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Original Research Article

THE EVALUATION OF CODAL FINANCIAL REPORTING EFFICIENCY ON IRAN

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Abstract: - Due to process of implementation and developing of electronic financial reporting in Iran, a universal and intelligence network of informing for money market (CODAL), which is one of the most important plan of informing company in money market, has been started in CODAL.ir. CODAL website could be one of complete websites and authentic in informing in field of money market for the businessmen in this field in Iran.

According to the importance of CODAL site in developing of electronic financial reporting , this survey is looking for finding answer for this question: has the CODAL site improved the process of gathering information, inquiry and releasing the information of registered companies in Tehran stock exchange which for answering to it four theories has been expressed. Due to doing survey of effeteness CODAL site after selecting community and sample, a questionnaire has planned for gathering information from two registered groups in stock exchange and stockbrokers and its validity and stability by distributing between experts and by using their ideas about it were ensured . For analyzing information T tests Friedman and comparing norms of theories were used according to the groups that answered to it. The survey s data show that using CODAL site is decreasing time for preparing financial reports and increasing cost of preparing financial reports. It is also increasing fidelity and accessing to financial report. Furthermore, according to Friedman test, effectiveness of using CODAL site in four factors as mentioned are not the same.

Keywords: Efficiency, CODAL Network Reporting

Introduction

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A universal and intelligence network of informing for money market (CODAL) with the address of “Codal.ir” is established according to our country investors requirements. Increasing the speed of announcement disclosure, assisting in market transparency, equal reporting opportunities, receiving required data along with announcement details, increasing the

accuracy of distributed data using automated monitoring and controlling for checking the data accuracy when importing data is the present research main goal.

According to capital market trustees, the site design is done based on successful, common and acceptable patterns of stocks and it has properties such as reporting, publisher service providing, data maintenance management, management and security services, digital signature, reporting services and the ability to send reports after system automated monitoring.

The Stock Exchange organization has established CODAL system on Sep. 2007 and after its initial testing and the obligation for market companies to use this system from the beginning of 2009 all companies which are accepted in the Stock Exchange send their data only through this system.

This system has features which increase the financial data transparency and make the financial data analysis easier and it increases the reporting speed and delivers the data to the organization on time.

The organization is going to prepare the requirements for the reporting capability in CODAL system in form of a financial language which can be reported. According to the aforementioned points and due to the CODAL system importance in developing electronic financial reporting, the present research is seeking answer for the question that what kind of relationship exists between using a CODAL system and improvement in financial reporting in companies which are accepted in Tehran Stock Exchange?

Review of the Related Literature

In an analysis regarding data testing in a reliable financial reporting language for American Exchange companies, Zhia *et al.* (2003) indicate that supervisors, regulators and auditors has accepted a moderate method for accepting the desired language due to security issues, unequal access to data and controlling more through electronic financial reporting. Furthermore, regulators are faced with incompatibility between consumers' and providers' data requirements.

Weber (2003) indicates that a reliable financial reporting language decreases the expenses related to data accessibility and analysis through recovering and omitting incompatibilities.

Ehling (2003) has studied the effect of reporting language on auditing and reassuring services. They indicated that using such a language results in a considerable change on auditing and reassuring services. Nevertheless, this will have effects on the service providers' responsibilities.

Malhatra & Grate (2004) has studied comparing capability and the speed of preparing financial statements. They came to the conclusion that a reliable financial reporting language results in an increase in auditing reports values for financial statement consumers and reducing expenses for participants.

Xadro (2005) carried out a research on financial and operational leverage of 100 companies in KualaLumpur in 2003 and 2004. He indicated that although the number of companies and the type of provided data on the internet is increased, the quality of the reported data for consumers has been low because auditors do not control the web contents much.

Williams *et al.* (2006) has studied the initial acceptance and the performance of a financial reporting language in Australia. They indicated that there are technical, management and logical ambiguities in running such a language and insufficient functions has been carried out for creating a clear point of view of the effect of a reliable financial reporting language.

