

# The Effect of Website Improvements of the Amman Stock Exchange on Its Financial Performance

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## Abstract

The big revolution in the field of information technology and information network (Internet) a significant impact on the performance of various institutions activities . So This study aimed to identify the impact of the evolution of the website of the Amman Stock Exchange on its financial performance study sample consisted of (50) individual included managers, department heads, and staff., Where results showed the presence of the impact the development of the website of the Amman Stock Exchange on its financial performance.

**Keywords:** financial performance, website, Amman stock exchange (ASE).

## Problem of the study and its importance

### Introduction:

Financial markets play an important role in the economies of developing and developed countries alike, being one of the tools of fiscal policy used in mobilizing domestic savings and an attractive instrument for foreign investment, in addition to its active role in financing economic development plans. With a growing deficit of public budgets of some countries have taken - these countries - in the search for non-sovereign financial resources to fund its development plans, and there have been a great revolution in the field of information technology and information network (Internet). ASE was not untouched by this development, as it realized the organizers of the importance of introducing technological development of the stock exchange to keep up with the next stage and keep pace with international developments in order to find a sophisticated Jordanian market of Securities that meets the requirements of local and international investors, they kept on creating the right climate in terms of infrastructure, training and application of sophisticated electronic trading systems meets the aspirations and requirements mentioned, and was able to exchange from the application of this system from the twenty-sixth day of the month of March 2000 (Siam, 2007).

This event is a quantum leap for the ASE to keep up with developments experienced by the global stock markets, electronic trading has contributed to rather than the traditional trading floor in raising the efficiency and speed of dealing in securities with what entails that the transparency and security for traders and investors in the stock market through the introduction of all buy and sell orders for Using computers and then interview the supply and demand for securities and determine the price and executing it electronically. The application of system Website development has given great flexibility and different information to brokers to know their complete and incomplete work and carry out an analysis of the situation of traded companies, which facilitates the execution of trades fairly and quickly and easily, as well as to facilitate control over the trading operations and the dissemination of information in real time and increase the depth and liquidity of the market, This contributed to raise the level of financial performance of the Amman Stock Exchange.

### Importance of the study

In light of technological developments accelerated in the world and the openness of the world, and the intensification of competition and the need to increase the competitiveness of capital markets, it has become necessary to stock exchanges transition from manual trading to electronic trading system and the use of information technology and different means and through the development of its website , particularly since many of the previous studies concluded that the use of information technology improves the motives of work and increases job satisfaction and the level of achievement and performance. They added to the increasing impact of the electronic system of transparency of information on the required Prices shown on stocks and bonds and trading volumes and prices and speed of execution of contracts and financial settlements compared with the traditional markets. Hence the importance of this study is to explore the improvement in the financial performance indicators of Amman Stock Exchange after the application of the Website development system.

### Problem of the study and questions:

Information plays a role, in the overall economy and in the financial markets in particular, a key role in raising the level of efficiency and transparency; financial market is described as efficient or inefficient depending on the availability of information and the speed of its impacts on the prices of listed securities. Given the role played by modern technology in the provision of information very quickly, it has taken the Amman Stock Exchange to an important step to keep pace with technological development and renaissance taking place in world markets, therefore, the electronic systems were implemented to them for the purpose of raising the efficiency of the market. From here and after determining the most important features of the electronic trading system and achieve

the purpose of the information that cannot be provided under the traditional manual trading system, this study came to shed light on this important topic and by trying to answer a range of questions, including:

- 1 - What is the impact of the Amman Financial Market Update and the introduction of the electronic trading system on its financial performance?
- 2 - What is the impact of the evolution of Website (transparency, liquidity and avoid financial intermediaries, and the efficiency of the financial ASE) from the standpoint of investors.
- 3 - What is the impact of the Website in the Amman Stock Exchange in terms of financial (trading volume, and the number of shares traded and the number of bonds traded, and the ratio of dividends to market value).

**Objectives of the study:**

This study aims to touch the effect of replacing the manual trading system with an electronic trading system on the ASE Stock Exchange, through to test the importance of the changes that have occurred in some stock indexes and services (trading volume, number of shares traded and the number of bonds traded, the ratio of dividends to the value market) and features added by the Website (transparency, liquidity and avoid financial intermediaries, and the efficiency of the financial ASE) from the standpoint of investors. And measure the impact of factors (availability, confidentiality and protection, responsibility, simplicity of use, content) of the website on the performance of the Amman Stock Exchange.

**Hypotheses:**

This study seeks to identify the factors affecting the financial performance of the Amman Stock Exchange through testing the following hypotheses:

**First hypothesis:**

"There is a statistically significant relationship between the continuous updating of the website for the ASE and its financial performance"

**The second hypothesis:**

"There is a statistically significant relationship between the responsibility of the website for the ASE and its financial performance"

**The third hypothesis:**

"There is a statistically significant relationship between secrecy and protection of the website for the ASE and its financial performance"

**The fourth hypothesis:**

"There is a statistically significant relationship between the availability of the website for the ASE and its financial performance"

