Study the effect of management information systems to the financial success of companies in the industrial cities of Bandar Abbas by inferential statistics

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Abstract: The increasing development of technology-based tools and information to adapt quickly to the needs of human beings has led to a new form of interactive and creative learning environment, active and inclusive environment. The companies and commercial organizations is serving a full-scale war that their main goal was survival and competitive advantage them nothing but more and better customers. Accordingly, management information systems as a new tool can have enormous influence in contemporary organizations. In this paper, information management systems were on the companies' financial success. In this study population was including financial management companies in the industrial cities of Bandar Abbas (200 members). For samples were randomly sample based on a sample size of 127 was calculated. The data collected through a questionnaire consisting of 20 questions. Questionnaires to some experts (experts) and the results led to a reform of the items. As a result, the questionnaires were received from content and face validity. Cronbach's alpha coefficients were obtained for the variables; more than 0.7 were approved, resulting in reliability. To identify hypotheses, one sample Student's t- test at a significance level of less than 0.05, was used. In this regard, the software spss version 17 was used. The results showed that studied management information systems affect the company's financial success.

Keywords: Information systems, management, financial success, Inc.

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I. Introduction

Trade today due to the transition from the old economic model in the global village constituting patterns, different functional requirements demands. In other words, to succeed in today's management must have thought and system of today. (Alvani, Teimoor nezhad, 2007). In the third millennium as an agent of change is what information technology and its various applications. After own technology and its applications in all sectors and organizations have been the main cause of global thinking and the other organizations of the system can be learned today that the requirements of the organizations of today's respond (Laoden, Laoden, 2009). Most systems in the industrial age, enterprises and organizations to raw materials and energy in necessary care and attention to the issue of information were also (Porter, 2000). But the transition from the industrial age to the age of information systems, which coincided with the explosive development of industry, the development of information and communication technology (ICT) and globalization of communications and information-based economy, for the first time as a vital source of information and development tools and development of strategic value enjoyed, so that in this new era of complex and unpredictable only institutions, organizations or institutions that were able to continue their normal life as soon as they can, to provide the desired information, processing and exchange. (Mahmudi, 2007) Directors faced by many challenges to decide on the today's organizations. If Herbert Simon's comment about being synonymous accept management decisions, then, according to some experts who believe that the decision is a good decision based on information that 80 to 90 percent and 10 to 20 percent dependent on the skill, capability and experience of director the value and importance of more determined (Lucas, Henry, 2000). When the importance of information clearly apparent the role of information systems in organizations. Accordingly, first, some concepts in the field of IT from the perspective of some scholars seem necessary (Feqhhy farahmand, 1999). astrasman, information systems and systems encompassing hardware, software, communications software, or information, people and processes or business process has been introduced (Torben, MacLean, 2007).

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Defined management information systems that collect environmental data and transaction data and records of corporate operations and then filter them, organizes and selects and provides the information administrators and managers a tool to provide the information needed to produce (Flores, etal, 1988). In particular, information systems and management information systems in many companies and organizations in the country are emerging as a tool and not many of them took advantage of this approach (Dewett & Jones, 2001).

If the connection system is direct and strong financial performance and the company's financial success can be further investment in the development of management information systems to provide that in order to enhance the competitiveness of this study was to the Case Study facilitate them. The main question is whether management information systems could affect the financial success of the companies surveyed?

II. Research background

1. Clanton and Knight (2000), to review the financial success of their companies. The results suggest that the most successful companies in the financial field in sales growth, market share, financial performance and profitability are eligible (according to Swierczek, Shrestha, 2003).

2. Dahl (1985) has done research in relation to financial obligations. Develop effective information systems to financial resources and long-term financial commitments for the purchase of software, hardware and professional needs. Successful companies for their information system development activities are long-term financial obligations. Senior managers from different sources and from different sectors can provide. Senior management in successful companies the financial resources required for the project on the basis of mutually agreed terms and set. The company's senior management on a master plan for development of the system of an overall agreement with the other sections. In contrast, the unsuccessful companies, senior managers tend to have a written financial commitments and the overall program and not have to agree with other sectors (quoted in Humphrey, 2004).