Jim Richard, Berry Smith and Ali Saidii (2006) has come to the conclusion that financial reporting language do not account for creating and adjusting new auditing standards but also it tries for standardization labeling foundations which are used in commercial reporting.

Eric *et al.* (2007) has studied tradition reporting and web reporting. They came to the conclusion that one of the advantages of web reporting is quick access to the data.

Effendi *et al.* (2009) has studied the advantages of using web reporting. They found out that

using this reporting language has effects on effectiveness, disclosure quality improvement and preparing non biased reports.

David Handerson, Steven Sheets and Brade Trincle (2009) studied the motivation of using web reporting language. They found out that although using such a language has becoming obligatory in America, using such a reporting method is not obligatory.

Hongoi Hu and Hariss Wu (2009) have studied reliable financial reporting language and the capability of comparing financial statements in America. This research results indicate that there is no integration between financial statements which are based on self which is a result of non-suitable GAAP glossaries and misusing these vocabularies by companies.

Hongoi Hu and Haris Wu (2009) have studied the quality of financial reporting language vocabularies in America according to that country accounting standards. They indicated that these standards initial aims are developing the capability of comparing data by different standards consumers.

Bartly *et al.* (2010) have studied the starting time of web reporting in America Exchange companies. They came to the conclusion that America Exchanges commission has started the reliable financial reporting language in financial statements from 2009.

Jap Effendi, Morphy Smith and Jeffry Wong (2011) have approved a law for companies on Dec. 2008, in which companies are obliged to present their financial statements in form of the aforementioned language. They found out that volunteer acceptors have greater companies and they are more creative in their industries. The results indicate an increase in effectiveness in financial reporting.

David Handerson, Iton Sheets and Brae Trincle (2011) have studied the effects of environmental factors on an organization for accepting the language in America. They indicated that comprehension is dependent on principled pressures and imitation such as general comprehension about Internet universal network technology and related technologies.

Chun Hoi Liu, Tavi Wong and Li Ji Yao (2013) have studied the advantages of obligatory acceptance of a reporting language which can be developed. The results indicated that there is a positive relationship between the language obligatory acceptance and the anticipation accuracy and such a relationship is stronger for financial reports providers at the first stage in comparison to their providers at the second stage in 2010. Furthermore, the inclination toward implementation and the resulted interests of accepting the language is increasing.

Igor Pasteel Nick (2013) came to conclusions regarding data recovery mechanism from financial reporting language which can be developed. Three patterns have been used for recovery defeat. Worthless data values can decrease using more limited patterns for explaining the relationship between common labeled patterns and classified labeled patterns.

Aghai (2005) has studied the effects of IT on accounting data qualitative features. Results indicate that IT increases pertain features and the capability of accounting data comparison and decreases the reliability.

Naderpoor (2006) has studied reasons of Exchange companies in Iran for not publishing their financial reports in the organization website. He indicated that technical, social and cultural factors in Iran prevent companies from publishing their financial reports in the organization website.

Daneshju (2007) has studied E- commerce websites in Iran from the view point of customers. According to the research results, based on users' opinions, website design variables, website survey, website content, website reliability and technical variables have positive effects in E- commerce websites evaluation.

Kheiri (2009) has studied the reasons for not applying a financial reporting language which can be developed. He indicated that not being aware of reporting language and lacking enough knowledge for applying it are among the reasons for not applying such a language and not being fit with Iran conditions, language that

is not being efficient and the reporting method which is not sufficient are not calculated as the reasons for not using this language.

Sohrabi and Khanlori (2010) have studied the prerequisites for the language implementation. The results show that external environmental pressures including law and regulations and professional financial organizations, the staffs and employees awareness about this technology and its organizational achievements, the organization readiness from cultural aspects, accounting standards and procedures as well as financial expertise and the required softwares are among the influential and significant variables in applying such a technology.

