Surveying Relative Improvement of Accounting Information Systems

Sadegh Alboali
Correspondence Author: Sadegh Alboali, Department of Accounting
Mahshahr Branch, Islamic Azad University, Mahshahr, Iran
E-mail: sadegh_alboali@hotmail.com
Tel: 0098-9163338162

Abstract

Having accounting information systems with sufficient and effective capabilities in commercial and noncommercial units to accelerate of useful and related data acquisition is an inevitable necessity. In this study about obstacles of accounting information system developments of production firms of Khuzestan province, some ways for relatively improvement is presented. The current study is a surveying type and accordingly a questionnaire with 16 questions is sent manually to managers and financial professionals of 90 sample companies out of 578 companies and finally just the data that received from 80 companies used. In this research for theories testing, the data was used by application of SPSS software and Z and K square statistic method at first. Then, for re-emphasizing on acceptance or deny probability of each theory, the P values of each theory was calculated by MINITAN software.

Generally, research results show that improvement of accounting information systems requires reforms and changes in cultural, technical, educational areas, which complete each other. In the other hand, one accounting information system can be useful when it is always used based on time condition in the way of continuous reform and improvement.

Keywords: Accounting information system, organizational culture, software and hardware, system training course.

1. Introduction

According to the phrase "today'world is the word of information' ownership, the information is a wealth and it has benefits like any valuable stuff. Also Having useful information needs cost and for gaining and maintaining this wealth, it is required to provide its tools and a proper system should be codified in this regards, since in this growing world, someone succeeds who has the most reliable and relevant information (as a valuable wealth) on proper time and is able to use the related information for any type of decision. In changing and advanced world, specially in complicated world of accounting , which is continuously changing , fast access to correct information is one of the essential parameters in making effective financial decisions in any economical unit and in the mean time information system have a major and increasing role in organizational life. Computer and computerized equipment also are considered as powerful and suitable tool for executing such mentions. The increasing advancement and development of computer science in recent years have extensively effected the economical activities of societies in such way that continuing of activities and performance of many companies and institutes is

impossible without computer usage today. This days, computers are widely used in financial and accounting due to their high capabilities and extraordinary abilities. Recent advance in the field of information technology, electronic business, exchange of electronic information, internet communication networks, and more recent inventions, has increased abilities of such equipments. The financial managers of companies can perform analysis and financial calculations for making financial decision by application of microcomputers with high accuracy as soon as possible. Of course, beside application of proper hardware and software for system requirements, sufficient attention should be paid to suitable management methods of human sources such as administering effective training for system users and the application of skilled accountants in field of computer and applying suitable methods of stabilizing powerful organizational culture(including organizational concepts and believes and also creating cultural networks which include traditions, myths and heroes.

2. Theoretical Researches
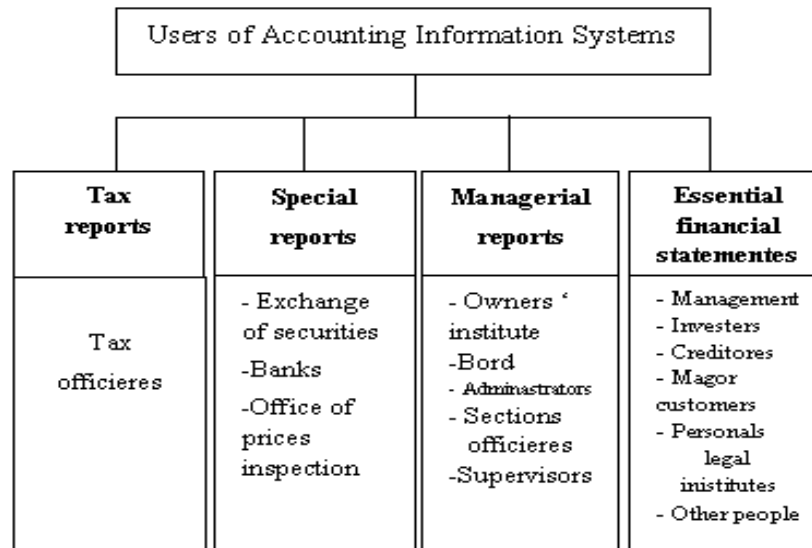### 2.1. Accounting as an Information System

Introduction of accounting as an information system maybe is the newest presented definition of accounting. At the first time in 1966, "American Accounting Association" in a formal statement titled " a statement of basic accounting theory"[1] which in accounting is defined as an information system. In this view, accounting is a part of public system in an active economic foundation. Chart 1 shows the relationship between accounting, commercial activities and decision makers (Needles, Beleverd E, Jr, 1995). According to the chart, the main duty of accounting information system is supply of information which users apply it in their making decision.