**The fifth hypothesis:**

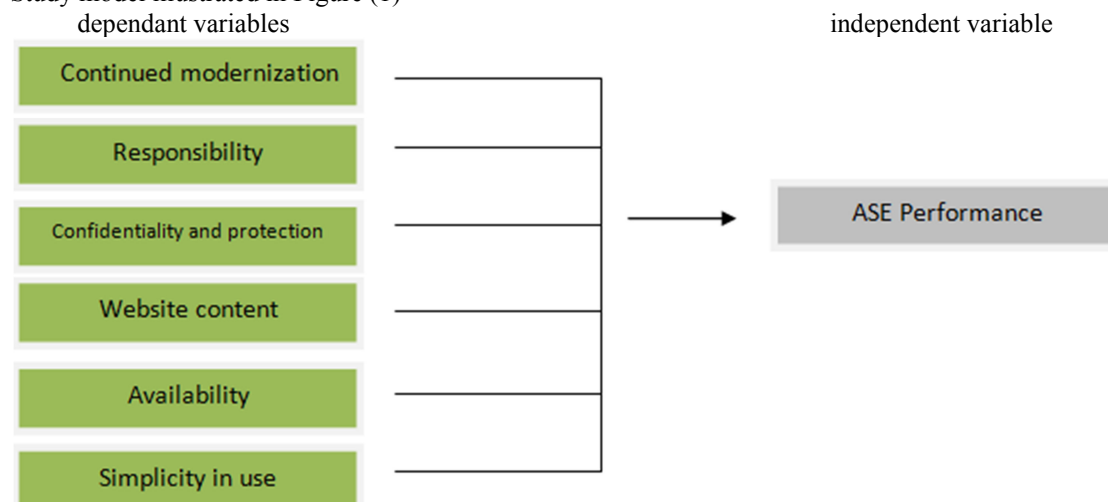
"There is a statistically significant relationship between the simplicity of use of the website for the ASE and its financial performance"

**The sixth hypothesis:**

"There is a statistically significant relationship between the content of the website of the Amman Stock Exchange and its financial performance"

**Study model**

Study model illustrated in Figure (1)



**Terms of the study (procedural definitions):**

The study contains some of the concepts and terminology, and it was incumbent on the researcher to determine the meaning of each of these terms and concepts in the following manner:

*Exchange*: regulated market takes place in a particular place in the lap times between dealers in the sale and purchase of various securities or agricultural crops or industrial goods through intermediaries (Bacchanal, 2002, : 38).

*Continued modernization*: the continued diversification and continuous distribution and the latest version of the subjects and sources referred to add programs and services.

*Confidentiality and protection*: It is a safe property and protects everyday activities such as: banking; shopping and browsing. Secrecy (Confidentiality), the confidentiality of all information in line with the company's policies in place to ensure the confidentiality of information. And protection (Security), the system is protected from unauthorized intrusions.

*Website Content*: All information contained in the web site and belonging to the ASE, including real-time or any other information or the contents of such programs and computer operating systems available on the website and data tables and instruction illustrations, and all protected as author rights and / or trademarks and any form forms of property rights. To allow the re-publication on the condition that the source is referred to.

*Availability*: means the availability of the site 24 hours a day where it appears directly when it's being contacted, and in the case of maintenance of the site the beneficiaries are notified of so.

*Responsibility*: is derived from the obligation to perform the function of responsibilities included in the work of the financial market including achieving the objectives of the Amman Stock Exchange (ASE).

*Simplicity in use*: ease of use and deal with the basic features of the site by the mediators during the process of browsing the site or when trading in the market.

*Financial performance*: is a measure of the results achieved or expected in the light of predetermined criteria to determine what can be measured and then the achievement of objectives to determine the level of effectiveness, and determine the relative importance between the results and the resources used allowing judgment on the degree of efficiency (Abdul Ghani, 2006: 41) .

#### **Limits of the study and its determinants:**

The limits of the study are Summed up in the following:

Spatial boundaries, the study is limited to the Amman Stock Exchange.

Human border, dependent sample response from investors in the Amman Stock Exchange and who use the Website in circulation.

The main determinants of the study, including the following:

Scarcity of previous studies and research that touched on the subject of the impact and evolution of the Web site in the performance of the stock market, which in this study came to be from the rare and few studies that touched on the subject of the study, which prevented the use of previous studies and directly.

The difficulty of procedures and correspondence in the distribution and collection of study questionnaires.

#### **The theoretical framework and previous studies**

##### **First: the theoretical framework**

The characteristic of this era - which is the so-called information age - Log information technology to various fields of life, has taken this phenomenon many forms and the most prominent was the operations of entering electronic systems to replace traditional manual systems in many areas, and this has been the introduction of electronic trading in the Stock Exchange Amman Stock Exchange in mid-2000, which was one of the examples of this phenomenon in the field of trading in securities, which is the latest significant changes in some of the indicators of the performance of this stock, which has increased the intensity of competition between global markets, especially the removal of barriers to the entry of investors to global markets that stimulate Markets administration to reorganize their work to increase the number of listed companies, brokers and the trading volume, and as a result many of the world's financial markets has worked to change the mechanism of action of its traditional markets and based on the nepotism of financial writing commands manually on a group of plates based on an auction, to the electronic markets By dealing with the Internet, and then, this improvement in the financial system will impact on the economic growth and the level of financial performance of the financial markets (Siam, 2007).