Khajavi and Etemadi Jozani (2011) have studied the influential factors on electronic data accounting system implementation. They indicated that electronic data systems and organizational strategies have the most effects on the system implementation.

Nikomaram and Shekari (2011) have studied the relation between financial reporting which can be developed (CODAL system) with accounting data qualitative features from the view point of accountants in the companies which are accepted in the Securities and Exchange. They found out that the research variables have direct relationship with CODAL system in the system respectively according to the following priorities as being related, the reliability and the capability of comparing data such that companies which use this system enjoy a higher quality in data and they deliver data to its users on time.

Poor zamani and Sanai (2012) have studied the electronic financial reporting and using financial reporting language which can be developed on the accepted companies stock shares rate in Tehran Exchanges and they found out that the average rate of stocks have been increased after applying this language in comparing to before using this language.

Gholam Hosseini and Jamalian Poor (2013) have studied the influential factors on the speed of financial reporting in the accepted companies. They showed that the financial reporting speed for companies creates different financial proportions for them. Financial reporting speed for different industries also varies and it provides individuals with on time electronic data reporting about the companies functions.

Research Hypothesis

The present research comprises of one main hypothesis and four sub-hypothesis as follows:

Main hypothesis: Using CODAL system in the research has been effective.

Sub- hypothesis:

1. Using CODAL system has been effective in reducing the expenses of auditing of financial reporting.
2. Using CODAL system has been effective in reducing the time needed for preparing financial reports.
3. Using CODAL system has been effective in increasing financial reporting accuracy.
4. Using CODAL system has been effective in increasing the accessibility to financial reporting.

Research Methodology

The methods chosen for the present research is descriptive- analytic from the pragmatic point of view and for using random sampling and generalizing the results to the whole population. It also enjoys questionnaire and reviewing the previous literature for using and applying the previous researches findings and results.

A. Sampling

The research population comprises of 375 companies among the accepted companies in Tehran Exchange which have used CODAL system in their financial reports. Random sampling has been applied using stratified random method. Using Cochran formula the sample size had been calculated 96.4 and 100 have been selected using stratified sampling for ease in the calculation. Table 1 indicates the distribution of random sampling.

Table 1. Random sample size per level

Row	Group description	Percentage	Volume
1	Service – nutrition	23%	23
2	Spinning – textile	24%	24
3	Institutes and companies	6%	6
4	Home appliances- industry	13%	13
5	Smithery – Casting	18%	18
6	Other service institutes	16	16
Total		100%	n= 100

B. Data analysis:

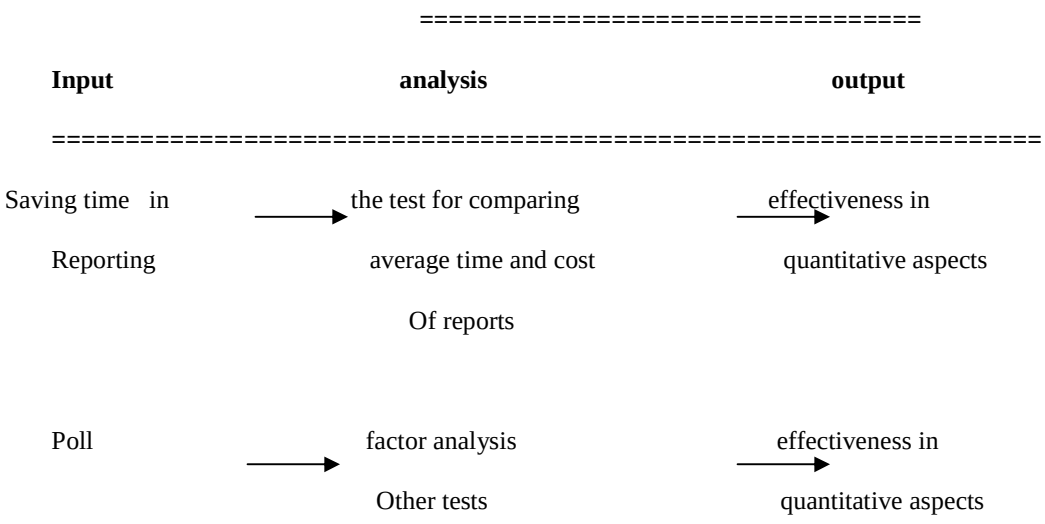
In the present research the following methods have been used for data analysis:

1) Questionnaire validity: for the questionnaire validity, first of all a sample including 15 people is chosen using stratified sampling and they are distributed the questionnaire. Then, Cornbrash's Alpha is calculated based on the data labeling. Cranach's Alpha in the present research is equal to 0.9067 based on the chosen pilot and it is valid enough as it is more than 0.7.
2) Descriptive methods: this method has been used for graphs, frequency distribution table and statistical average parameters and standard deviation for describing the used data.
3) Factor analysis: this method has been used for measuring the importance level or the factors effects, their classification and omitting the factors which are not important. The measuring criterion for the factors changes distributions is based on variance.

C. Research Model:

The research model can be defined as graphical, logical or any other form. The research overall model is illustrated in graph 1.

Graph 1. The research model



Research findings:

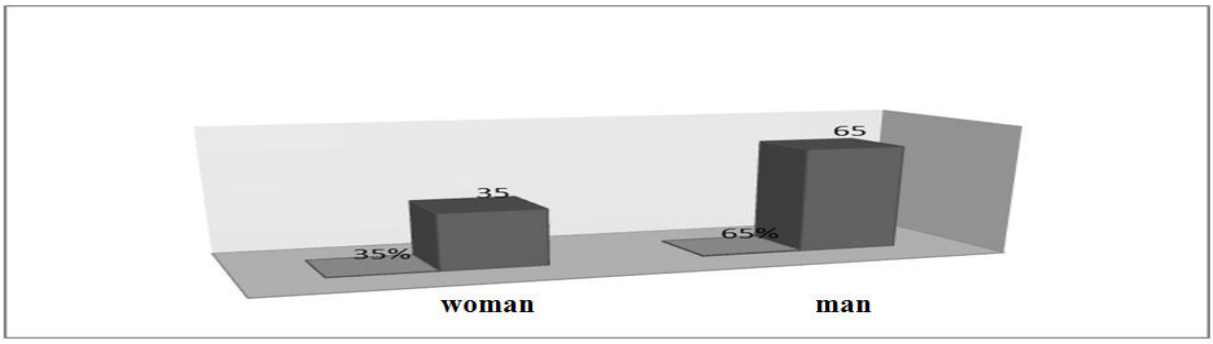
In this section, the data which is collected using distributed questionnaires and performing data is described and at the end the data is analyzed.

A) Sample Description:

Participants' description: in this section the data related to gender, education, the experiences of the samples is described.

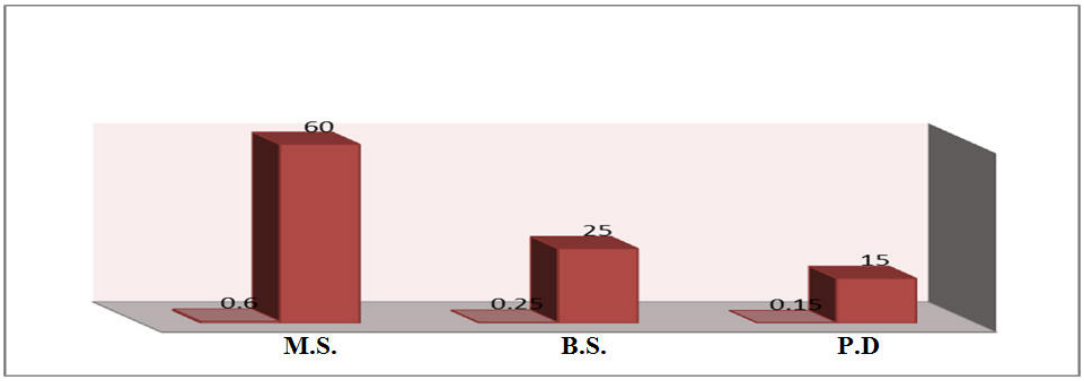
1) Gender: as it is illustrated in graph 1, 35 percent of the participants are female and 65 percent are male.