3. In the new study, Pascal (2003), the relationship between accounting information and stock returns over a ten year period examined in the Tokyo Stock Exchange. Investigator three variables that reflect the operating performance, profitability and financial policy are used. The results indicate that information systems with the ability to provide analysis of underlying reasons for companies to upgrade dividends turns (according to the Cunden, Heck, 2004).

4. Aghaee (2005), as the relationship between information technology and did research. This consists of a main hypothesis as using IT to increase efficiency and two sub-categories hypothesis using information technology to optimize the use of human resources and the application of information technology to optimize the use of resources, according to the hypothesis confirmed both with 95%, then the basic hypotheses have been confirmed.

5. Johnson & Sonen (2003) by comparing the company's financial data 478 in 98-1982 was to identify factors affecting the company's financial success. Financial success using three methods Sharpe ratio, alpha Johnson and EVA were measured. 10 companies were considered and using a model of binary comparisons, companies were evaluated parameters. The results showed that firms with high profitability, efficient capital management and high reliability to their business, successful companies are (according to the Ham Sunny, etal, 2005).

Hypotheses

- 1. Information Systems Management on the company's sales growth is influence.
- 2. Company management information systems to increase market share is impressive.
- 3. Management information systems on financial performance (increased profit) companies are impressive.
- 4. Company management information systems on return on assets are impressive.

Conceptual model of research

The following figure represents the conceptual model shows that reflects how the management information systems of the company's financial success. To determine the financial success of the four indicators Klanton and Knight (2000), was used. (Quoted from Turban etal, 2003).



The definition of concepts

Information: Information set the currents that change, this change occurs when or something added to knowledge collection or restructuring occur in Porter, 2001)).

Financial success: financial success is to improve performance in sales growth, market share; financial performance (increased profits) and efficiency are eligible. (raeesi Ardeli and Khakbaz, 2005).

Management information systems (MIS): official system is in the process of decision-making required reports to provide managers at different organizational levels (Rezaeian, 2006, p. 13).

Research Methodology

The aim of this study in terms of functional is descriptive in nature and the survey was conducted. On the other hand, as a researcher in the field of industrial estates and units involved in it, this study is among the studies. In this study population is including financial managers of industrial companies in the town of Bandar Abbas. Survey carried out showed that the managers of about 200 people. In the present study, the sampling procedure used random sample based on the sample size is calculated as follows:

$$n = \frac{NZ_{(\%)}^2 p(1-p)}{\varepsilon^2 (N-1) + Z_{(\%)}^2 p(1-p)} = \frac{200 \times (1.96)^2 \times 0.5 \times (1-0.5)}{(0.05)^2 \times (200-1) + (1.96)^2 \times 0.5 \times (1-0.5)} = 127$$

In this study, information management systems as independent variables and the dependent variable financial success as a tool to gather information is a questionnaire. Variable sales growth (5 items), increase market share (5 items), increase profits (5 items) and return on assets (5 items) in a range of 5 Likert very high (5), high (4), average (3), low (2) and very low (1) were designed. Then the questionnaires to some experts (experts) and the results led to a reform of the items. As a result, the questionnaires were received from content and face validity. Cronbach's alpha coefficient for the variable sales growth (vary from 850), market share (items 0.74), increase profits (0.79) and return on assets (0.8) and the result was more than 0.7 the reliability of the questionnaire was approved. To identify hypotheses, analytical tests (t- single sample student) at a significance level of less than 0.05, was used. In this regard, the software spss version 17 was used.

III. Research findings

Hypothesis 1: information management systems on corporate sales growth are impressive.

The results show that at 95%, as calculated by an amount equal to 1.000 P-Value and the greater the amount of error (0.05), and H_0 is based on the impact on the development of management information systems corporate sales, will be accepted and assumed H_1 or no impact on sales growth management information systems companies, is rejected.

The average obtained (3.94) which is higher than average (3), the following can impact on the development of management information systems sales and win.