The internet also impacted in the way investors get information and how to deal with it, and also contributed to the reduction of fixed costs and marginal costs for the production of financial service, and has enabled many small businesses with limited capital from entering the industry for the fact that fixed costs are much lower compared with the previous, also Many direct financial services institutions appeared (Online financial service) and which is based on providing financial services and information and research services to investors and The Internet contributed to a radical change in the function of financial intermediation.

Both of Allen & Strahan (2002) described electronic financial markets (e-finance) as "markets that offer financial services and market depending on electronic communications, computers," its description differs depending on the content of the systems used in the financial market-mail and its diversity, they are ranging within this standard to a number of levels:

Routing orders electronically: (electronic order routing), which means converting commands to systems

implementation.

Execute orders electronically: (automated trade execution), which means converting commands to business operations.

Disseminating information electronically: (electronic dissemination) before and after the commercial operations, such as a statement volumes and prices.

#### **Launching Trading through Website Service**

Amman Stock Exchange launched the online trading service on 14/7/2010, where the characteristics of the website of the Amman Stock Exchange (PSE) according to the model of the study:

With respect to the characteristics provided by the fiscal Amman Stock Exchange Website summarized below (ASE, 2010):

##### **\* Confidentiality and protection**

You may not copy or modify the material in this site or reproduce or publish or broadcast or use in any way whatever with the exception of the purposes of personal, non-commercial use.

Information in its protection under the copyright law of Jordan and subject to the terms of providers of information and the use of this information to be bound to comply with these conditions.

##### **\* Simplicity in use**

Easy to use by researchers and interested investors. ASE site includes hyperlinks "to other websites operated and owned by parties other than the" ASE ".

##### **\* Speed**

Quick access to the required information and that through the availability of sophisticated and intelligent research methods and so that they can search through any information about the ASE and to trading on the Amman Stock Exchange, as well as corporate information.

##### **\* Site Content**

It has become possible under the new site to obtain information on living and historical trading for long periods of time on a daily, weekly, monthly and annual basis, a new feature was added on the site that enables the user to get historical trading bulletins of the time periods they wish. The user can also through the new site monitor companies with most expensive stocks, and the cheapest during the trading session.

A daily summary of trading activity can be obtained either by a table or a written text, which is updated daily and weekly summaries after the end of the trading session automatically, thus contributing to provide all available information quickly and accurately, and to all at the same time. The new site also provides detailed information and historical sub-sectors and the main form of tables which allow the analysts and specialists to analyze the way they see fit.

##### **\* Responsibility and accuracy**

Information traded during the "ASE" are available from the ASE general reference for information and educational purposes only. "ASE" has no control over such information and shall not be considered responsible for the content or availability of information provided on this website.

#### **Impact of the evolution of the Amman Stock Exchange website on its financial performance (ASE, 2010):**

The technology impact on the performance of Amman Stock Exchange in 2010 got widened, where 2010 saw many financial events and local and global economic that affected the Amman Stock Exchange either directly or indirectly, over the past year, the ASE has also introduced electronic trading system via the Internet, which supposed to support the trading indicators as a whole in the coming years, statistics have shown ASE brokerage firms opened 238 accounts through which trades nine million shares valued at \$ 5.7 million. Through access to the Statistical Bulletin of the ASE (stock market note that included 5 new companies to the Amman Stock Exchange during 2010, bringing the number of listed companies to 277 companies compared with 272 companies in 2009, a decline in the market value of the shares listed on the Amman Stock Exchange by the end of year 2010 to \$ 21.85 billion dinars, compared with 22.53 billion dinars in 2009, i.e. a decline of 2.9%, a problem that accounted for 122.7% of GDP over the past year. The number of shares traded witnessed a rise during the year 2010 16%; reaching Number of shares traded 6.98 billion executed through 1.9 million contracts, compared with 6 billion shares traded during the year 2009 executed through a 2.9 million contract, as well as increased stock turnover rate of up to 102.2% compared with 91.3% in 2009.

Amman Stock Exchange finished trading year 2010 with a trading volume of a total amounted to 6.7 billion dinars, compared with 9.7 billion dinars in 2009, and closed the index of stock prices Free Float at 2374 points compared to 2534 points at the end of 2009, a decline of 6.3%. The index of the Amman Stock Exchange on 13 April 2010 its highest level at 2648.36 points, where the Amman Stock Exchange reached a peak during that period, supported by expectations of good performance of listed companies.

In spite of that, the percentage of ownership of non-Jordanian Amman Stock Exchange until the end of the month of November 2010 to reach 49.1% compared with 48.9% at the end of 2009, despite the fact that net investment by non-Jordanians in Amman Stock Exchange during the past year recorded a negative value of 14.6 million, compared with minus 3.8 million dinars in 2009,

On the other hand, 5 new companies has been included in Amman Stock Exchange during the year 2010 so that the number of listed companies were up to 277 companies, as the market value of shares listed on the Amman Stock Exchange by the end of 2010 was about 21.9 billion dinars, a problem thus accounted for 122.7% of GDP. Noteworthy that the number of shares traded during the year 2010 has witnessed an increase of 16.1%; terms of the number of shares traded reached 7.0 billion shares executed through 1.9 million contracts, compared with 6 billion shares traded during the year 2009 and was carried out over 3 million contracts, as well as the rate rose the stock turnover of up to 102.2% compared with 91.3% in 2009.