Graph 1. Gender (demographic) distribution



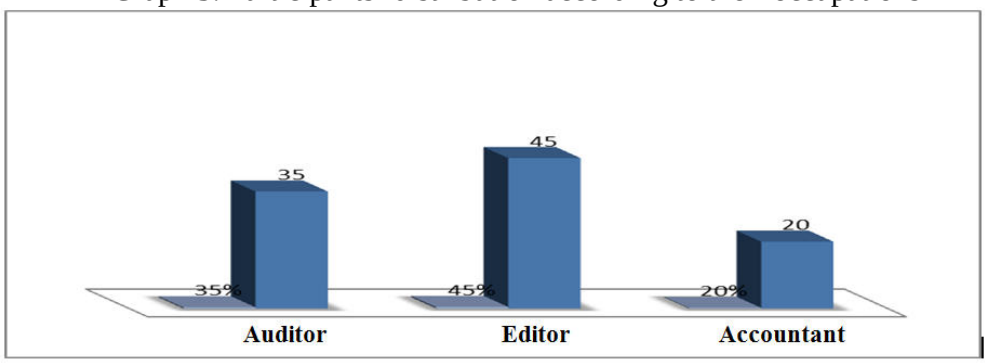
2) Education: in the present research 3 different levels of Diploma, B.A or M.A and higher are considered for the participants. The participants' educational level is illustrated in graph 2.

Graph 2. Education (demographic) distribution



3) Occupation: in the present research 3 different jobs of accountant, auditor and broker and their distribution is illustrated in graph 3.

Graph 3. Participants' distribution according to their occupations



B) Participants opinions description:

The second part of the questionnaire is about effectiveness of CODAL system in qualitative aspects such as accessibility level &…. which is presented here:

1. Increase in the users accessibility level: question 1-9 are devoted to an increase in financial reporting accessibility. Therefore, in table 2 each question statistics is expressed.

Table 2. Different opinions distribution results regarding financial reporting accessibility level

Questions	Opinion frequency										Total	
	Completely disagree (1)		Disagree (2)		Neutral (3)		Agree (4)		Completely agree (5)			
	N	percentage	N	P	N	P	N	P	N	P	N	P
Q1	2	2%	5	5%	15	15%	28	28%	50	50%	100	100%
Q2	1	1%	6	6%	18	18%	24	24%	51	51%	100	100%
Q3	4	4%	4	4%	15	15%	28	28%	49	49%	100	100%
Q4	1	1%	3	3%	10	10%	35	35%	51	51%	100	100%
Q5	2	2%	2	2%	8	8%	28	28%	60	60%	100	100%
Q6	1	1%	2	2%	5	5%	26	26%	66	66%	100	100%
Q7	2	2%	1	1%	4	4%	15	15%	78	78%	100	100%
Q8	1	1%	2	2%	3	3%	17	17%	77	77%	100	100%
Q9	2	2%	3	3%	2	2%	16	16%	77	77%	100	100%

2. Increase in financial reporting accuracy: questions 10- 20 in the questionnaire is devoted to the increase in financial reporting accuracy and it is illustrated in table 3 as follows:

Table 3. Different opinion distribution regarding increase in financial reporting accuracy