Variable	The number of respondents	Average	Standard deviation	P-Value
Sales growth	127	3.94	0.82	1.000

Table 1 (using t-test for the first hypothesis)

Hypothesis 2: management information systems are affecting the market share increasing companies. The results show that at 95%, as calculated by an amount equal to 1.000 P-Value and the greater the amount of error (0.05) and H_0 is that the impact of management information systems to share the corporate market, will be accepted and assumed H_1 or no impact on the market share of corporate management information systems, be rejected. The resulting average (3.79) is higher than average (3), the following could be the effect of management information systems in the Company's market share, win.

Table 2	(the t-test	for second	hypothesis)
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Variable	The number of respondents	Average	Standard deviation	P-Value
Sales growth	127	3.79	0.76	1.000

Hypothesis 3: management information systems on financial performance (increased profit) companies are impressive.

The results show that at 95%, as calculated by an amount equal to 1.000 P-Value and the greater the amount of error (0.05), and H_0 is based on the impact on performance of management information systems financial (increased profits) Company, will be accepted and assumed H_1 or no impact on the financial performance of management information systems (increase profit) companies, be rejected. The average obtained (3.89) which is

higher than average (3), the following could be the effect on the financial performance of management information systems (increase profits), wins.

Variable	The number of respondents	Average	Standard deviation	P-Value
Sales growth	127	3.89	0.69	1.000

Table 3 (t-test analysis for the third hypothesis)

Hypothesis 4: management information systems affect the Company's return on assets.

The results show that at 95%, as calculated by an amount equal to 1.000 P-Value and the greater the amount of error (0.05), and H_0 is based on the impact on efficiency of management information systems Company assets, will be accepted and assumed H_1 or no impact on the efficiency of asset management information systems companies, is rejected. The average obtained (3.48) which is higher than average (3), the following can impact on the efficiency of asset management information systems are used.

Table 4 (t-test analysis for fourth hypothesis)

Variable	The number of respondents	Average	Standard deviation	P-Value
Sales growth	127	3.48	0.96	1.000

IV. Conclusion

Here is a summary of the findings will be presented: The average obtained (3.94) which is higher than average (3); the following can impact on the development of management information systems sales and win. The resulting average (3.79) is higher than average (3), the following could be the effect of management information systems companies win market share. The average obtained (3.89) which is higher than average (3), the following could be the effect on the financial performance of management information systems (increase profit) range. The average obtained (3.48) which is higher than average (3), the following can impact on the efficiency of asset management information systems are used.

V. Suggestions

During and with the advent of technology has not any technology like IT, communication between the different disciplines of science. IT as a linker, all of the day's work is to provide the required information professionals, industry organizations and finally all the people in different parts of society in the shortest time and provide the best possible way. So that now sweeps the world's information technology borders and brings together nations in a global society. Perhaps the correct use of information technology will improve not only the future of human life, but trying to damage incurred as a result of previous IT reform. For example, the use of IT traffic problems, lack of physical space to work and education, lack of time, lack of competition and jealousy and secrecy in science education, employment and cultural exchange will be eliminated.

Naturally, in this new field, in every society, organization or individual with the knowledge and even more noble, goals and objectives clearly stepped into the breach can take more advantage of this technology in various spheres of economic, social, cultural and political world role have more. In general, information technology, along with its factors has created enormous changes in companies and organizations. On this basis, the sustainability and competitiveness of today's changing environment requires the use of IT in the organization.

The new role of IT in organizations is bold enough Many theorists, managers and decision makers of organizations to adopt these technologies in organizations recommend future directions. Important part of the organization that will be affected by this technology is especially the decisions and financial decisions.

According to highlight the role of information as a strategic resource, organizations are unaware of this source will undoubtedly be defeated in a competitive world and obtaining, maintaining and enjoying strategic effectiveness of this source would not be possible without information systems survey research firm showed, information systems, resulting in increased production speed and product design changes have reduced production cycle the system also utilizes the information in the companies mentioned changes in the production hall for the managers of these companies is very easy and senior managers of the company's production line in their offices to easily apply the required changes.