Chart 1: Relationship between accounting, commercial activities, and decision makers
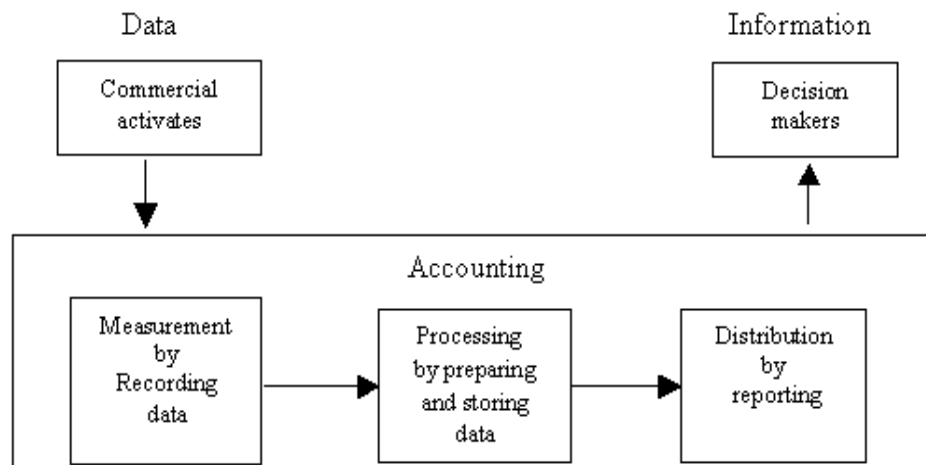
The most important group of users' financial information that AIS based on generally accepted accounting principles, standards, and legal requirements, should provide financial information and reports for them could be shown as chart 2 (Meigs and Meigs, 1990). A good accounting system, is semi batch type which include internal controls for preventing effects of environment on AIS. The task of internal controls in process converting of financial data to financial information in accounting system, is prevention of effect of environmental factors on accounting system and detection of them if they occurs. Accounting system data consists of series of economic events which are occurred in business transactions form. In this system, related and reliable information is provided on time and it is presented in a way which is be understandable and comparable for users.

---

[1]   ASOBAT

Chart 2: Users of Accounting Information Systems

Users of Accounting Information Systems			
Tax reports	**Special reports**	**Managerial reports**	**Essential financial statementes**
Tax officieres	- Exchange of securities -Banks -Office of prices inspection	- Owners ' institute -Bord - Adminastrators - Sections officieres -Supervisors	- Management - Investers - Creditores - Magor customers - Personals legal inistitutes - Other people

2.2. Importance of Information

Request for financial information to improve making decision or showing mentioned information is for applying them. Determining and expected factors in ownership of information can be summarized as reduction of ambiguity and presence of competence for accessing on sources of information.

According to this, essential element for any decision is ambiguity, which can be minimized by gaining the most on time and proper related information(Foster.George,1999). Hereupon, noways, information like money, food, equipment and other human needs is considered as good and it can be produced, purchased or consumed. Therefore, its supply and pretension, like other goods, has costs in one hand and on the hand, it has benefits and advantages. Importance and need to produce information and how to use it, increased continually, that today, new information technologies make world as a small village. Therefore, more knowledge about information can be effective for its better utilizing.

2.3. Systematic Method, New Advances and Systematic Strategies in Accounting

Frequently, developing countries try to find an independent solution for problems of each part. These attempts had limited success. Thus, accounting bases should be viewed in developing countries (or any other country) as a system .Because its parts have interactive relation such a way that the behavior of one part affects on behavior of other parts. These interactive relations cause some problems. Problems in a particular part are not only result of its internal, but also it is the result of problems of other parts. Also, we should remember that separated solutions for each part could be compensating by problems and performents of other parts which it is required to present an organized and measured solution in this regards.

The general view about changes in methods, techniques and new criteria which are entered in accountants surveying scope, makes clear that speed factor among various effective factors on accounting profession function whose main factor is close competition in the minimum time has the most determining one. As a supplied production in market be far from expectations and needs of consumer, that capital part will be soon removed from economic effectiveness circulation and of course this event in present time, does not necessarily occur in a long period , but this capital may be in serious hazard in such market. On the other hand, demand and presentation will flow via electronic networks in not a far future and modern technology creates new areas in economic and monetary markets and information will be exchanged by amazing fast speed (Shableh, Mohamad 1999). For example, Electronic Commerce is not only doing commercial and managing it in internet environment. This method also affects on commercial affairs flow and their nature. In this environment, every

moment customers face various and different selections and if it is needed, they receive uninterrupted and various answers. Involved companies in these markets can provide related and accurate information in the soonest time if they have predictive and comprehensive information system, so as they have effective and efficient performance along organization aims and increase a value of organization every day. Achievement to such system requires that organizations and commercial companies consider principles of design and supply of comprehensive structure for entering to new profession and commercial areas completely and consider accounting as one system which each part has kind of relation with other ones and in design and execution of various parts, interactive effect of these parts on each other should be properly identified.

