

Empirical Evidence of Relationship of Features of Firms and Internet-based Financial Reporting

Mohsen Moradi^{1*}, Morteza Shafiee Sardasht² and Nahid Big Moradi³

¹Faculty of Management, University of Imam Reza, Mashhad, Iran; Momoradi2010@yahoo.com

²Faculty of Management and Accounting, Islamic Azad University, Mashhad Branch, Mashhad, Iran; acc.shafiee@gmail.com

³Faculty of Management and Accounting, Islamic Azad University, Mashhad Branch, Mashhad, Iran; nahid_bigmoradi@yahoo.com

Abstract

Objective – The evolution in communication and the development of global market lead to creation of new financial opportunities in the world. In this study, investigation on the level of information disclosure through Internet, as in the website of listed firms in Tehran stock exchange (TSE) and correlation with the firm's features such as the industry type, firm size, profit, products' importance, processes, competition (environmental stress) and electronic communication with clients and beneficiaries has been attempted.

Methods/Statistical Analysis – Initially, a check list based on 84 previous researches, was prepared. The required information was collected through the website of listed firms in industries during 15 May to 20 June 2012 and the data recorded and analyzed in Excel spreadsheet, as the dataset. This information along with financial statements of firms, from automotive industries, chemical industries, banks, investment and medicine products, were processed and analyzed using regression model, concomitant with investigating hypotheses. This input data for statistical model was utilized for the research hypotheses. Finally the data was processed using SPSS software.

Conclusion/Application – The results show that the studied companies tend to disclose non-financial information rather than financial information. Also there is a significant and positive relationship between firm size and nature of industry with Internet-based financial reporting. In other side there is a significant inverse relationship between profit and competition with Internet-based reporting and there is no significant relationship between the importance of products, services and electronic communication with clients and Internet-based reporting.

Keywords: Internet Financial Reporting, Business Reporting, Web Based Disclosure, Disclosure Index, Firm Characteristics.

1. Introduction

In order to update required information of stockholders including stakeholders, in decision-making processes. it is mandatory to present the firms financial and non-financial information. This will include financial statements, explanatory notes, and other financial and non-financial complementary information. In the past, firms have represented information through tradition-

ally published reports (written report), that is followed to this day, may continue for several years till, this reporting approach becomes outmoded to be replaced progressively by Internet-based reporting [1, 30, 10].

Nevertheless it establishes increasing important relationship of Internet with financial reporting. Furthermore, accountants wish to achieve an insight based on Internet information, to its future prospects [44].

**Corresponding author:*

Mohsen Moradi (Momoradi2010@yahoo.com)

Increased awareness resulted in the utilization of website distributing financial information, because paper-based (traditional) information was not beneficial for decision-makers, being untimely. Since firms can provide more information on their websites at cheaper rates, the focus of accounting shifted from traditional reporting to Internet-based reporting [12, 8]. The findings of American Institute of Certified Public Accountants, concerning financial reporting, has shown, that in order to satisfy varied users' information have to adopt a method that is attentive to user's needs [2]. This entails using a flexible reporting system, for public purposes, which the current reporting lacks.

In such an atmosphere developing countries, including Iran, have to look beyond the traditional reporting approaches. Failure of any country to expedite in adopting this system will result in loss of many business opportunities.

Internet-based financial reporting is a modern technology instituted in financial reporting area. From past years, the firm's financial reporting approaches have been studied by different researchers. The initial researches (1996–97) about Internet-based financial reporting were initiated; however, initially investigations were on the existence of website for security market leading firms [5], earlier researches had been conducted in this setting [24, 28, 29, 38].