This information system enables accurate and efficient utilization of all facilities related to the production hall is possible. This had a great impact on several financial indicators and would provide the financial success of the Company has provided. Studied business information systems at companies like (information systems) companies, in addition to significantly be reducing decision cycle is prepared for managers is the ability to multi-task.

Reduction of operating decision is affecting the Company's financial success. Human resource information system created in these companies who exploited to the maximum capability and proposed that research to develop the information system for these companies offer is appreciated by creating a platform for knowledge management in the structure of the information system features increased speed boost knowledge transfer. The researcher also proposes a system of information systems; **the company** offers system status to be allocated to characterize prospective thoughts of the main characteristics of world-class organizations, to improve.

Considering that the investigation concluded that the financial management information systems industrial company located in the city of Bandar Abbas has а direct impact, Recommended in these companies and all large investment companies on the development of management information systems accept and only in this way, but not limited to the following systems of TPS steps taken longer and in the establishment and use of DSS and ES systems step, to the financial success of the Company's control.

References

- [1]. Aghaee, Roh allah., (2005), the relationship between information technology and functionality, Dissertation Master of Public Administration, Allameh Tabatabai Management School (in Persian).
- [2]. Alvani, seyed Mehdi, Teimoor nezhad, Kaveh., (2007), management information systems, our software releases, Tehran (in Persian).
- [3]. Cunden, Mayen, Heck, Eric Van, (2004), "Barganing power and information technology in African-European business relationships: Case of the Dutch flower auctions", European Management Journal, Vol. 22, No. 5, pp. 573-587.
- [4]. Dewett, Todd & Jones, Gareth.R., (2001), "The Role of Information Technology In Organization: A Review model and assessment", Journal of Management, Vol 27.
- [5]. Feqhy farahmand, N., 2004, management of technology, publications afterglow Tabriz (in Persian).
- [6]. Flores F, Graves M, Hartfield B, Winogard T, (1988), "Computer system and the design of organization interaction".
- Ham Sunny, Kim Woo Gon, Jeong Seungwhan, (2005)," Effect of information technology on performance in upscale hotels", Hospitality Management, Vol 24, pp. 281–294.
- [8]. Humphrey, John, (2004), "The value chain approach- Linking national producers to international buyers and markets", published in University of Sussex Brighton, UK.
- [9]. Lavdn, Kent, Lavdn, Jane Price, (2009), management information systems, translation by Ramin Molana poor, Farzad Habyby poor Roodsari, Mehran Karimi, ati negar Publications, Tehran (in Persian).
- [10]. Lucas, C., Henry, Jr. (2000), "Information Technology for management", Mc Grow-Hill, 7 Th Ed.
- [11]. Mahmoudi, Seyed Mohammad, 2007, information systems management, Tehran University Press (in Persian).
- [12]. Porter, E. Michael, (2000), "Copetitive Advantage: Creating and sustaining superior performance", Orginally published: New York: Free Press, Londn: collier Mac Millan, c1985.
- [13]. Porter, E. Michael, (2001), "Estrategy and the Internet", Harvard Business School Publishing Corporation.
- [14]. raeesi Ardeli, Gholam ali, Khakbazan, Hassan. The effect of IT on total quality management plan in (2005), No. 165 (in Persian).
- [15]. Rezaeian, Ali, (2006), management information systems, published by the (in Persian).
- [16]. Swierczek Fredric William, Shrestha Pritam K., (2003) "Information technology and productivity: a comparison of Japanese and Asia-Pacific banks", Journal of High Technology Management Research, Vol 14, 269–288.
- [17]. Torben, Lydnr, MacLean, vadroob, (2007), IT management (transformation of enterprises in the digital economy, translation A. Sarafyzadeh, cashmere Publications, Tehran (in Persian).
- [18]. Turban .E, Leidner, McLean .E, Wetherbe .J, (2003), "Information technology for management", New York: John Willy and Sons.

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