Questions	Opinion frequency										Total	
	Completely disagree (1)		Disagree (2)		Neutral (3)		Agree (4)		Completely agree (1)			
	N	P	N	P	N	P	N	P	N	P	N	P
Q10	1	1%	2	2%	8	8%	28	28%	61	61%	100	100%
Q11	2	2%	2	2%	12	12%	27	27%	57	57%	100	100%
Q12	3	3%	3	3%	11	11%	26	20%	57	57%	100	100%
Q13	0	0%	0	0%	9	9%	29	29%	62	62%	100	100%
Q14	1	1%	1	1%	8	8%	15	15%	75	75%	100	100%
Q15	1	1%	4	4%	7	7%	13	13%	75	75%	100	100%
Q16	2	2%	2	2%	10	10%	18	18%	68	68%	100	100%
Q17	3	3%	1	1%	9	9%	22	22%	65	65%	100	100%
Q18	0	0%	0	0%	8	8%	26	26%	66	66%	100	100%
Q19	1	1%	2	2%	5	5%	24	24%	68	68%	100	100%
Q20	1	1%	3	3%	6	6%	20	20%	70	70%	100	100%

C) CODAL system effectiveness analysis

In this part we have studied the CODAL system reporting effectiveness:

1. Effectiveness from users' accessibility level: according to factor analysis based on variables (questions) 1- 9 factor analysis, we have 3 outputs.

Table 4. KMO and Bartlett index

KMO index		0.82
Bartlett Test	Chi-square	159.776
	Degrees of freedom	36
	Significance level	0.000

According to the fourth chart first output, when KMO index is near 1, shows the sufficiency of sampling. Bartlett test significance level is also less than 0.05 which shows that matrix is not single and factor analysis can be used for identifying structures.

Table 5. The degree to which the questions are shared

Question	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
Frequency	0.782	0.776	0.705	0.651	0.306	0.419	0.549	0.691	0470

According to the above output, the degree on which the questions 5, 6 and 7 are common is less than 0.5. Therefore, these questions are omitted in the second factor analysis.

Table 6. : Analysis of Variance

Question	Initial amount			The sum of the squares of extractives		
	Total	**Variance**	**remained**	**Total**	**Variance**	**remained**
1	2.371	26.345	26.345	2.371	26.345	26.345
2	1.732	19.241	45.586	1.732	19.241	45.586
3	1.246	13.843	59.429	1.246	13.843	59.429
4	0.963	10.704	70.133			
5	0.733	8.141	78.275			
6	0.674	7.492	85.767			
7	0.483	5.365	91.132			
8	0.423	4.696	95.828			
9	0.375	4.172	100			

The 6th chart third output shows that 59.429 percent of variance changes can be explained using 3 factors (questions). Now, again the variance analysis is done by omitting variable (question) 5, 6 and 9. And three of its outputs are studied:

For testing its validity ,Exploratory factor analysis is used and finally we come up with 3 outputs based on question 1,2,3,4,7,8 factor analysis.

Table 7. KMO and Bartlett index

KMO index		0.837
Bartlett Test	Chi-square	88.834
	Degrees of freedom	15
	Significance level	0

According to 7th chart first output which KMO index is near 1, it shows the sampling is sufficient. Bartlett significance level is also less than 0.05 which shows that matrix is no single and factor analysis can be used for identifying structures.

Table 8. The degree to which questions are shared

Question	Initial	frequency
Q1	1.000	.790
Q2	1.000	.786
Q3	1.000	.718
Q4	1.000	.725
Q7	1.000	.735
Q8	1.000	.728

According to the above outputs, the degree of shared questions of question 1,2,3,4, 7 and 8 is more than 0.05. Therefore, these questions should not be omitted from factor analysis.

Table 9: Analysis of Variance

questions	Initial amount			The sum of the squares of extractives		
	Total	variance	remained	total	variance	remained
1	1.873	31.212	31.212	1.873	31.212	31.212
2	1.384	23.062	54.274	1.384	23.062	54.274
3	1.225	20.418	74.692	1.225	20.418	74.692
4	.600	10.005	84.697			
5	.508	8.471	93.168			
6	.410	6.832	100.000			

9th chart third output shows that after the questions exit with less shared rate in the second stage, 74.692 percent of variance changes can be explained using three factors (questions). Therefore, it can be said that using CODAL system brings about effectiveness in increasing accuracy in financial reporting.