Based on [35] in investigating Australian firms, and [19] in New Zealand, there is a positive relationship between optional disclosure and operational leverage of firms by Internet-based financial reporting, while researcher like [34, 11, 3] has rejected the existence of this relationship. Also [26] investigated the Internet-based financial reporting in 144 firms listed in Madrid's security market. The results show that there is a significant relationship between firm size, financial leverage and stockholders' turnover with the amount of disclosed information through Internet. Hadi studied the firms of 17 accepted industries in Kuwait's exchange market in order to investigate the relationship between Internet-based financial reporting and the firms' features. Among the firms' features are: firm size, growth, profit, proficiency and liquidity. Findings show that there is a significant relationship between firm size and firm profit. But in reviewing other variables there were no significant relationship [18]. Clik et al. (2006) conclude in investigating 253 accepted firms in Istanbul's security market that ownership structure foreign investment's level and key-money as firms' features have no significant relationship with Internet-based financial reporting. But firm size, industry

type, and firm's turnover have a positive relationship with Internet-based financial reporting [12]. Hsiu-Fen Lin and Szu-Mei Lin in 2007 selected 732 firms from the largest accepted firms in Taiwan's exchange market in investigating the relationship between Internet-based financial reporting and competition. The results showed that there is a positive relationship between competition and Internet-based financial reporting [20], that is similar to [21] and [33]. These researchers also concluded that in industries that where the number of competitors is higher (high-competition industries) Internet-based financial reporting is used more frequently. Alanezi in 2009 investigated a sample of 179 accepted firms in Kuwait's security market in order to determine whether there is a relationship between Internet-based financial reporting of Kuwaiti firms and the firm's corporate sovereignty features and special features including role's duality, directorate size, ownership publication, auditing type and firm size. The results showed that there is a significant and positive relationship between Internet-based financial reporting and auditing type, firm size and industry type. But there were no significant relationship between Internet-based financial reporting and corporate sovereignty [4]. Damaso and Lorenc (2011) prepared a check list with 5 parts in order to investigate the accepted firms in London's security market. Their findings showed that the firm size was one of the effective factors in Internet-based financial reporting; there is a negative relationship between operational leverage of the firm, and the ownership level and Internet-based financial reporting; and there is no significant relationship between profit and Internet-based financial reporting [14] according to [1] investigated listed companies in Ghana between September and October 2010 and concluded that 77.14 percent of the company has no website and other websites are not available. Also, shows that the company's profitability and leverage are important determinants of Internet financial reporting.

2. Research Methodology

In order to investigate the features of Internet-based financial reporting in Iran based on previous researches, firstly, a check list of 84 author was prepared that was divided into 2 parts: financial information based on 36 researches and non-financial information by 48 researches (please see appendix 1). For completing the check list, firstly, the website addresses of intended firms were gained through Tehran's security market's site and Google, then the required information was collected through referring to the

website of accepted firms in intended industries during 15 May to 20 June 2012 and the data was created and analyzed in Excel environment as informational dataset.

Next, according to acquired information from this check list, the total disclosure index for every firm calculated. This information along with information extracted from financial statements of intended firms, were processed using Excel. In order to analyze the results in line with investigating the hypotheses, regression model was used and then the entry data for statistical software was provided for the test of the research's hypotheses. Finally the data was processed using SPSS.

3. Research Hypotheses

1. There is a significant and positive relationship between the amount of Internet-based financial reporting of accepted firms in Tehran's security market and the industry type.
2. There is a significant and positive relationship between the amount of Internet-based financial reporting of accepted firms in Tehran's security market and the firm size.
3. There is a significant and positive relationship between the amounts of Internet-based financial reporting of accepted firms in Tehran's security market and profit.
4. There is a significant and positive relationship between the amounts of Internet-based financial reporting of accepted firms in Tehran's security market and the importance of products and the processes.
5. There is a significant and positive relationship between the amounts of Internet-based financial reporting of accepted firms in Tehran's security market and environmental stress (competition).
6. There is a significant and positive relationship between the amounts of Internet-based financial reporting of accepted firms in Tehran's security market and electronic communication with clients and suppliers.

4. Investigating and Measuring the Research's Variables

4.1 The Internet-based Disclosure Index (Dependent Variable)

In this research a comprehensive investigation concerning Internet-based disclosure indices used in important researches such as [17, 5, 7, 32, 41, 42] was conducted to determine the Internet-based disclosure index.