Today' world is wireless world which all are emerged in an integrated system and integrating view is a key to success. There is a fragment in this field in Iran.In a way that accountants, marketers, and expert professions work for themselves and what is worse that more proprieties are governmental, there is no clear aim for owner and foundation and absence of such aim cause fracture and unapplying modern techniques. Therefore, since there is no motivation for maximizing profit and wealth in management level and since organization managers has no experience for management and maximizing wealth, maybe they are not interested, main activities and operations in organization do not perform by scientific and systematic methods along with modern advances, thus it seems that accounting information systems in Iranian organizations and, and firms subordinately, manufacturing companies and organizations in Khuzestan are not properly designed and they are not developed in required fields , therefore it is required that some strategies be provided for improving the available status and the present study is attempted along this aim.

2.4. Transfer / Convert of System

This concept consists of creating changes on old accounting information system and converting of it to new accounting information system by change factors such as hardware, software, etc. Transfer /convert methods can be named following (Janani, Mohamad Hasan, 2004):

2.4.1. Direct Convert
In this method, simultaneously by entering of modern accounting information system, old systems will be blocked .This method is usually used when old system has no value; risk of this method be usually high.

2.4.2. Paralle Convert
In this method, old system and modern system work simultaneously, which decreases its risk, but high cost is the disadvantage of this method.

2.4.3. Stepy Convert
In this method, elements of old system is gradually replaced by modern system which, of course, increases the costs.

2.4.4. Partial Convert
In this method, the new system first executes in a part or branch of organization and then it is transmitted to other parts. Time consuming is the disadvantage of this method.

2.5. Organizational Culture and It's Constitutive Elements

Organizational culture is one of the newest words in management literature which recently received more attention by management experts and scientists. Ouchi, Peters, Waterman in their best seller books emphasize on importance of organizational culture as a success requirement for organizations.

Researchers in the field of organizational culture believe that ratio of culture to organization is the same as the ratio of character to individual and they believe that for creating maturity in people of a

society, their character field should be studied. Therefore, for creating organizational maturity which causes maturity in society, organization culture should be studied.

Conceptually, culture is refereed to human's understand from environment which he/she lives in, and it indicates views and behaviors. Adgar Schein, whom is widely considered as organization culture's father, believes that organization culture is complicated and deep subject. Schein in his article in 1978 says: however culture is a deep event and it's understood is difficult, but trying to understand is valuable, since most of secrets and logics in organizations are suddenly be clear when we understood culture". Majority of organization' managers in developing countries understand effect of culture completely and they know that they should pay attention to it but they have no a wide agreement on clear definition of it. For showing this subject, introduction of some special indicators are required. Here, Schien's view can be an effective help. He defines organization culture in this way: model form basic assumptions (inventions done, discovered or created by group) which learns from it how interact to their problems which are external adaptability and internal correlation. There is sufficient work about validity of the model and therefore for new members, it is taught as a right way of understanding, thinking and sensing in related with above subjects. What is frequently ignored are the culture norms which exist in an organization or any other collection (Veysi, Hemat, 2004).

Dill and Kennedy are other researchers who pay attention more to knowledge issue in organization culture. A more interesting part in Dill and Kennedy's work is description of five constitutive element of organization culture which are: work environment, organization value, organization hero, organization traditions, organization culture network (Veysi, Hemat, 2004).

2.6. Communication between Information Technology, Organization Culture and Organization Strategy with AIS

Creation of information systems inside of a company needs a strategy, programming, and accurate design. As this subject requires a special design and plan. Since one of the most important tasks in accounting, is helping to a long time strategic programming. Financial managers should always know that how to converge information technology with organization strategy, on the other hand, technology management in developing countries is affected by other areas such as non organization – cultural aspects which are essential in international commerce subjects. By this understanding, there is no doubt that, effect of cultural subjects and especially organizational culture, in technology management is not venial (Veysi, Hemat, 2004). Chart 3 shows that organizational strategy, and specially organizational culture are two basic elements which affects on design of an accounting information system and information technology has also important role in it (Romny,Marssshall B.and paul John Steinbart , 2005).