2. Effectiveness in increasing accuracy in financial reports: for measuring validity exploratory factor analysis is used and the procedures of using factor analysis according to the questions 10- 20 enjoy three outputs.

Table 10. KMO and Bartlett's index

KMO index		0.857
Bartlett Test	Chi-square	119.834
	Degrees of freedom	45
	Significance level	0.000

According to the first output of 10th chart which KMO index is near 1, it shows sufficiency in sampling. Bartlett significance level is also less than 0.05 which shows that matrix is no single and factor analysis can be used for identifying structures.

According to the above outputs, the degree of being shared in variable (question) 15 and 17 is less than 0.05. Therefore, these questions are omitted in the second factor analysis.

Table 12: Analysis of Variance

questions	Initial amount			The sum of the squares of extractives		
	total	variance	remained	Total	Variance	remained
1	2.659	24.170	24.170	2.659	24.170	24.170
2	2.269	20.631	44.800	2.269	20.631	44.800
3	1.532	13.929	58.729	1.532	13.929	58.729
4	1.216	11.052	69.782	1.216	11.052	69.782
5	0.897	8.154	77.936			
6	0.801	7.283	85.219			
7	0.702	6.382	91.601			
8	0.523	4.754	96.354			
9	0.401	3.646	100.000			
10	.0000	.0000	100.000			
11	.0000	.0000	100.000			

The third outputs of 12th chart indicate that 69.782 percent of variance changes can be explained using 4 factors (questions). Now again we omit variance analysis of question 15 and 17 and we study its outputs. For measuring reliability, exploratory factor analysis is used which the procedures of factor analysis of questions 15 and 17 enjoy three outputs.

Table 13. KMO and Bartlett's index

KMO index		0.901
Bartlett test	Chi-square	98.721
	Degrees of freedom	39
	Significance level	0

According to the first output of 13th chart which KMO index is near 1, sampling is sufficient. Bartlett significance level is also less than 0.05 which shows that matrix is no single and factor analysis can be used for identifying structures.

Table 14. The degree to which the questions are shared

Question	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
Frequency	0.575	0.966	0.992	0.568	0.627	0.475	0.564	0.415	0.536	0.966	0.962

According to the above output, the degree of being shared for the questions 10, 11, 12, 13, 14, 16, 18, 19, 20 is more than 0.05 therefore these questions should not be omitted from factor analysis.

Table 15: Analysis of Variance

Questions	Initial amount			The sum of the squares of extractives		
	Total	Variance	Remained	Total	Variance	Remained
10	2.659	24.170	24.170	2.659	24.170	24.170
11	2.269	20.631	44.800	2.269	20.631	44.800
12	1.532	13.929	58.729	1.532	13.929	58.729
13	1.216	11.052	69.782	1.216	11.052	69.782
14	.897	8.154	77.936			
15	.801	7.283	85.219			
16	.702	6.382	91.601			
17	.523	4.754	96.354			
18	.401	3.646	100.000			
19	.000	.000	100.000			
20	.000	.000	100.000			

The third output of 15th chart indicates that 77.912 percent of variance changes can be explained using 4 factors (questions). As a result it can be assert that using CODAL system brings about an increase in effectiveness of financial reporting.

3. Effectiveness for decreasing auditing expenses: for this purpose, auditing expenses before and after using CODAL system is compared. As it can be seen, table 16 indicates the number of data, average, standard deviation and standard mean error.