After analyzing and investigating the components used in previous research one by one, Internet-based enclosure index components based on the statue of accepted firms in Tehran's security market and the condition of Iran's capital market identified and designed. Therefore, the check list's items were categorized into 7 classes as follows:

Table 1. Summary of classified information about list

No.	Information Classification	Numbers		Total
		Non-Financial attributes	Financial attributes	
1	Company general Information	11	-	11
2	Financial and accounting information	-	36	36
3	Strategic information	5	-	5
4	Commercial information	7	-	7
5	Timeliness of information	3	-	3
6	Website technology	16	-	16
7	Human resources information and intellectual capital	6	-	6
Total		48	36	84

In order to determine the amount of Internet-based disclosed information, meantime referring to the intended firms' websites, if the intended firm has disclosed the intended component, the value 1 is assigned to it and the value 0 is assigned to it otherwise. Finally (by using Formula 1 which is presented in the next page) by calculating the ratio of the sum of disclosed components to total disclosure components (all the check list items) we derived the total disclosure index of the intended firm.

$$DI_x = \frac{\sum_{i=1}^{N_x} T_{ix}}{N_x}$$

DI_x : the disclosure index of the firm

T_{ix} : the disclosed information items by the firm

N_x : the maximum items that is expected to be disclosed by the firm (all the check list items).

4.1.1 Form Size

In this research the sum of firm's assets in the end of fiscal year is used as the firm size measure and the natural logarithm of assets is used to place the firms' size in a range and preventing asymmetric-induced problems in variables' distribution.

Firm size = natural logarithm (the sum of the assets)

4.1.2 Profit

In this research assets' turnover is used to evaluating the profit.

Assets' turnover = sum of assets in the end of fiscal period / net gain before subtracting the taxes

4.1.3 Industry Type

Active firms in a special operational group, form a special industry. In this research industry type was determined based on industry classification, by Tehran's security market.

4.1.4 Environmental Stress (Competition)

In order to measure the environmental stress, firstly we divide the total number of the population's firms by total number of industries and the figure 28 is derived. If the number of co-industry with the intended firm is lower than 28 firms, then the intended firm has few competitors and if the number of co-industry firms with the intended firm is 28 or more, then the firm will be classified in high competition firms.

4.1.5 Importance of Products and Processes' Quality

In order to evaluate the degree of products and processes' quality, if the intended firm has one of the ISO standards or the approval of Management European Foundation Quality (EFQM) is classified as a firm that value its products and processes' quality and if the firm has none of the aforementioned standards, then it will be classified as a firm that pay no attention to its products and processes' quality.

4.1.6 Internet-based Communication with Beneficiaries

If the intended firm has an e-mail or has a link in its website as (**contact with us**), it can be concluded that it communicates with its beneficiaries through Internet, and if the intended firm has no e-mail or communication link, this means that this firm has no electronic communication with its beneficiaries.

5. Research's Population

The research's population is the accepted industries in Tehran's security market that are among important industries and their Internet-based reporting is better than other industries. According to initial investigations conducted and the previous researches, the population of this research includes automotive industries, chemical industries, banks, investment and medicine products (a total of 111 firms). It should be noted that due to the importance of this industries and few number of its members, we have considered the investment industry and banks together.

5.1 Methods of Data Collection

In order to collect data, first we completed the prepared check list by referring to intended firms' websites, and the remaining required information for the test was collected from referring to the intended firms' financial statements and attached notes through Tehran's security market and Iran's capital market databases.

5.2 Methods of Data Analysis

5.2.1 Stepwise Linear Multiple-regression Approach

In linear multiple-regression we investigate the simultaneous effect of a number of independent variables on dependant variable. Therefore, six research hypotheses were tested using the stepwise multi-regression. In fact, hypotheses having a common dependant variable are tested together. Since we have a dependant variable DIBD (T), so we have also a linear multiple-regression. This model is as follows:

$$\text{DIND}(T) = \alpha + \beta_1(\text{BANK \& INVESTMENT}) + \beta_2(\text{AUTOMOTIVE}) + \beta_3(\text{CHEMICAL}) + \beta_4(\text{MEDICAL}) + \beta_5(\text{SIZE}) + \beta_6(\text{PROFIT}) + \beta_7(\text{ENVIRONMENTAL PRESSURE}) + \beta_8(\text{IMPORTANCE GIVEN TO THE QUALITY OF PROCESSES AND PRODUCTS}) + \beta_9(\text{RELATIONSHIPS CLIENTS AND SUPPLIERS VIA THE INTERNET}) + \varepsilon$$