Chart 3: Relationship between organizational strategy, organizational culture and Information technology
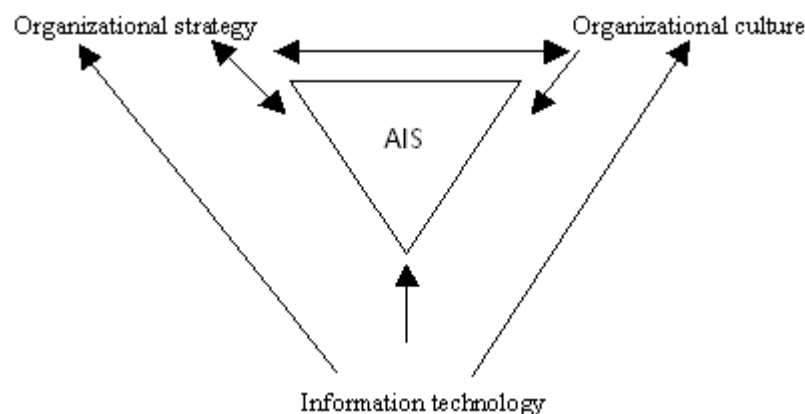
2.7. Accountants' Role in Applying of AIS

Identification of equipments and tools which cause easy and proper execution of accounting information system operations is an irrefutable need for accountants. Many accountants, when people speak about computer, think that they are talking in another foreign language. Accountants, who do not know information technology terms, may face with some problems in understanding of information system. However it is not required to become experts in this area, but they need to know about computers and know its constituents and learn how to work with it, process and save economic events and financial data by using it. Main reasons of the necessity of learning computer for accountants are (Romny,Marssshall B.and paul John Steinbart ,2005):

1. Frequently, accountants are considered as users of system, therefore it is expected that accounting students, before entering to work environment, gain high skills on computer or sometimes it is necessary to satisfy their professional needs beside programmers in organizations by computers and programs which should be programmed.
2. Information technology is a strong symbol of new advances and complexities which are occurring regularly during industries and special fields, such as accounting.
3. Accountants are also considered as assessors, supervisors of accounting information systems. Independent and internal auditors asseses strong and weak points in accounting information system by assessment and determination of some criteria such as internal controls, which is not possible without identifying of hardware and software concepts.
4. Management and control of computer information sources, is done by accountants.They may survey and control the design and purchase of the system users (work) operations and the way of using computer sources.
5. Gaining skill and computer science increases accountants' knowledge level.

2.8. The Effect of Teaching Activities on users' Performance

Daily development of science and technology lead to different organization structures compared to the past ones and any organization for coordinating with these fast and increasing advances, has changed inter-organizational connection channels according to these changes. In these conditions, successful organization is one which guides itself ahead according to daily knowledge and advanced technology. Fast changes and technologies have high effects on all organizations especially a huge industrial organizations and ignoring it cause organization's fast fail. Organizations consist of important components such as, capital, human source, technology, operational tool (machinery, etc) and management which according to most theorists, human source is the most important factor of all. Because the efficiency of the organization depends on right and proper doing of tasks by this forces. Since about 70 percent of sources and capitals are human sources, therefore the supply of this capital requires doing organized and continuous teaching activities in all organizational levels. Training skilled persons which is refereed as human source development, is a inevitable necessity which organizations need seriously for surviving and advancing in today world of full changes and advances (Abaseyian, Abdolhosein, 2005).

3. Experimental Reserchs

Since in developed and industrial countries, in field of design and development of accounting information systems, there are not way variables, environmental and internal problems such as those exist in that undeveloped countries such as Iran, direction of researches in those countries is also in another way and major of researchers are trying to find structures and present theoretical and practical models about changes which organizations should do so that they can gain a comprehensive information system according to methodology of decision making. Here, some cases are mentioned briefly:

1. " An Integrated Model of Information Systems Adoption in Small Businesses ", is title of a research which is done by James Y.L. Thong in 1999. Based on theories from the technological

innovation literature, a questionnaire survey was conducted in 166 small businesses. Data analysis shows that small businesses with certain CEO characteristics (innovativeness and level of IS knowledge), innovation characteristics (relative advantage, compatibility, and complexity of IS), and organizational characteristics (business size and level of employees' IS knowledge) are more likely to adopt IS. While CEO and innovation characteristics are important determinants of the decision to adopt, they do not affect the extent of IS adoption. The extent of IS adoption is mainly determined by organizational characteristics. Finally, the environmental characteristic of competition has no direct effect on small business adoption of IS (James Y.L. Thong, 1999).

2. "concepts of accounting information value" is title of article that belongs to Theodor G.Mock's which emphasizes on necessity of information value identification and explained this necessity makes proper use of accounting information system as a need, and plays a vital role in controlling, programming and making decision of management. He also studied importance of personnel's training in relation to accounting information systems and way of information flow in organization and assessment of resulted information and feedback of systems' model (Mock ,Theodor J., October, 1971).

