

THE IMPACT OF IT ON THE DEVELOPMENT OF SMALL AND MEDIUM ENTERPRISES IN IRAN (GILAN PROVINCE)

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Abstract:

Environmental organizations in stressful, unpredictable, complex and changing work and earn more profit, the market and the overall survival and their growth and to achieve these objectives should be capable of rapid response Rqabnd the obligations and opportunities such dynamics have on the environment, Technology used to rapidly modify and update any new technology comes to market And choice of quality goods and services will change and this increase is the result of today's technologies and methods will become obsolete over time

Given the importance of its role in today's world of information technology in organizations today, it is necessary to understand this concept and its effects on unemployment agencies, organizations and businesses a competitive advantage in the use of IT can help.

This study determines the impact of IT on small and medium industries have been developed that industrial development can be considered Risen factor of 5. To examine the impact of IT on these sales, after sales service, management, marketing, inventory control and access to new tools will be studied. To examine the impact of IT on these sales, after sales service, management, marketing, inventory control and access to new tools will be studied.

The study population consisted of all small and medium industries in the province, which is produced by way of information technology in organizations are benefiting.

The number of companies registered in 2556, the number will be selected randomly. Data set can be obtained using a questionnaire that using the spss software using descriptive statistics (mean, standard deviation, frequency, percent) and t-test analysis will be. Several studies have shown that many developed countries owe developing small and medium enterprises are not large firms.

Also considering that many of these firms using new technology to increase competitiveness and profitable for them is the Understanding the impact of IT on the development of small and medium enterprises has doubled.

Keywords: Information technology, business development, small and medium industries

1. Introduction

Today, the economic reforms of the formation and operation of small and medium scaled enterprises (SMEs) in many countries, especially developing countries is considered as a strategic approach that highlights the need to change the role of government, empowering the private sector, the competitiveness of the economy and the interaction with global rules and policies based on economic liberalization and strengthening of the private sector for the development of economic activity (Fernando, 2001).

Although large industries are still being considered by economic policy makers due to advantage of the effects of large scale, the production range, the experience effect and the effect of regulation, but the advantages of small and medium enterprises due to the effects of transport, market size effect, the effect of regulation, effective choice and control effect have made this industry are often the first choice in the good production.

But the industry to solve this problem and competitiveness ability in the global arena requires extensive and rapid changes. IT as a transformational tool has several applications at each stage of the value and supply chain of organizations. these applications if used properly can respond to needs facing the industry (Malekinezhad, 2009).

Today, the economic development of small and medium enterprises is recommended as a way to pass the transition period for developing countries and even developed countries (Mohtarami et al., 2010).

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Small and medium industries need to have an efficient organization. This requires to do the necessary purchases in the right time and to identify the necessary resources for the future. Computers and servers, software and connections to the Internet include technologies that help the growth of small and medium industries and small businesses should do a good investment in this regard in all areas, whether urban or rural.

Consistent with the growing evolution and development of IT, the utilization and investment in this area is growing. Successful companies are largely owes their growth and profitability to continuous investment in IT and hence try to equip their higher levels of organization to meet the requirements of this organizational effecting area.

Many of these organizations are trying to gain competitive advantage and achieve higher performance and better meet the organization by the application of information technologies. Therefore, the recognition of concepts of IT and factors affecting the application of IT in organizations is necessary.

2. The main text of the articles

Increasing progress in changes in the modern business environment has made small and medium enterprises as part of global production networks and chains so that small and medium enterprises development is key to economic development in the next decade.

Studies have shown that small businesses have impact on the global economy by job creation and increase income. Moreover, the intensification of global competition, increased uncertainty and growing demand for diverse products has led to greater interest in small enterprises.

So moving toward in order to organize and assist small and medium industrial units should not be viewed from the angle of rent-seeking group. Instead, the goal is to improve the industrial structure and the making structure competitive for future challenges when the competitiveness of the enterprises are the best answer to the problem of chronic unemployment in the country (khezri, 2009)

Experts in management and organization define IT as set of tools that can guide an organization's customers in decision making process with detailed information on its time. IT makes the organization's policies more accurate and job description are expressed in more detailed (Gibb, AA 2000).

In this age, IT is the fastest and cheapest technology and since the main problem of small businesses are in marketing and sales if IT is used properly by small businesses, it can lead to the development of small industry.

Small industries cannot spend a large percentage of capital and income on newspapers and their advertising brochures due to money constraints. But the use of the Internet made it possible for the small industry that their production are been seen with low co t by millions of visitors every day and at any time on the website. In addition, place restrictions disappears on the case of e-commerce using for sales and marketing of their products in domestic and foreign markets. It is also possible to compare products with similar products at home and abroad with international standards (Nodeh Farahani, 2003).