The variable of total disclosure index DIND (T) was calculated through information derived from the check list and firm's SIZE & PROFIT variables were derived from related financial statements. The variables of banks and investment, automotive industry, chemical industries, medicine industries are among dummy variables. Dummy variable or indicator variable is a variable that take 0 and 1.

Here the aim is estimating the regression coefficients β_1 and β_2 and ... β_n and the fixed coefficient α . One of the best approaches of multiple-regression is stepwise multi-regression. Because in this approach, those variables that have the conditions to enter the model (variables having higher minor correlation with dependant variable) will enter the model one by one. Other variables which haven't the entrance conditions - i.e. have no significant effect on dependant variable - would not enter the model and after entering each variable is controlled again by the model and if a variable is to be eliminated, the model will eliminate it. Then, using Fisher statistics the significance of the model was investigated and ultimately using T-student statistics the existence of each independent variable on dependant variable was investigated and finally the end model was confirmed.

For investigating the effectiveness of each independent variable on dependant variable minor correlation coefficient (correlation between each of independent variables) was used. Also, for investigating the direct or reverse effect of each independent variable on dependant variable β coefficient was used, if the coefficients are positive the relationship is direct and in they are negative the relationship is reverse.

6. Findings

6.1 Hypothesis 1

Hypothesis 1 is converted into 4 following hypotheses.

Hypothesis 1-1: there is a significant and positive relationship between Internet-based financial reporting of

accepted firms in Tehran's security market and the industry type and investment.

The investment and bank variable has not entered the model. Therefore, bank industry has no significant effect on Internet-based financial reporting and H₀ hypothesis is confirmed, so we can say with 95% certainty.

Hypothesis 1-2: there is a significant and positive relationship between the amount of Internet-based financial reporting of accepted firms in Tehran's security market and the automotive industry.

Automotive industry has entered the model, so automotive industry has a significant effect on Internet-based financial reporting.

Therefore we can say with 95% certainty.

Since the amount of regression coefficient is positive the H₀ hypothesis is rejected. Therefore the automotive industry has a positive effect on Internet-based financial reporting.

Hypothesis 1-3: there is a significant and positive relationship between the amount of Internet-based financial reporting of accepted firms in Tehran's security market and the chemical industry.

Chemical industry has entered the model, so automotive industry has a significant effect on Internet-based financial reporting.

Therefore we can say with 95% certainty.

As the amount of regression coefficient is positive the H₀ hypothesis is rejected. Therefore the automotive industry has a positive effect on Internet-based financial reporting.

Table 2. Statistical result of first hypothesis (1-1)

Hypothesis	Status in the model	Regression coefficient	T- statistics	Level of significance	Result
1-1	Not interred	-----	---	-----	Hypothesis rejection

Table 3. Statistical result of first hypothesis (1-2)

Hypothesis	Status in the model	Regression coefficient	T- statistics	Level of significance	Result
1-2	Interred	0.182	5.808	0.000	Hypothesis acceptance

Table 4. Statistical result of first hypothesis (1-3)

Hypothesis	Status in the model	Regression coefficient	T- statistics	Level of significance	Result
1-3	Interred	0.096	3.024	0.096	Hypothesis acceptance

Table 5. Statistical result of first hypothesis (1–4)

Hypothesis	Status in the model	Regression coefficient	T- statistics	Level of significance	Result
1–4	Not interred	-----	----	-----	Hypothesis rejection

Table 6. Statistical result of second hypothesis (2)

Hypothesis	Status in the model	Regression coefficient	T- statistics	Level of significance	Result
2	Interred	0.022	2.664	0.009	Hypothesis acceptance

Table 7. Statistical result of hypothesis (3)

Hypothesis	Status in the model	Regression coefficient	T- statistics	Level of significance	Result
3	Interred	-0.011	-6.196	0.000	Hypothesis rejection

Hypothesis 1-4: there is a significant and positive relationship between the amount of Internet-based financial reporting of accepted firms in Tehran's security market and the medicine industry.