3. "Study obstacles related to computerized accounting development in Iran" is a subject of a research which is done by Naser Aria in 1993. He explained major problems in developing computerial accounting information systems in Iran as follow:
    1. Accountants' and mangers' insufficient undrestanding of facilities of computer
    2. Lack of experts for creating and executing of computerized systems
    3. Lack of standard accounting methods
    4. Inadequacy or improper available accounting software
    5. Lack of interest for managers for providing computer systems and lack of complete support

4. "The necessity of reviewing accounting information systems position in training program and accounting profession" is another research which is done by Mohammad Arab MazarYazdi. In this research , besides current status of accounting information systems in training programe of accounting field in Iranian universities is compared with developed countries such as America, the position of these systems in the organizations is studied and criticized and reasons for absense of proer information systems in organizations are studied too. According to researcher's view, the most important reasons which hinder application of proper accounting information system in organizations are as follow (Mohammad, Arab MazarYazdi, 1994):
    1. lack of manger's knowledge to accounting information systems capabilities role
    2. Tax-contentedness of information system of Iran

5. "Identifying obstacles of underdevelopment in computerized accounting information systems in manufacturing companies in the province of Khuzestan" is title of a thesis which is done by Seyed Mohsen Tabatabi Nejad in 1380, and in this research, besides introduction of some factors of undevelopment and available problems related to accounting information system, need to reform, improvement and development of such systems is incidentally mentioned. He emphasized on following item as obstacles of mentioned system in his research (Seyed Mohsen, Tabatabie, 2004):
    1. Lack of managers' knowledge of the abilities of computerized systems
    2. Lack in manger's usage of information in making decision
    3. Low level of accountants' skills in applying computer and using its possibilities
    4. Undevelopment of professional standards related to accounting information systems

6. "Accounting information systems in need for development" is the title of an article by Dr. Farzaneh Heydarpur. She has presented a subject about design's and installation's necessity of accounting information system according to requirements of that organization. Author also, emphasized on the need for application of up to date technology and adds that technology, is a fast answer for quality increasing, operational efficiency and customers' satisfaction (Farzaneh Heydarpoor, 2005).

7. "Effect of information technology on accounting information system", is a subject of article which is done by Mehdi Arabi. It explains that information technology advances affects on accounting information system by reduction of human errors, reduction in costs, increasing efficiency and quality and effectiveness and also it creates some new applications and fields (such as international accounting, electronic commerce, just in time production, etc) in accounting profession (Mehdi, Arabi, 2005). The summary of some done researches has shown in Table 1.

Table 1: Summary of done researches

Year	Article	Author
1971	Concepts of Information Value and Accounting	Mock ,Theodor J
1993	Survey of difficults of development of computerized accounting	Naser Aria
1993	The necessary of review in the place of accounting information systems in education and accounting profession	Mohamad Arab Maziar Yazdi
1995	Accounting information systems needs to advance	Farzaneh Heydarpoor
1999	An Integrated Model of InformationSystems Adoption in Small Businesses	James Y.L. Thong
2000	Information System Development in the Small Firm	Gavin C Reid
2000	Identify barriers to the development of computerized accounting information systems production companies, Khuzestan Province	Seyed Mohsen Tabatabai Nejad
2009	Impact of information technology on accounting information systems	Mehdi Arabi
2009	The Study on factors affecting the successful implementation of accounting information systemsCompanies listed on the Tehran Stock Exchange	Shokrollah Khajavi et
2012	The Effect Of E-Commerce on the Developmentof the Accounting Information Systems in the Islamic Banks	Khalil Mahmoud AL-Refaee
2013	Evaluating the Design of Accounting Information System and its Implementation in Ethiopian Manufacturing Industries	Yuvaraj Sambasivam et

4. Research Hypothesizes
4.1. Main Hypothesis

To effective reform current status of accounting information systems in manufacturing companies in province of Khuzestan, hypothesizes of this research are presented in four independent sections, which each one of them is considered a strategy of a relative improvement of these systems.

1. Management's active participation in stabilization of strong organization culture is one of relative improvement strategies of systems in manufacturing companies in province of Khuzestan.
2. Applying advanced technology(hardware and software synchronized with accounting information system) is one of relative improvement strategies of systems in manufacturing companies in province of Khuzestan.
3. Applying of relatively skilled accountants in field of computer is one of relative improvement strategies of systems in manufacturing companies in province of Khuzestan.
4. Providing training courses for users of systems for effective usage of system is one of relative improvement strategies of systems in manufacturing companies in province of Khuzestan.