### **Second: Previous studies:**

This section deals with an overview of previous studies related to the subject of study in order to configure a conceptual framework based on the current study to clarify the fundamental aspects of the subject, the following presentation of the previous studies categorized by chronological order:

1 - Abdel Nasser and Mohammed Khair (2007), conducted a study entitled "The Impact of Internet in the financial markets," An Empirical Study on the Amman Stock Exchange Finance "aimed to define the role of the Internet in the financial markets and measure their impact on the financial markets in light of turning many of the financial markets to rely on the Internet at implementation of its internal and external operations. The study has reached to a set of results, the most important was the that the Internet penetration in the financial markets increased the level of transparency and disclosure, increased the level of liquidity and avoided brokerage in average. the spread of the Internet has a positive impact in raising the efficiency of Amman Stock Exchange through increased communication channels and reduce the cost of access to information. The study concluded that the spread of the Internet did not contribute to lowering the cost of trading on the Amman Stock Exchange and there has been no improvement in trading volume and the number of shares traded and the number of bonds traded and the ratio of earnings to the market value.

2 - (Siam 2007), a study entitled "The impact of updated financial markets and the introduction of the electronic trading system to stimulate investments (case study of the Amman Stock Exchange)" aimed to measure the impact of updated financial markets and the introduction of the electronic trading system to stimulate investment through the measurement of growth rates performance indicators in the Amman Stock Exchange (stock market) after the introduction of updated electronic trading system instead of the traditional manual trading system. To achieve the objectives of the study, necessary data on performance indicators for the years 1999, 2002 were collected, 1999 the previous year and the years 2001 and 2002, the subsequent two years to bring the electronic trading system that replaced the manual system. And analyze performance indicators and to make a comparison between them and creating growth rates, show that there is a clear growth, which confirms the response of ASE performance indicators (stock market) of improvement after the application of the electronic trading system in 2000.

3 - Pankaj Jain (2003) a study aimed to identify the impact of e-commerce in the financial markets in the medium term and long term, where he collected data on 118 countries that have announced the start of trading through the Internet, and the study results have found that, according to the model of growth in earnings that expected return has fallen by 0.08% after the announcement of the start of e-commerce, but that advertising has contributed to the short-term (after installing a number of variables and of risk factors, financial integration and economic development) to increase liquidity and education for the financial markets that then contributed to the reduction, and illiquidity.

5 - Look smart (2003) published an essay that called to the statement of the impact of electronic trading on the trading volume or market value of the stock exchange, where the researcher pointed expectations of growth in the value of electronic investment in Western Europe at a compound rate of 10.5%, where the back of this growth in part to the maturation Investment of the electronic Market (e-investment), concluded in an article, but the most important problems that limit the growth process of these are: the lack of security in electronic trading process, and the crisis of confidence among investors, in addition to sudden market fluctuations.

6 - Barber & Odean (2002) concluded a study that aimed to analyze the characteristics and performance of the 1607 investors switched from investing in securities through the phone to the investment by the Internet during the 1992 to 1995 The study found that investors of young people were more willing to switch to trade through the Internet. The study also demonstrated that investors who have achieved high success in investment in securities have increased their activities and risk appetite after the spread of the Internet, and the researchers see that the reason for increased confidence in this medium due to the fact that these investors have achieved a higher return, as well as increased the size of the information provided by the Internet, and finally to increase control over the buying and selling through the Internet has increased confidence in this way, but this study needs to add a greater number of variables studied in the desire towards a shift in the use of the Internet in the financial markets.

### **Study Methodology**

This chapter describes the study population and the tools used to collect the data, and how to develop sincerity, persistence, and concluded a description of the study procedures and statistical treatment that was used to answer

the study questions.

Methodology:

The researcher followed a descriptive analytical method to conduct this study, so as to compensate with the nature of the study.

The study population:

The study population consists of all ASE staff, who work in all the companies that used the websites for the Amman Stock Exchange (stock market).

The study sample:

A random sample was selected from the study population amounted to (50). It was divided into (18) manager, and also includes all heads of departments who are working in companies who use the system, totaling in (12) Head of Departments, and also includes all employees who work companies who use the system, totaling (20) employees, and the sample shows as follows:

Distribution of the sample according to demographic variables:

Table (1)

Distribution of the sample according to demographic variables

Percentage	Repetition	Types	Variables
36.0	18	Director	Job Title
24.0	12	Head of Department	
40.0	20	Other, Please mention	
30.0	15	BA	Qualification
8.0	4	Diploma, Higher studies	
38.0	19	Masters	
24.0	12	PhD	
30.0	15	Other, Please mention	
24.0	12	Accounting	Specialty
26.0	13	Business Administration	
32.0	16	Economy	
18.0	9	Financial sciences	
24.0	12	Other, please mention	
32.0	16	Less than 2 years	Experience
30.0	20	From 2 years and less than 5 years	
22.0	9	From 5 years and less than 10 years	
7.0	5	From 10 years and more	
6.0	3	Less than 2 years	Years of using the website
40.0	20	From 2 years and less than 5 years	
40.0	20	From 5 years and less than 10 years	
14.0	7	From 10 years and more	

The researcher used a curriculum survey to prepare questions to form the themes that will depend on the questionnaire that was applied to a number of managers and department heads and staff of ASE to measure the impact of the development of the website of the Amman Stock Exchange on its financial performance and that by measuring growth rates in the performance indicators in the Amman Stock Exchange.