The use of ICT in small and medium industries result in improved communication and data exchange capabilities, teamwork, customer relationships, market share increase, competitive advantage, etc. Another benefit of e-commerce can be taking higher efficiency in trading because of fast and accurate processing of information. Website activating will lead to increased competition in the small and medium industries because stronger relationships with customers will change through the creation of the company relationships with its customers. The use of ICT in small and medium industries in the service sector could also facilitate cooperation between the company and other companies. Small and medium industries can use web-based tools and technologies such as modeling tools, development tools services, discussion groups, education and so on.

Increasing value role of IT is in enrichment of infrastructure which increase the organization's ability to perform competitive operation in the market as well as the ability to adapt to constantly external changing environment for its organization. Therefore, in the other way, the relationship between the dynamic and competitive operation helps to organizational units to use IT resources to boost their competitive operation. Thus there is a mutual relationship between the IT and organizational performance and vice versa. In other words, the application of IT within the organization can improve organizational performance.

IT is a branch of technology that uses hardware, software and network for study and application of data and its processing in the fields of storage, manipulation, transfer, management and control.

Development of small and medium industries: the increased use of inputs with increased economic efficiency and the use of empty capacity to increase production capacity and reduce cost or in other words, the growth and development of industries in terms of favorable conditions and competitive advantages such as exports, industry modernization and profit,... are defined as the development of small businesses.

The use of ICT in small and medium-sized companies in the service sector can improve the competitive advantage and the company's performance. Small and medium industries with all their advantage facing many problems in their developments. One of the factors that led to the development of small and medium industries can be sales improvement, having the proper management in the organization, providing appropriate services to clients, inventory management, and access to modern means of marketing that if used properly and in time can be a competitive advantage (Beikzad et al., 2009)

Correct management:

Studies about the management of small and medium industries suggest that even management functions such as planning, organizing, staffing, directing and controlling fail in many industries. Financial management is very weak in many small and medium industries, decision-making has been delayed, workers' welfare and retirement planning is not provided and production planning does not take place.

Access to new marketing tool:

Marketing means integrating all activities in the direction of further sales. In fact, no matter how we define marketing, it is important to know that in the modern world without marketing we cannot continue our economic activity and more importantly marketing is not just advertising! Marketing is providing an appropriate product or service in the relevant market at a reasonable price. While short-term promotional measures should not be confused with marketing, in marketing, the concepts should have a clear definitions and benefit should be considered for long time period.

Sales:

Sales and marketing are critical elements for the stability and progress of the business in organizations. No matter what is the business, sales and marketing and productivity can have a good income for the organization. Sales and marketing are often dependent on each other that could directly affect the productivity of marketing. Sales and profits increase as the amount of funds spent on marketing is valuable for large and small organizations. Weak marketing led to falling sales, rising costs and even it will lead to bankruptcy of the organization if it continues (Nodeh farahani, 2003).

After-sales service:

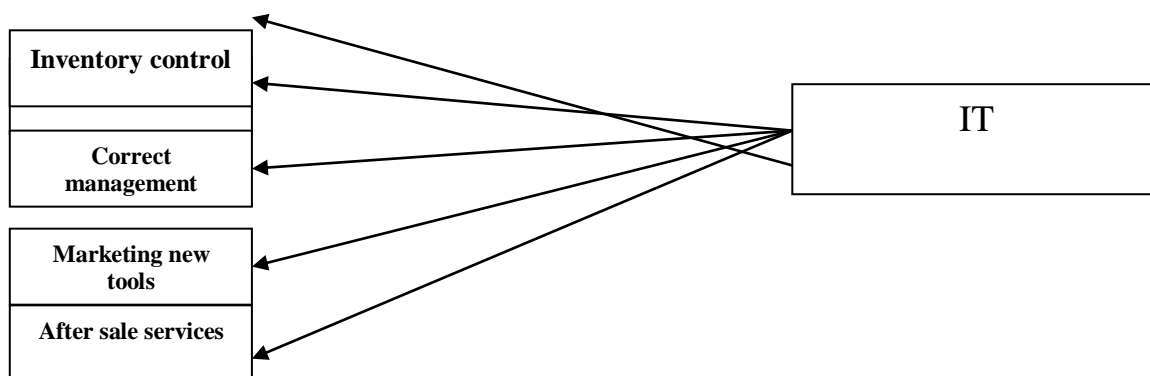
Services are an activity between organizations and customers to promote the sale and the use of products and it also includes operations provided by the manufacturer to the customer during the entire transaction (Christopher, 2000).

Inventory control:

Optimal inventory management has multiple and continuous challenges for small business. In each of these companies, design and implementation of inventory planning system should be based on their strategic planning systems. Optimized inventory control include shopping, taking care of the materials needed in the production process or retail.

Research conceptual model

Every research needs a theoretical framework. Theoretical framework is a model that the researcher theorizes the relationship between the factors that create the problem the use of IT. The theoretical framework does not necessarily be researcher opinion and originate from previous studies. The theoretical framework of this study (Figure 1) is taken from Beikzad et al (2009) study.