4.2. Sub Hypothesis

For identifying of regulator variables and their effect in relation to independent variables and dependent variables, following hypotheses are presented:

1. There is a relationship between subjects' educational field and their perception of a relative improvement in accounting information system.
2. There is a relationship between subjects' educational level and their perception of relative improvement in accounting information system.

3. There is a relationship between: the working experience of subjects and their perception of relative improvement in accounting information system.

5. Research Method
5.1. Population, Sample and Sampling

Statistic population in this research is all financial managers and financial experts in manufacturing companies of Province of khozestan. According to received list from Khuzestan province industries main office, total number of companies was about 570 companies, which 80 companies were selected randomly for this research.

5.2. Variables Scale Measurement

Main tool for gathering data in present research is questionnaire. Questions can be considered as a type of act-react. Answer range for each question was a Likert type which is scaled as following.
Very low:1, low:2, average:3, high:4, very high:5
Options' valuation each question is in this way that for very high, number 5 and for very low, number 1 is scored.

5.3. Information Gathering Methods

Two major methods were used in information gathering method. At first, the subject and the research was explained, and then by usage of library method, information was gathered. After theoretical study, questionnaire was written in a field way. For being sure about the appropriateness of questions in questionnaire of research, the subject of each question determined according to literature related to subject.
Also for assessment and logical verification of the validity of questionnaire, besides use of expert's recommending view, a per test was used. Therefore questionnaire was sent for 20 persons from statistic population and some reforms were applied for questionnaire according to their recommendations.

5.4. Research Statistic Methods

In this research, description and induction statistic methods were used. At first, according to the aims of the research and for getting knowledge about studied population, analyzing of sample data was done.
In description method, it is tried to help for transparency of research by drawing of tables and descriptive statistic such as central and distributive indexes for description of questions in research. Since sample number was more than 30(n>30), so sample distribution is approximately normal. Also, since σ_x is not clear and since the volume of the sample is enough large, at first the amount of S_x.
In hypothesis test, Z statistic method and q square was used. So statistic assumption test in comparison between averages through one sided test by using a dependent samples and also probability calculation for statistic assumption reject by help of p-values (level of reject in hypothesis in zero for research is considered as $P<0.05$) were done. According to normality assumption of distribution in test statistic and statistic assumptions of H0 and H1 in significant level is $\partial=0/05$. It should be noted that average of population is $\mu = 3$. According to research hypothesizes and questions of questionnaire, test statistic and test assumptions of H0 and H1in significant level of $\partial = 0/05$, is designed as follow:
H0: $\mu \leq 3$ assumption contradict
H1: $\mu \geq 3$ assumption accept

6. Test the Research Hypothesizes
6.1. Main Hypothesizes Test

Generally, this research with four main hypothesis is performed which all of these hypothesis in 95 percent level were verified and accepted.

6.1.1. Main Hypothesis Test
The results in Table 2 show that average score of tests in intended independent variable is more than expected average(score 3.26 vs average 3) and this shows "active participation in management range for stabilizing of strong organization culture'' in relatively improvement for accounting information system in manufacturing companies in Province of khozestan" is 95% of assurance level.

Table 2:

Effect of stabilizing of strong organization culture by active participation of management	number of respondents	Mean	standard deviation	Score' Minimum	Score' Maximum
	80	3.26	0.45	2.2	4.2

6.1.2. Main Hypothesis Test
According to the results in Table 3 , average score of tests in dependent variable is more than expected average in this hypothesis (score 3.45 vs average 3). Results from second hypothesis testing show that 95 of assurance is for hardware and software suitable for accounting information system is one way for improvement of computer systems in manufacturing companies in Province of khozestan.

Table 3:

Effect of advanced technologies(suitable hardware and software)	number of respondents	Mean	standard deviation	Score' Minimum	Score' Maximum
	80	3.45	0.485	2.6	4.7

6.1.3. Main Hypothesizes Test
As we see in the Table 4, average score in applying of "relatively skilled accountants in field of computer" is more than expected average score(4.09 vs average 3) and this shows that this variable is in 95 percent assurance level for improvement in computer system of manufacturing companies in state of Khuzestan.

Table 4:

Effect of Effect of applying of "relatively skilled accountants in field of computer"	number of respondents	Mean	standard deviation	Score' Minimum	Score' Maximum
	80	4.09	0.353	2.24	4.31

6.1.4. Main Hypothesizes Test
The Table 5 shows that average score for tests in relation with independent variable is more than expected average score.(3.76 vs average 3) and this confirms the assumption and shows variable as a strategy for improvement of accounting information system in manufacturing companies in Province of khozestan in 95 percent of assurance level.