Table 16. Description of the parameters of financial reporting auditing expenses

Variable	Data number	Average	Standard deviation	Mean error
Auditing expenses before CODAL	300	282.47	195.254	11.273
Auditing expenses after CODAL	300	403.24	362.802	20.946

As it can be seen in table 16, auditing expenses has been increased after using CODAL system: for generalizing the results, a test for comparing the average costs before and after using CODAL system is used. In this test, zero hypothesis and anti- zero hypothesis is explained as follows:

$H_0 : \mu_1 \geq \mu_2$

$H_1 : \mu_1 \neq \mu_2$

This test results is summarized in table 17:

Table 17. Statistical findings of financial reporting auditing variable

Variable	T-Statistic	D. F.	Significance	Difference	Lower Limit	Upper Limit
Cost	304.65	260.28	282.469	.000	299	25.057

According to table 17 and as the significance level is zero it can be said with 95 percent confidence that the hypothesis for decreasing the costs is rejected. Furthermore, the expenses differences before using CODAL system are positive. Therefore, auditing expenses has increased. In other words, using CODAL system not only decreases auditing costs but also increases the costs. Thus, using this system has not been effective in decreasing financial reporting auditing expenses.

4. Effectiveness for decreasing the time needed for preparing financial reporting: here also a test for comparing averages is used. Table 18 indicates findings of comparison between statistical parameters for the time needed for preparing financial reports before and after using CODAL:

Table 18. Comparing parameters of the time for preparing financial reporting

Symbol	number	average	Standard deviation	Mean error
Time after CODAL	300	12.50	2.008	.116
Time before CODAL	300	18.60	4.766	.275

Comparing parameters of time for preparing financial reporting before and after using CODAL system based on table 18 indicates that the time for preparing financial reporting has changed from 18.6 to 12.5 and it has decreased about one third. For generalizing the results of random sampling to the whole population, the test for comparing the differences between the time for preparing financial reporting before and after using CODAL system has been carried out and the hypothesis is set as follows:

$H_0 : \mu_1 \geq \mu_2$

$H_1 : \mu_1 \neq \mu_2$

These comparison test and its results is summarized in table 19 as follows:

Table 19. The summary of comparison test results for comparing the time needed

Variable	T-Statistic	D. F.	Significance	Difference	Lower Limit	Upper Limit
Time	107.845	299	0.0000	12.5	12.27	13.73

According to table 19 and zero significance level it can be said with 95 percent confidence that the hypothesis for an increase in time for preparing financial reporting is rejected. Furthermore, the difference of expenses in comparison to before using the CODAL system is positive. Thus, the time needed for preparing financial reporting has increased. In other words, using CODAL system not only increased the time but also has decreased it. As a result, using this system for reducing the time for preparing financial reporting has been effective.

Conclusion

The present research aims at evaluating the effectiveness of CODAL system reporting in Iran. This evaluation has been used in qualitative aspects of the ease of use for users and the accuracy in financial reporting in comparing to before survey research and factor analysis. Furthermore, for evaluating the

effectiveness in qualitative aspects of comparing the time needed for preparing financial reporting and auditing expenses, Ex post facto ***research*** and average comparing test was used. The obtained findings from tests and the statistical analysis indicate that:

1. The average cost of auditing before using CODAL system is equal to 282.47 million Rials and this cost increased to 403.24 Million Rials after using CODAL system. Average comparing test indicates that 95 percent the increase in the auditing expenses is accepted. As a result, using CODAL system has not been effective in reducing auditing expenses.
2. The average time needed for preparing financial reporting after using CODAL system was equal to 12.5 days while before using the system it was equal to 18.6 days. Average comparing tests indicate that with 95 percent confidence decrease in the needed time for preparing financial reporting is accepted. Therefore using CODAL system for reducing the time needed for preparing financial reports have been effective.
3. Questionnaire factor analysis indicates that the accuracy in financial reporting has been increased after using CODAL system comparing to before using it.
4. Questioner factor analysis indicates that accessibility to financial reporting and data accessibility has improved.

Therefore, although using CODAL system has increased reporting expenses, time for preparing these reporting, the accuracy as well as the ease of accessibility has improved. In other words, using this system has been effective in all aspects except in reducing expenses.

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