Research Hypothesis

The main hypothesis of research study

The use of IT has positive effect on the development of small and medium industries.

The sub-hypothesis of research study

The use of IT causes more precise control of the small and medium industries.

The use of IT increases sales in the small and medium industries.

The use of IT causes the right management in small and medium industries.

The use of IT would benefit small and medium enterprises to apply advanced technology marketing for their product presentation and sales.

The use of IT improves the after sales services.

Research methodology:

This practical study is correlational descriptive in data collection methods view point. The study population consists of all small and medium companies that includes 2556 enterprises. Cochran formula was used to determine the sample size according to the above formula sample size of 135 firms was calculated.

In this study, the data collection method to assess the impact of IT on the development of small and medium industries was the researcher questionnaire. The questionnaire was adjusted based on Likert scale to measure five factors: sales, after-sales service, access to modern means of marketing, inventory control and organizational management.

To determine the validity, the questionnaire was examined by teachers, advisors, and a number of professors of the university so that they examined any questions of the questionnaire and finally the questionnaire was approved.

Cronbach's alpha coefficient is used for reliability coefficient calculation with an emphasis on internal consistency. To calculate the reliability coefficient using Cronbach alpha, the questionnaire was distributed between 30 enterprises and table below shows the reliability of the research tools.

Research variable	α value
IT	0.896
Management	0.813
Inventory control	0.828
sales	0.796
Marketing	0.737
After sales services	0.891
Small enterprises development	0.888

As specified in the above table, the values of Cronbach's alpha and the reliability of each variable is more than 0.7, which indicates good reliability of the model.

Findings

The distribution of the dependent variable values should be normal for using parametric statistical techniques, that it is tested by Kolmogorov-Smirnov test.

Development variable of small and medium enterprises are normally distributed H0:

Development variable of small and medium enterprises are not normally distributed H1:

Since the p-value obtained for all aspects of small and medium business development variables is less than 0.05, the null hypothesis is rejected and thus dependent variable in the sample are not normally distributed, so nonparametric methods (Spearman correlation coefficient) must be used for inferential statistics.

The main hypothesis: The use of IT has positive effect on the development of small and medium industries.

The independent variable	The dependent variable	Number	correlation coefficient	significant level	Result
The use of IT	The small and medium organizations	135	44.4	0.000	Confirmed

The sub-hypothesis no. 1: The use of IT causes more precise control of the small and medium industries.

The independent variable	The dependent variable	Number	correlation coefficient	significant level	Result
The use of IT	Inventory control	135	21.3	0.013	Confirmed

The sub-hypothesis no. 2: The use of IT increases sales in the small and medium industries.

The independent variable	The dependent variable	Number	correlation coefficient	significant level	Result
The use of IT	Sales amount	135	31.6	0.000	Confirmed

The sub-hypothesis no. 3: The use of IT causes the right management in small and medium industries.

The independent variable	The dependent variable	Number	correlation coefficient	significant level	Result
The use of IT	Correct management	135	40.2	0.000	Confirmed

The sub-hypothesis no. 4: The use of IT would benefit small and medium enterprises to apply advanced technology marketing for their product presentation and sales.

The independent variable	The dependent variable	Number	correlation coefficient	significant level	Result
The use of IT	Marketing	135	35.3	0.000	Confirmed

The sub-hypothesis no. 4: The use of IT improves the after sales services.

The independent variable	The dependent variable	Number	correlation coefficient	significant level	Result
The use of IT	After-sales service	135	40.5	0.000	Confirmed

Conclusion

The important issue in the inventory management is access to information and transparency of available information, the orders and purchase items that reduce costs. According to the results of data, IT can solve manual inventory control problems in small and medium industries which often takes place traditionally so access to information become faster, orders times will be more accurate than manual mode and transparency will increase in the organization. The results of this study suggest that use of computers in small and medium industries in the process of inventory control has the same effect as the big industries.

The use of information and communication technology enables the industry to show their product with low cost to millions of visitors every day and at any time on the website. In addition, the space limitations in the use of e-commerce for sales and marketing of their products in domestic and foreign markets disappear and also it becomes possible to compare products with international standards or with similar products at home and abroad. This provides an opportunity for small and medium industries to sell their products and penetrate in global markets. the research results shows that many of the problems facing small and medium industries in the field of administration is due to the lack of correct information, access to a huge amount of information and time-consuming data processing and lack of adequate knowledge and skills in management. According to the results of this research, IT process increases access to information in the organization, reduces processing time from among a host of information and reports required by managers to make decisions and provides a major step forward in the development organization.

According to the results of this study, IT and its components can provide this opportunity for the industry to use new tools for marketing.

As the findings of the study shows, the use of IT in the provision of after-sales service to customers, in addition to the specific order to respond to customers, it will fast response times so that companies can use the site to receive complaints in every time and time and space restrictions will be eliminated.

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