Table 5:

Effect of train courses related to system for personnel	number of respondents	Mean	standard deviation	Score' Minimum	Score' Maximum
	80	3.76	0.621	2.05	5

Table 6:   Summarizes the results of main hypothesises testing

Research main hypothesises	Test statistic	Critical value	P-Value Calculated By MINITAB Software	Result
The first main hypothesis: Management's an active participation in characterizing of strong organization culture is one of relative improvement strategies of systems in manufacturing companies in province of Khuzestan.	5/24	1/645	p<0/05	Accepted
The second main hypothesis: Providing suitable & advanced technologies (hardwares and softwares) synchronized with accounting information system is one of relative improvement strategies of systems in manufacturing companies in province of Khuzestan.	8/49	1/645	p<0/05	Accepted
The third main hypothesis: Applying of relatively skilled accountants in field of computer is one of relative improvement strategies of systems in manufacturing companies in province of Khuzestan.	6/079	1/645	p<0/05	Accepted
The forth main hypothesis: Providing training courses for users of systems for effective usage of system is one of relative improvement strategies of systems in manufacturing companies in province of Khuzestan.	10/97	1/645	p<0/05	Accepted

6.2. Sub Hypothesizes Test

6.2.1. Sub Hypothesis Test
In this hypothesis educational field as a regulator variable and researcher wants to know if the regulator variable has any effect on the relationship between the first independent and dependent variable or not. It is clear from Table 6 that there is a meaningful error level which is obtained from Chi- 2 test is equal to 54% and is more than α=5% or critical amount of 5/99 is greater than Chi- 2(1/332) , as a result , null hypothesis is verified. It means that educational field could not significantly affect on test results.

Table 6:

Variable	Significant level of Contractal	Significant level	Degree freedom	Critical value	Chi-square	Result
Educational feild	5 %	54 %	2	5/99	1/332	Rejected

6.2.2. Sub Hypothesis Test
It is concluded form Table 7 that meaningful error level is obtained from Chi-2, (21%) is more than α(5%) or on the other word, critical value(5.99)is greater than Chi-2 (3.109), so null hypothesis is verified. It means, education level could not meaningly affect on test results.

Table 7:

Variable	Significant level of Contractal	Significant level	Degree freedom	Critical value	Chi-square	Result
Educational level	5 %	21 %	2	5/99	3/109	Rejected

6.2.3. Sub Hypothesis Test
In this hypothesis, working experience is as a regulator variable and researcher wants to know if regulator variable has any effect on the relationship between independent and dependent variable or not. It is clear from Table 8 that significant error level which is obtained from Chi-2 test is equal to 74% and is more than α=5% or critical amount of 12/59 is greater than Chi-2(11/496) , as a result , null hypothesis is verified. It means that the mount of working experience could not significant affect test results.

Table 8:

Variable	Significant level of Contractal	Significant level	Degree freedom	Critical value	Chi-2	Result
Working experience	5 %	74 %	6	12/59	11/495	Rejected

Table 9: Summarizes the results of sub-hypothesis testing

Research theories	Chi-square	Critical value	Result
The first sub-hypothesis: There is a relationship between subjects' educational field and their perception of a relative improvement in accounting information system.	1/332	5/99	Rejected
The second sub-hypothesis: There is a relationship between subjects' educational level and their perception of relative improvement in accounting information system.	3/109	5/99	Rejected
The third sub-hypothesis: There is a relationship between: the experience of working subjects and their perception of relative improvement in accounting information system.	11/495	12/59	Rejected

7. Conclusion

There are many problems and obstacles such as , lack of interest for application of computer equipments, or lack of attention to hardware and software features, or non optimized investment for those equipments, or lack of managers' or accountants' knowledge of capabilities of accounting information system of manufacturing companies in Province of khozestan, cause that these systems to be inefficient for playing their sensitive and important role as an informer. According to this, having efficient and effective accounting system in commercial and non commercial units for providing useful and related information is considered as a undeniable essentially. In this study some solutions are presented for relatively improving the obstacles problems in development of accounting information systems in manufacturing companies in khozestan Province.

Results show that , first, It is possible to provide field for stabilizing of organization culture in systematic environment by master management' cooperation in different departments such as financial department. In this way, we will see myths, values, traditions, and dynamic environment and cultural network inside of systematic environment. Second, application of coordinate software and hardware, not only increases speed in central processing unit and users' performance, but also it covers more information needs in organization. Third, by application of relatively skilled accountants in field of computer, both accounting operations is done by more professional view, and repetitive systematic errors will be removed. Fourth, providing training courses cause internal systematic positive interaction and increases users' skill. Generally, accounting information system improvements requires reform and modifications in cultural, technical, expert and educational fields, which these dimensions always complete each other. on the other hand, an accounting information system is effective, efficient and helpful when it reforms continuously according to the requirements of the time.