The medicine variable has not entered the model. Therefore, medicine industry has no significant effect on Internet-based financial reporting and H_0 hypothesis is confirmed. So we can say with 95% certainty.

According to hypotheses 1-1 to 1-4, since 2 industries are entered the model, thus generally industry type has an effect on Internet-based financial reporting. In one hand, the effect of these industries on Internet-based financial reporting is positive so we can say that industry has a significant a positive effect on Internet-based financial reporting.

6.2 Hypothesis 2

Form size variable has entered the model, so the firm size has a significant effect on Internet-based financial reporting. Therefore we can say with 95% certainty.

Because the amount of regression is positive H_0 hypothesis is rejected. Thus firm size has a positive effect on Internet-based financial reporting.

6.3 Hypothesis 3

Firm profit variable has entered the model, so the firm profit has a significant effect on Internet-based financial reporting. Thus we can say with 95% certainty:

Therefore, firm profit has a significant and negative effect on Internet-based financial reporting (total enclosure index).

6.4 Hypothesis 4

The importance of products and processes' quality variable has not entered the model. Therefore, the importance of products and processes' quality has no significant effect on Internet-based financial reporting and H_0 hypothesis is confirmed. So we can say with 95% certainty.

6.5 Hypothesis 5

Competition variable has entered the model, so competition has a significant effect on Internet-based financial reporting, but because the regression's coefficient is negative H_0 hypothesis is confirmed. Thus we can say with 95% certainty.

Therefore competition has a negative effect on Internet-based financial reporting.

6.6 Hypothesis 6

The communication variable has not entered the model. Therefore, electronic communication has no significant effect on Internet-based financial reporting and H_0 hypothesis is confirmed. So we can say with 95% certainty.

7. Conclusion and Further Studies

Nowadays information technology's growth has led to a great evolution in accessing to required information across and even further than national borders. With unprecedented Internet growth, firms use it for financial and non-financial information propagation. The results of the

Table 8. Statistical result of hypothesis (4)

Hypothesis	Status in the model	Regression coefficient	T- statistics	Level of significance	Result
4	Not interred	-----	----	-----	Hypothesis rejection

Table 9. Statistical result of hypothesis (5)

Hypothesis	Status in the model	Regression coefficient	T- statistics	Level of significance	Result
5	Interred	-0.149	-4.377	0.000	Hypothesis rejection

Table 10. Statistical result of hypothesis (6)

Hypothesis	Status in the model	Regression coefficient	T- statistics	Level of significance	Result
6	Not interred	-----	----	-----	Hypothesis rejection

first hypothesis show that in firms enrolled in Tehran's exchange market there is a significant and positive relationship between industry type and Internet-based financial reporting. The result of testing this hypothesis is in accordance with researches conducted by [43, 23, 22, 37, 16]. But, nevertheless, [31, 13, 39] observed no significant relationship between Internet-based financial reporting and industry type.

The results of the second hypothesis suggest that there is a significant and positive relationship between Internet-based financial reporting and firm size. The result of testing this hypothesis is in accordance with researches' results by [1, 9, 6, 36, 32, 37].

In the third Hypothesis, the relationship between Internet-based financial reporting and firm profit was tested, and it was suggested that there is a significant and negative relationship between these two variables. The results of this test are in accordance with the researches by [1, 32, 18].

In the fourth hypothesis we have investigated the relationship between Internet-based financial reporting and the importance of products and processes' quality. We found any significant relationship between these two variables, but the researches by [7, 26, 25] showed that there is a significant and positive relationship between Internet-based financial reporting and the importance of products and processes' quality.