The stability of the tool:

Stability Coefficients were extracted (alpha Cornbach) for fields of study as follows:

Table (2)

Stability Coefficients (alpha Cornbach) for fields of study

Stability Coefficient	Field	Number
.942	The effect of continuous updating of the website on the financial performance of the Amman Stock Exchange.	1
.923	The effect of responsibility in the Website on the financial performance of the Amman Stock Exchange.	2
.922	Impact of confidentiality and protection available on the website on the financial performance of the Amman Stock Exchange	3
.971	Impact of the availability of the website on the financial performance of the Amman Stock Exchange.	4
.945	Impact of the simplicity of use of the website on the financial performance of the Amman Stock Exchange.	5
.955	Website content effect on the financial performance of the Amman Stock Exchange	6
.986	The Tool as a whole	

Results of the study showed an increase in stability coefficients ratios, which shows a high consistency between

the one vertebrae of the field alone and paragraphs tool as a whole. Making it acceptable for the purposes of scientific research.

Procedures of the study:

After confirming the veracity of the study tool and determining the sample to be applied resolution on them, the questionnaire was distributed to a study sample, after explaining its goals and the demand of the sample carefully collected and objectively, as confirmed by the researcher for individuals covered by the study, that their answers would be treated confidentially, and it will only be used for research purposes and scientific research only, and respondents will be given an ample opportunity to answer.

As will be grading the level of answering in each paragraph according to the Likert scale Pentagram that is identified in five levels as follows: always applies and gives (5) degrees and the level applies often given (4) degrees and the level applies sometimes given (3) degrees and the level applies rarely given (2) two notches and the level does not apply and never given (1) the degree of one, and a scale has been used to judge the results, which were divided into (high, medium, low), depending on the categories of the tool, and number four categories (1-1.99), (2-2.99), three low grade follows from (1 - less than 2.6) and middle class (2.6 - less than 3.4), and high-grade (3.4 - 5), and the division of these levels can be clarified as follows:

$$1 + (0.8 + 0.8) = 2.6.$$

$$2.6 + (0.8) = 3.4.$$

$$3.4 + (0.8 + 0.8) = 5.$$

Thus, the levels are as follows:

1 - less than 2.6 low degree.

2.6-less than 3.4 medium degrees.

3.4-5 high degree.

Statistical treatment:

For the purpose of answering the research questions and achieving the desired objectives, statistical treatments were used as follows:

To answer the first question, which states "What is the impact of the ongoing modernization of the website on the financial performance of the Amman Stock Exchange?" averages and standard deviations were extracted for the study sample answer on the scale of Amman Stock Exchange.

To answer the second question, which states "What is the effect of responsibility in the Website on the financial performance of the Amman Stock Exchange?" averages and standard deviations were extracted for the study sample answer on the scale of Amman Stock Exchange.

To answer the third question, which states "What is the impact of confidentiality and protection available on the website on the financial performance of the Amman Stock Exchange?" averages and standard deviations were extracted for the study sample answer on the scale of Amman Stock Exchange.

To answer the fourth question, which states "What is the impact of access to the website on the financial performance of the Amman Stock Exchange?" averages and standard deviations were extracted for the study sample answer on the scale of Amman Stock Exchange.

To answer the fifth question, which states "What is the impact of simplicity in the use of the website on the financial performance of the Amman Stock Exchange?" averages and standard deviations were extracted for the study sample answer on the scale of Amman Stock Exchange.

To answer the sixth question, which states "What is the impact of Website content on the Amman Stock Exchange's financial performance?" averages and standard deviations were extracted for the study sample answer on the scale of Amman Stock Exchange.

To extract the stability of the tool, the stability coefficient (Cornbach Alpha) Was used.

Therefore, duplicates and percentages were extracted to narrow the sample.

## Chapter IV

### Results of the study and discussion

To answer the question, which states "What is the impact of the ongoing modernization of the website on the financial performance of the Amman Stock Exchange?" averages and standard deviations were extracted for the Answers of the study sample on the size of the ongoing modernization of the website, and the results were as follows:

Table (1)

Averages and standard deviations for the Answers of the members of the study sample on the paragraphs that measure the impact of the ongoing modernization of the website on the financial performance of the Amman Stock Exchange

Degree of application	Rank	Standard Deviation	Average	Paragraph	Number
Average	1	1.36	2.66	The use of real-time in the process of continuous updating of the website helps to keep pace with developments, moment by moment.	4
Average	2	1.44	2.62	The continuous updating of the site raises the efficiency of the performance of the Amman Stock Exchange.	1
Average	3	1.14	2.62	The speed of response to new information and prices that are available to users increases with continuous update.	5
Low	4	1.32	2.44	Continuous updating of the website helps to get the information the stock need for investment purposes at low cost.	3
Low	5	1.14	2.4	the speed of financial trading instruments increases with continuous updating of the site.	7
Low	6	0.99	2.32	The ongoing modernization of the Amman Stock Exchange Website Contributes to raise the volume.	2
Low	7	1.23	2.32	The update affects the decision-making process appropriate for the performance of the stock market.	6
Low	-	1.07	2.48	Total grade	

The previous table shows that the arithmetic averages came from medium and low paragraphs by Answers members of the study sample, the overall arithmetic average was (2.48), and a standard deviation of (1.07).

