XBRL" reports will increase the number of investors, and thus achieve the efficiency of those marketsrepresentativeness.

- Appendices:

Table 01 : Stability test:

Reliability Statistics

Cronbach's Alpha	N of Items
,990	24

The source : calculated by the author using spss

Table 02 : Professional qualifications

professional

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	accountat	10	20,0	20,0	20,0
	banking	5	10,0	10,0	30,0
	financial auditor	3	6,0	6,0	36,0
	financial adviser	20	40,0	40,0	76,0
	financial manager	10	20,0	20,0	96,0
	financial analyst	2	4,0	4,0	100,0
	Total	50	100,0	100,0	

The source : calculated by the author using spss

Table 03 : Specialization

specialization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Finance and Accounting	20	40,0	40,0	40,0
	Accounting and Auditing	14	28,0	28,0	68,0
	Financial and Banks	11	22,0	22,0	90,0
	Other	5	10,0	10,0	100,0
	Total	50	100,0	100,0	

The source : calculated by the author using spss

Table 04 : Experience

experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 5 years	5	10,0	10,0	10,0
	5 to 10 years	10	20,0	20,0	30,0
	10 years and above	35	70,0	70,0	100,0
	Total	50	100,0	100,0	

Source:calculated by the author using spss

Table 05 : **For the first axis**

Descriptive Statistics

	N	Mean	Std. Deviation
X1.1	50	4,2000	,98974
X1.2	50	4,2000	,75593
X1.3	50	4,2000	,75593
X1.4	50	3,7000	,11117
X1.5	50	3,9400	,03825
X1.6	50	4,0400	,94675
Valid N (listwise)	50		

Source:calculated by the author using spss

Table 06 : For the second axis

Statistics

		Y1.1	Y1.2	Y1.3	Y1.4	Y1.5	Y1.6	Y1.7	Y1.8	Y1.9
N	Valid	50	50	50	50	50	50	50	50	50
	Missing	1	1	1	1	1	1	1	1	1
Mean		4,2000	4,3600	4,5000	4,2000	4,5200	4,5000	4,2000	3,9000	4,4000
Median		4,0000	4,0000	4,5000	4,0000	5,0000	4,5000	4,0000	4,0000	4,0000
Std. Deviation		,75593	,66271	,50508	,75593	,50467	,50508	,75593	,83910	,49487

Source:calculated by the author using spss

Table 07 : For the third axis

Statistics

		Y2.1	Y2.2	Y2.3	Y2.4	Y2.5	Y2.6	Y2.7	Y2.8	Y2.9
N	Valid	50	50	50	50	50	50	50	50	50
	Missing	1	1	1	1	1	1	1	1	1
Mean		4,2000	4,0600	4,4000	4,2000	3,7000	4,2000	4,2000	4,3000	4,3000
Median		4,0000	4,0000	4,5000	4,0000	4,0000	4,0000	4,0000	4,0000	4,5000
Std. Deviation		,75593	,91272	,67006	,75593	,11117	,75593	,75593	,64681	,78895

Source:calculated by the author using spss

Table 08 : **The First hypothesis test:**

One sample T-Test for one sample of respondents' response to XBRL language expressions

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
x1	50	24,2800	5,40612	,76454

One-Sample Test

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
x1	27,834	49	,000	21,28000	19,7436	22,8164

Source:calculated by the author using spss

Table 09 : Second hypothesis test:

Regression

Descriptive Statistics

	Mean	Std. Deviation	N
y1	38,7800	4,96638	50
x1	24,2800	5,40612	50

Correlations

		y1	x1
Pearson Correlation	y1	1,000	,965
	x1	,965	1,000
Sig. (1-tailed)	y1	.	,000
	x1	,000	.
N	y1	50	50
	x1	50	50

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	x1[b]	.	Enter

a. Dependent Variable: y1
b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,965[a]	,931	,929	1,32246

a. Predictors: (Constant), x1
b. Dependent Variable: y1

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1124,633	1	1124,633	643,051	,000[b]
	Residual	83,947	48	1,749		
	Total	1208,580	49			

a. Dependent Variable: y1
b. Predictors: (Constant), x1

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	17,264	,869		19,869	,000
	x1	,886	,035	,965	25,358	,000

a. Dependent Variable: y1

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	29,6701	43,8489	38,7800	4,79079	50
Residual	-2,64569	2,32993	,00000	1,30890	50
Std. Predicted Value	-1,902	1,058	,000	1,000	50
Std. Residual	-2,001	1,762	,000	,990	50

a. Dependent Variable: y1

Table10 : Third hypothesis test

Regression

Descriptive Statistics

	Mean	Std. Deviation	N
y2	37,5600	6,88139	50
x1	24,2800	5,40612	50

Correlations

		y2	x1
Pearson Correlation	y2	1,000	,995
	x1	,995	1,000
Sig. (1-tailed)	y2	.	,000
	x1	,000	.
N	y2	50	50
	x1	50	50

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	x1[b]	.	Enter

a. Dependent Variable: y2
b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,995[a]	,990	,990	,67917

a. Predictors: (Constant), x1
b. Dependent Variable: y2

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2298,179	1	2298,179	4982,328	,000[b]
	Residual	22,141	48	,461		
	Total	2320,320	49			

a. Dependent Variable: y2
b. Predictors: (Constant), x1

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6,802	,446		15,244	,000
	x1	1,267	,018	,995	70,586	,000

a. Dependent Variable: y2

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	24,5373	44,8061	37,5600	6,84848	50
Residual	-1,20530	1,72750	,00000	,67220	50
Std. Predicted Value	-1,902	1,058	,000	1,000	50
Std. Residual	-1,775	2,544	,000	,990	50

a. Dependent Variable: y2

The first hypothesis test: ": The importance of using XBRL as a tool for electronic disclosure

No	Statement
1	"XBRL" can provide financial reporting in a variety of formats to meet the different needs of users
2	"XBRL" tags provide detailed information about each item, whether within the lists or in the notes
3	"XBRL" helps solving problems that prevent electronic financial reporting from being comparable
4	"XBRL"can integrate complementarly financial and non-financial data
5	The language "XBRL" is used with IFRS in terms of form and quality content
6	XBRL can enter and encode data once to be ready for e-extraction to set up all types of reports

The Second hypothesis test: "There is no statistically significant relationship between «XBRL» and the quality of financial information

No	Statement
1	The use of "XBRL" makes financial information available in the financial market easy to analyze by users
2	"XBRL"helps to improve financial reporting efficiency
3	The "XBRL" language validates the comparability and reliability of financial information
4	The "XBRL" language produces an appropriate timing property for information
5	"XBRL" contributes to the ongoing reporting of financial information
6	"XBRL" provides financial reporting in a uniform format at the international level
7	Using XBRL will make financial information more transparent
8	Accounting disclosure using "XBRL" helps reduce uncertainty
9	"XBRL" provides financial information to the public and beneficiaries at the same time "rewarding opportunities

The Third hypothesis test:There is no statistically significant relationship between the language "XBRL" and the efficiency of the stock market

No	Statement
1	"XBRL" Checks the language accuracy and efficiency in stock pricing "pricing efficiency
2	"XBRL"supports the principles of corporate governance, disclosure and transparency"
3	The" XBRL "mechanism enhances the quality of decisions taken
4	"XBRL" improves liquidity in the financial market
5	"XBRL" helps to reduce information asymmetry
6	The use of "XBRL" leads to the attraction of a large number of global investors
7	"XBRL" facilitates communication between participants in the stock market
8	"XBRL" contributes to increase the market capital growth rates
9	"XBRL" contributes to increase the market volume and improving its conditions

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