The fifth hypothesis' results suggest that there is a significant and negative relationship between Internet-based financial reporting and competition (environmental stress)

in firms enrolled in Tehran's security market. The results of this hypothesis are in accordance with researches by [7] in Europe; [27], but were not in agreement with the results of researches by [20, 21, 33].

The results of the sixth hypothesis showed that there is no significant relationship between Internet-based financial reporting and electronic communication with clients in firms enrolled in Tehran's security market. In this setting there are very few studies that we can refer to the researches by [40, 15], all of which suggest that there is a positive relationship between these two variables.

8. Recommendations

Based on study results, recommendations offered are provided that can improve the situation in Iran Internet financial reporting are listed below:

1. Research in connection with reporting standard Internet, the present result, is recommended in relation to Internet content and method of financial reporting standards, specified by the relevant authorities including the Stock Exchange, be developed for the audit organization, especially stress their importance in the absence of reporting by these companies.
2. Legal requirements for publishing information on the company website.
3. A workshop for managers of the Tehran Stock Exchange executives to familiarize with the benefits of Internet financial reporting.

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Appendix 1. Check list based on 84 researches

Name Industry	Industry		Industry		Industry		Industry		Industry		Total	
	Chemical		Automotive		Investment		Banking		Pharmaceutical		Industry	
attributes	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total number of corporations	30	100	31	100	14	100	10	100	27	100	111	100
Number of accessible websites	30	100	31	100	14	100	10	100	27	100	111	100
Number of corporation that don't have websites	0	0	0	0	0	0	0	0	0	0	0	0
Number of the websites in reconstruction	0	0	0	0	0	0	0	0	0	0	0	0
Number of inaccessible websites	0	0	0	0	0	0	0	0	0	0	0	0
Company general Information												
company History	27	90	28	93.3	13	92.8	10	100	26	96.3	104	93.7
Organizational graphics	8	26.6	9	30	8	57.1	2	20	7	25.9	34	30.6
News summaries	23	76.6	23	76.6	12	85.7	10	100	23	85.2	91	82
Links to news summaries	23	76.6	22	73.3	12	85.7	10	100	22	81.5	89	80
name and composition of board members	19	63.3	15	50	11	78.6	10	100	9	33.3	64	57.6
rights and benefits of board of directors	0	0	0	0	0	0	0	0	0	0	0	0
name and management information	15	50	12	40	6	42.8	10	100	9	33.3	52	46.8
combined shareholders	11	36.6	12	40	9	64.3	7	70	7	25.9	46	41.4
investors in connection with the company	7	23.3	4	13.3	0	0	3	30	4	14.8	18	16.2
information about the group companies, subsidiary and affiliates	15	50	10	33.3	6	42.8	9	90	6	22.2	46	41.4
about auction information	13	43.3	7	23.3	2	14.3	6	60	0	0	28	25.2