Like all empirical studies, the present research also has its own limitations due to the methodology employed. Use of questionnaire to collect data always has also its own limitations, since responses could be biased because of the common method used for the collection of all data. Although extensive care has been taking when designing the questionnaire and the pilot study refined the questions, still the criticism of the survey method can never be completely ignored and should be taken into account. From generalization of the results point of view, measuring research questions based on the opinion of the respondents would limit our generalization of the findings. Despite the above limitations, this research has provided useful results in paving the way for future research in this area. Since in Iran, only recently increasing demand for AIS, as an effective tool in managing the Iranian organizations, has prevailed, this research could provide a supportive evidence for the implementation of AIS.

Avenues for future research could be:

1. Survey of collection of other effective elements on AIS' improvement like organizational strategy , accounting soft wares,
2. The effects of user participation on the design of AIS,
3. Study of the extent to which factors such as inflation, human resource accounting etc. would be taken into account when designing which maybe improvement AIS kind of.

References

[1]   Needles, Beleverd E, Jr.(1995). Financial Accounting. Hougton Miffli Company, 3-5.
[2]   Meigs & Meigs.(1990). Accounting the Basic for Business Decisions. McGraw Hill, 6.
[3]   Foster.George.(1999). Financial Ststement Analiysis. Prentic-Hall Inc, 38.
[4]   Chandler, A. (1962). Strategy and structure. New York: Doubleday
[5]   Shableh, Mohamad. (1999). Career' program to this direction of world(Canada and America). Hesabres's quarterly journal, no 4-5, 58.
[6]   Janani, Mohamad Hasan. (2004). Accounting information systems. Booklet of Master college of Broujerd Branch, Islamic Azad University, Iran. 3-30.
[7]   Veysi, Hemat. (2004). Influence of organizational culture on technology management in developing country. Defensive researches magazine, no 11-12, 215 -225.
[8]   Romny,M. B.& Paul J. S. (2005). " Accounting InformationSystems",8Edition, Prentice-Hall International Inc, 79-200.
[9]   Abaseyian. A. (2005). Efficiency of educational courses. Tadbir' quarterly journal, no 17. p. 52
[10]   James Y.L & Thong. (1999). An Integrated Model of Information Systems Adoption in Small Businesses. Journal of Management Information Systems ,Spring 1999, Vol. 15, No.4, 187-214.
[11]   Mock ,T.J. (1971). Concepts of Information Value and Accounting. The Accounting Review, Vol XL VI No4. 774-779.
[12]   Naser, A. (1993). Study obstacles related to computerial accounting development in Iran. Hesabdar's quarterly journal, no 101,36.
[13]   Mohammad, A. M.Y.(1994). Necesarility review on place of accounting information systems in training program and accounting profession. Accounting Investigationes'quarterly journal, no 9, 23-42.
[14]   Seyed M.T. (2004). Identifying obstacles of undevelopment in computerial accounting information systems in manufacturing companies in province of Khuzestan. Master'thesis of Ahvaz Chamran University(Iran), 17-89
[15]   Farzaneh. H. (2005). Accounting information system is a need forward changing. Rasmi hesabdar's quarterly journal, no 5 and 6, 61- 63.
[16]   Mehdi. A. (2005). Effect of information technology on accounting information system. Tadbir monthy journal, no 110, 45-48
[17]   Shokrollah. Kh & et. (2009). The Study on factors affecting the successful implementation of accounting information systems Companies listed on the Tehran Stock Exchange. Researches of financial accounting's quarterly journal, no 2, 2-12.
[18]   Khalil. M. A. (2012). The Effect Of E-Commerce on the Development of the Accounting Information Systems in the Islamic Banks. American Journal of Applied Sciences 9 (9): 1479-1490, ISSN 1546-9239.
[19]   Yuvaraj. S & et. (2013). Evaluating the Design of Accounting Information System and its Implementation in Ethiopian Manufacturing Industries. International Journal's Research Journal of science & IT Management, www.theinternationaljournal.org > RJSITM: Volume: 02, no 7. ISSN: 2251 - 1563.
[20]   Thompson /? J.D(1967).. Organizations in action: Social science bases of administrative theory. New York: McGraw-Hill. Waterhouse, J., & Tiessen, P. (1978). A contingency framework for management accounting system. Accounting Organization & Society, 3(1), 65–76
[21]   Woodward, Joan) 1965(Industrial Organization: Theory and Practice. Londorl:. Oxford University Press.