The previous table shows paragraph (4), which states, " The use of real-time in the process of continuous updating of the website helps to keep pace with developments, moment by moment" came in first place with an average account of (2.66), while paragraph (1), which states " The continuous updating of the site raises the efficiency of the performance of the Amman Stock Exchange "came in second place with an average account of (2.62), and r paragraph (2) was ranked before the last, which states that" The ongoing modernization of the Amman Stock Exchange Website Contributes to raise the volume. " A mean average of (2.32), and the last paragraph (6) was ranked last, which states that " The update affects the decision-making process appropriate for the performance of the stock market ", with an average account of (2.32).

To answer the second question, which states "What is the effect of responsibility in the Website on the financial performance of the Amman Stock Exchange?" averages and standard deviations were extracted for Answers the sample study on the impact of liability on the Website, and the results were as follows:

Table (2)

Averages and standard deviations for the Answers of the members of the study sample paragraphs that measure the impact of responsibility in the Website on the financial performance of the Amman Stock Exchange

Degree of application	Rank	Standard Deviation	Average	Paragraph	Number
Average	8	1.49	2.72	To promote the positive aspects of responsibility and the morale of the users, which reflected positively on the performance of the stock market in general.	9
Average	9	1.39	2.62	Availability of the responsibility factor provides an increase in trading volume and increase in market liquidity.	12
Low	10	1.34	2.5	the responsibility of the website Contribute in providing all the information you need without having to return to the brokerage.	11
Low	11	1.29	2.4	Responsibility raises the level of accuracy of data and information.	8
Low	12	1.22	2.26	Responsibility provides sufficient information in full for all investment opportunities.	10
Low	-	1.18	2.50	Total grade	

The previous table shows that the arithmetic averages were mostly low by paragraphs Answers of the members of the study sample, which came to an overall arithmetic average of (2.50), and a standard deviation of (1.18).

The previous table shows that paragraph (9), which states that " To promote the positive aspects of responsibility and the morale of the users, which reflected positively on the performance of the stock market in general." Came first, with a mean of (2.72), while Paragraph (12), which states that " Availability of the responsibility factor provides an increase in trading volume and increase in market liquidity." came in second place with an average account of (2.62), and the Last paragraph (8), which states " Responsibility raises the level of accuracy of data and information." had a mean average of (2.4), and the last paragraph (10) was ranked last, which states that " Responsibility provides sufficient information in full for all investment opportunities." and had a mean of (2.26).

To answer the third question, which states "What is the impact of confidentiality and protection available on the website on the financial performance of the Amman Stock Exchange?" the averages and standard deviations for Answers of the members of the study sample on the impact of confidentiality and protection available on the



website on the financial performance of the Amman Stock Exchange were extracted, and the results were as follows:

Table (3)

Averages and standard deviations for Answers of the members of the study sample paragraphs that measure the impact of confidentiality and protection available on the website on the financial performance of the Amman Stock Exchange

Degree of application	Rank	Standard Deviation	Average	Paragraph	Number
Average	13	1.4	2.9	Confidentiality and protection of the Amman Stock Exchange website affects positively in increasing the volume of electronic trading.	16
Average	14	1.4	2.76	Strengthening the confidentiality of the Amman Stock Exchange Website address increases efficiency and transparency in the performance of the market.	17
Average	15	1.4	2.68	Confidentiality and protection of the Amman Stock Exchange website contributes positively in raising the efficiency of electronic trading.	13
Average	16	1.27	2.62	Confidentiality and protection systems for the Amman Stock Exchange Website address raise the reliability of the data available.	14
Average	17	1.27	2.6	confidentiality helps in the Amman Stock Exchange web site to increase the channels of communication between the investors in the market.	15
Average	-	1.18	2.71	Total grade	

The previous table shows that the arithmetic averages were mostly medium by paragraphs Answers of the members of the study sample, which came by an overall arithmetic average of(2.71), and a standard deviation of (1.18).

The table shows the previous paragraph (16), which states that " Confidentiality and protection of the Amman Stock Exchange website affects positively in increasing the volume of electronic trading." came in first place with an average account amounted to (2.9), while Paragraph (17), which states " Strengthening the confidentiality of the Amman Stock Exchange Website address increases efficiency and transparency in the performance of the market "came in second place with an average account of (2.76), and paragraph (14) was ranked penultimate, which states that" Confidentiality and protection systems for the Amman Stock Exchange Website address raise the reliability of the data available" with a mean average amounted to (2.62), and the paragraph (15) came in ranked last, which states that " confidentiality helps in the Amman Stock Exchange web site to increase the channels of communication between the investors in the market." and had a mean of (2.6).