Name Industry	Industry		Industry		Industry		Industry		Industry		Total	
	Chemical		Automotive		Investment		Banking		Pharmaceutical		Industry	
attributes	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Per
Financial and accounting information												
Audited balance sheet of the previous financial period	8	26.6	4	13.3	5	35.7	6	60	5	18.5	28	25.2
Audited Profit and loss account for the previous financial period	8	26.6	4	13.3	5	35.7	6	60	5	18.5	28	25.2
Cash flow before financial period audited	7	23.3	4	13.3	5	35.7	5	50	5	18.5	26	23.4
Notes to the audited financial statements of the previous financial period	7	23.3	2	6.67	3	21.4	4	40	5	18.5	21	18.9
Previous financial period audited income statement of comprehensive	7	23.3	3	10	5	35.7	5	50	5	18.5	25	22.5
Previous financial period audited income statement of comprehensive	7	23.3	4	13.3	5	35.7	6	60	5	18.5	27	24.3
the have been audited balance sheet this year /not audited	9	30	6	20	5	35.7	3	30	8	29.6	31	27.9
the gains and losses this year have been audited / not audited	9	30	6	20	5	35.7	3	30	8	29.6	31	27.9
year cash flow statements have been audited /not audited	7	23.3	6	20	5	35.7	3	30	7	25.9	28	25.2
the notes to financial statements been audited /not audited this year	7	23.3	5	16.6	2	14.3	2	20	7	25.9	23	20.7
Audited comprehensive income / year are not audited	7	23.3	5	16.6	5	35.7	3	30	7	25.9	27	24.3
circulation of accumulated profits and losses this year have been audited / not audited	8	26.6	6	20	5	35.7	3	30	8	29.6	30	27
summarized financial ratios related to the previous financial period	0	0	1	3.33	1	7.1	2	20	0	0	4	3.6
the auditor's report or a link to it - the year	7	23.3	6	20	2	14.3	3	30	7	25.9	25	22.5
the auditor's report or a link to it - the previous financial period	7	23.3	6	20	1	7.1	5	50	4	14.8	23	20.7
the auditor's signature - the report period the previous fiscal,	7	23.3	5	16.6	2	14.3	5	50	3	11.1	22	19.8
legal or link it to the inspector's report - relate to the current year	7	23.3	6	20	2	14.3	3	30	7	25.9	25	22.5
link to the statutory auditor's report - relate to the period Before the financial	7	23.3	6	20	1	7.1	5	50	4	14.8	23	20.7
legal inspector's signature - before the financial reporting period	7	23.3	5	16.6	2	14.3	5	50	2	7.4	21	18.9
reports and statistical analysis / comparison reported in the financial period before the board	7	23.3	5	16.6	5	35.7	4	40	6	22.2	27	24.3
signed by board members on the board's report	7	23.3	6	20	8	57.1	5	50	4	14.8	30	27
forecast earnings per share - estimated at about / EPS and adjusted its forecast	7	23.3	5	16.6	6	42.8	5	50	4	14.8	27	24.3
stock market information, including prices and volume of traded shares	9	30	8	26.6	5	35	4	40	10	37	36	32.4
information regarding portfolio investments	9	30	8	26.6	7	50	5	50	6	22.2	35	31.5
information related to intangible assets	5	16.6	4	13.3	7	50	2	20	2	7.4	20	18
financial statements audited by at least five years of archives	4	13.3	8	26.6	6	42.8	5	50	7	25.9	30	27
information and community decisions	5	16.6	8	26.6	0	0	5	50	3	11.1	21	19.9
	11	36.6	11	36.6	12	85.7	7	70	16	59.2	57	51.3

tax information, tax status, assertiveness, been confirmed, paid, and tax liability...	0	0	1	3.33	0	0	0	0	1	3.7	2	1.8
first prediction per share earnings	5	16.6	7	23.3	2	14.3	2	20	3	11.1	19	17.1
predicted earnings per share in quarter sections and adjust the budget	6	20	7	23.3	0	0	3	30	8	29.6	24	21.6

information about the general price level adjusted financial statements based on the general price level as statements complementary financial	6	20	4	13.3	1	7.1	1	10	1	3.7	13	11.7
stock prices at least five years	6	20	6	20	2	14.3	2	20	1	3.7	17	15.3
the General Assembly's annual results to the previous financial period	8	26.6	9	30	9	64.3	3	30	8	29.6	37	33.3
calendar (including the date, etc.)	4	13.3	6	20	6	42.8	4	40	9	33.3	29	26.1
links to stock exchange.	7	23.3	5	16.6	9	64.3	7	70	8	29.6	36	32.4

Name Industry	Industry		Industry		Industry		Industry		Industry		Total	
	Chemical		Automotive		Investment		Banking		Pharmaceutical		Industry	
attributes	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Strategic information												
long-term goals, strategies, programs and future prospects of the company	20	66.6	18	60	8	57.1	9	90	21	77.8	76	68.5
information about competitors	3	10	5	16.6	2	14.3	7	70	5	18.5	22	19.8
industry data	10	33.3	8	26.6	2	14.3	7	70	5	18.5	32	28.8
budget data and budget information is to compare	8	26.6	5	16.6	1	7.1	2	20	4	14.8	20	18
the environmental performance (environmental performance).	10	33.3	2	6.67	0	0	0	0	3	11.1	15	13.5

Name Industry	Industry		Industry		Industry		Industry		Industry		Total	
	Chemical		Automotive		Investment		Banking		Pharmaceutical		Industry	
attributes	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Commercial information												
information products, goods and services	27	90	26	86.67	0	0	10	100	3	11.1	66	59.4
promotions or other company products	1	3.33	1	3.33	0	0	0	0	0	0	2	1.8
links to other companies' products and services	1	3.33	2	6.67	0	0	6	60	3	11.1	12	10.8
main markets and the (market) / major customers	4	13.3	2	6.67	0	0	0	0	2	7.4	8	7.2
customer profile	1	3.33	5	16.6	0	0	0	0	0	0	6	5.4
major partners, business / finance the major suppliers of materials and goods	4	13.3	5	16.6	0	0	0	0	0	0	9	8.1
foreign operations	5	16.6	6	20	0	0	4	40	7	25.9	22	19.8

Name Industry	Industry		Industry		Industry		Industry		Industry		Total	
	Chemical		Automotive		Investment		Banking		Pharmaceutical		Industry	
attributes	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Timeliness of information												
Pages indicate the latest update	12	40	5	16.6	3	21.4	3	30	2	7.4	25	22.5
current prices of stocks or stock exchange in the last days	7	23.3	7	23.3	6	42.8	4	40	6	22.2	30	27
weeks or months is related to sales or operations	6	20	4	13.3	1	7.1	4	40	6	22.2	21	18.9

Name Industry	Industry		Industry		Industry		Industry		Industry		Total	
	Chemical		Automotive		Investment		Banking		Pharmaceutical		Industry	
attributes	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Website technology												
e-mail for communication	25	83.3	26	86.67	11	78.6	10	100	25	92.6	97	87.4
phone and fax	28	93.3	27	90	14	100	10	100	26	96.3	105	94.6
postal address of the company	29	96.6	27	90	14	100	10	100	25	92.6	105	94.6
load time website in less than 10 seconds	30	100	30	100	14	100	10	100	27	100	111	100
site map	10	33.3	7	23.3	4	28.6	8	80	10	37	39	35.1
engine searcher within the site	20	66.7	15	50	5	35.7	9	90	23	85.2	72	64.9
search engines outside the site	3	10	1	3.33	0	0	0	0	0	0	4	3.6
Links (useful links)	18	60	25	83.3	11	78.6	9	90	16	59.2	79	71.2
English language support	29	96.7	27	90	10	71.4	10	100	24	88.9	100	90.1
comments and suggestions - questions and answers	19	63.3	13	43.3	5	35.7	9	90	19	70.4	65	58.5

Register - Login	17	56.7	12	40	13	92.8	8	80	16	59.2	66	59.4
audio features	7	23.3	4	13.3	1	7.1	0	0	0	0	12	10.8
video features	22	73.3	24	80	3	21.4	3	30	18	66.7	70	63.1
chartstock price changes	3	10	9	30	5	35.7	3	30	6	22.2	26	23.4
moving images (such as Java applications)	1	3.33	2	6.67	0	0	0	0	0	0	3	2.7
it is possible to download information, financial statements and papers	13	43.3	11	36.6	13	92.8	8	80	15	55.5	60	54

Name Industry	Industry		Industry		Industry		Industry		Industry		Total	
	Chemical		Automotive		Investment		Banking		Pharmaceutical		Industry	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
attributes												
Human resources information and intellectual capital												
staff, education, age, attracting	5	16.6	6	20	1	7.1	4	40	0	0	16	14.4
hiring (job opportunities)	9	30	10	33.3	0	0	5	50	10	37	34	30.6
HR policies	3	10	3	10	0	0	4	40	0	0	10	9
proposals, staff	0	0	0	0	0	0	0	0	0	0	0	0
private space for employees	5	16.6	6	20	0	0	4	40	1	3.7	16	14.4
cost of staff training	2	6.67	0	0	0	0	1	10	0	0	3	2.7