To answer the fourth question, which states "What is the impact of access to the website on the financial performance of the Amman Stock Exchange?" The averages and standard deviations for the Answers of the members of the study sample on the impact of the availability of the website on the financial performance of the Amman Stock Exchange were extracted, and the results were as follows:

Table (4)Averages and standard deviations for the Answers of the members of the study sample paragraphs that measure the impact of access to the website on the financial performance of the Amman Stock Exchange

Degree of application	Rank	Standard Deviation	Average	Paragraph	Number
Average	18	1.44	2.8	Availability of ASE website electronically leads to following the style of electronic trading which is expected to cause a broad and comprehensive change for the performance of the stock market.	21
Average	19	1.55	2.78	Availability of the Amman Stock Exchange Website electronically contributes to reduce unproductive activities such as attendance to the financial market.	18
Average	20	1.48	2.72	The availability of the Amman Stock Exchange Website electronically increases the trading volume and increases market liquidity.	20
Average	21	1.42	2.64	Availability of the Amman Stock Exchange Website electronically contributes to facilitate the trading process and removes any restrictions or obstacles prevented from attaining justice between securities dealers.	22
Average	22	1.48	2.64	Availability of ASE website contributes to increase the speed of electronic trading of financial instruments.	23
Average	23	1.64	2.6	Access to the Amman Stock Exchange Website electronically encourages electronic trading, including raising the performance of the stock market.	19
Average	-	1.68	3.23	Total grade	

The previous table shows that the arithmetic averages were mostly medium by paragraphs Answers of the members of the study sample, which came with an overall arithmetic average of (3.23), and a standard deviation of 1.68.

The table shows the previous paragraph (21), which states that " Availability of ASE website electronically leads

to following the style of electronic trading which is expected to cause a broad and comprehensive change for the performance of the stock market." came in first place with an average account amounted to (2.8), while paragraph (18) which states " Availability of the Amman Stock Exchange Website electronically contributes to reduce unproductive activities such as attendance to the financial market." came in second place with an average account of (2.78), and paragraph (23) came before the last, which states that " laboratory space of the school does not fit with laboratory experiments that are made in the laboratory, " with a mean average of (2.64), and paragraph (19) ranked last, which states that" Access to the Amman Stock Exchange Website electronically encourages electronic trading, including raising the performance of the stock market." with an average of (2.6).

To answer the fifth question, which states, "What effect simplicity in the use of the website on the financial performance of the Amman Stock Exchange?" averages and standard deviations for the Answers of the members of the study sample on the impact of simplicity in the use of the website on the financial performance of the Amman Stock Exchange were extracted, and the results were as follows:

Table (5)Averages and standard deviations for the Answers of the study sample paragraphs that measure the following constraints of the simplicity in the use of the website on the financial performance of the Amman Stock Exchange

Degree of application	Rank	Standard Deviation	Average	Paragraph	Number
Average	24	1.29	2.84	Simplicity in the use of Amman Stock Exchange Website electronically leads to increase market liquidity.	26
Average	25	1.23	2.78	Simplicity in the use of Amman Stock Exchange Website electronically leads to reducing the cost of trading on the Amman Stock Exchange as a result of electronic trading.	29
Average	26	1.33	2.74	Simplicity in the use of Amman Stock Exchange Website electronically leads to the economy in the cost of buying and selling commissions due to the reduce of dependence on financial intermediaries.	27
Average	27	1.32	2.74	Simplicity in the use of Amman Stock Exchange Website electronically contributes to raise the efficiency of the performance of the market.	28
Average	28	1.37	2.7	Simplicity in the use of Amman Stock Exchange Website electronically leads to an increase in trading volume.	25
Low	29	1.41	2.52	Simplicity in the use of Amman Stock Exchange Website electronically removes any restrictions or obstacles in trading operations.	24
Low	-	1.02	2.52	Total grade	

The previous table shows that the arithmetic averages were mostly medium by paragraphs Answers of the members of the study sample, which came with an overall arithmetic average of (2.52), and a standard deviation of (1.41).

The table shows that paragraph (26), which states that " Simplicity in the use of Amman Stock Exchange Website electronically leads to increase market liquidity." came in first place with an average account of (2.84), while Paragraph (29), which states that " Simplicity in the use of Amman Stock Exchange Website electronically leads to reducing the cost of trading on the Amman Stock Exchange as a result of electronic trading." came in second place with an average account of (2.78), and paragraph (25) was ranked penultimate, which states that" Simplicity in the use of Amman Stock Exchange Website electronically leads to an increase in trading volume. " with a mean average of (2.7), and paragraph (24) came in ranked last, which states that" Simplicity in the use of Amman Stock Exchange Website electronically removes any restrictions or obstacles in trading operations." with a mean total of (2.52).

To answer the sixth question, which states "What is the impact of Website content on the Amman Stock Exchange's financial performance?" averages and standard deviations for Answers of the members of the study sample on the impact of the content of the Website on the financial performance of the Amman Stock Exchange were extracted, and the results were as follows:

Table (6) Averages and standard deviations for Answers of the members of the study sample paragraphs that measure the impact of website content on the financial performance of the Amman Stock Exchange

Degree of application	Rank	Standard Deviation	Average	Paragraph	Number
Average	30	1.32	2.64	The content of the Amman Stock Exchange website encourages electronic trading, which helps in raising the performance of the stock market.	31
Low	31	0.99	2.54	The content of the Amman Stock Exchange website provides full information (reports, tables) needed by the investor.	32
Low	32	1.16	2.54	The content of Amman Stock Exchange Website provides strategies that take into account the rapid changes.	35
Low	33	1.05	2.52	The content of the website enhances efficiency and transparency performance of the Amman Stock Exchange.	33
Low	34	1.24	2.52	The content of the Amman Stock Exchange web site provides information to cover all the needs of the beneficiaries.	36
Low	35	1.03	2.5	The e-content works through diversity and inclusion and the multiplicity of options for beneficiaries and contributes as a magnet for electronic trading.	34
Low	36	1.23	2.42	The content of Amman Stock Exchange Website increases the trading volume and market liquidity.	30
Low	-	1.02	2.52	Total grade	

The previous table shows that the arithmetic averages were mostly low by paragraphs Answers of the members of the study sample, which came with an overall arithmetic average of (2.52), and a standard deviation of (1.02). The above table shows that paragraph (31), which states that " The content of the Amman Stock Exchange website encourages electronic trading, which helps in raising the performance of the stock market." Came first with a mean of (2.64), while Paragraph (32), which states that " The content of the Amman Stock Exchange website provides full information (reports, tables) needed by the investor." came in second place with an average account of (2.54), and paragraph (34) came ranked penultimate, which states that " The e-content works through diversity and inclusion and the multiplicity of options for beneficiaries and contributes as a magnet for electronic trading." with a mean average of (2.5), and paragraph (30) came in ranked last, which states that" The content of Amman Stock Exchange Website increases the trading volume and market liquidity." with a mean of (2.42).

#### Discussion of the results and their interpretation:

Discussing the results related to the first question, which states "What is the impact of the ongoing modernization of the website on the financial performance of the Amman Stock Exchange." The study results showed that the arithmetical averages came from medium and low-paragraphs, and the paragraph which states that " The use of real-time in the process of continuous updating of the website helps to keep pace with developments, moment by moment." and the paragraph that states "The update affects the decision-making process appropriate for the performance of the stock market" had the lowest average account. And the researcher indicates that these reasons are due to the resulting cognitive development and blasting tremendous scientific and technical progress, which has led to an increase in the amount of data and information that deal with rights in various areas of life, which prompted him to search for a way to store this information and data retrieval and invested through continuous updating of web sites by increasing the amount of its increasing technical sophistication of information on massive financial ASE. And to assist in the introduction of new methods for the disclosure of information received by the stock exchange and use in order to develop any information about the stock market. And help modernize the technical infrastructure of the Stock Exchange.

Discuss the results of the second question, which states, "What is the effect of responsibility on the website of the performance of the Financial Amman Stock Exchange. The study results showed that the paragraph which states that" promoting responsibility on the positive aspects and the morale of the users, which reflected positively on the performance of the stock in general. " And the paragraph came in ranked last which states that "responsibility provide adequate and complete information for all investment opportunities. The researcher believes that these reasons belong to. This is because the websites helps greatly in providing information, education and marketing and develops a clear vision about the daily trading sessions of the Amman Stock Exchange and assistance in making investment decisions and to identify the movement of financial market activity and the movement of the initial versions.

Discuss the results on containing the question "What is the effect of responsibility in Website on the financial performance of the Amman Stock Exchange. The paragraph which states that" Supporting the positive aspects of responsibility and the morale of the users, which reflected positively on the performance of the stock market in general. came in First place and this is due to that websites enhance the consumer to use their security access to safe and good information by the site and that are useful for making appropriate purchasing decisions, through the information provided.

Discuss the fourth question, which states "What is the impact of access to the website on the financial performance of the Amman Stock Exchange?" Arithmetical averages came mostly medium according to the answers of the study sample, and the paragraph which states that " Availability of ASE website electronically leads to following the style of electronic trading which is expected to cause a broad and comprehensive change for the performance of the stock market." This is due to the availability of electronic sites that provides Many of the policies and mechanisms of action to improve the degree of efficiency and effectiveness by achieving compatibility with the actual needs of the beneficiary community.

Discuss the sixth question, which states "What is the impact of Website content on the financial performance of the Amman Stock Exchange?"

The results showed that the paragraph which states that " the content of the Amman Stock Exchange website promotes electronic trading, which raises the performance of the stock market." Came first. And these results show the importance of websites in the Amman Stock Exchange private information and what the website provides of ease of electronic trading, which increases the performance the stock. To answer the fifth question, which states, "What the impact of simplicity in the use of the website on the performance of the ASE, the Financial Results were percentages and averages that came average, also the paragraph that stated that ASE electronically increases the liquidity of the market had the highest average account due to the ease websites provide in knowing the transfer of assets easily through the motions of buying and selling and prices, wither it was a rise or fall in value. the results of the present study are compatible with the results of previous studies like the study of (Khasawneh, 2000), the study of (Abdel Nasser and Mohammed Khair, 2007), and the study of Siam, 2007.

#### **Recommendations that emerged from the study:**

The need to facilitate and clarify the information and services on the Amman Stock Exchange on its financial performance on their websites.

The need to find a highly qualified staff in the field of marketing, especially online marketing and marketing services for ASE.

Facilitate services for the ASE in the websites and the expansion of these services to meet the changing demands by the beneficiaries.

The need to set-up sites to Amman Stock Exchange companies that do not have a special site on the Internet so that it contains modern systems.

The need to work on adding service feedback and communicate directly on the websites between the ASE and beneficiaries ..

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