

Effective Factors on the Agility of IRIB (Islamic Republic of Iran Broadcasting)

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ABSTRACT

With increasing environmental change in business and become more competitive, productive organizations require to system that can response to all needs of clients. agility is a new concept that accelerates the responsibility and competitiveness of a company and we can define it as the ability in surviving and development in a competitive environment (special feature of this environment is changing and lack of confidence) that rapidly and effectively shows reflex from itself to the changing markets based on the needs of client.

The purposes of this research are:

- 1: identifying the factors which are effective on the agility of organization.
- 2: determining the rank of agility variables in IRIB.
- 3: determining " whether IRIB has the agility or not?

The results of this research are:

1. More familiarity of managers and authorities with making agile factors of organization and its better planning for creation of agility in the organization.
2. Familiarity of managers and authorities and suitable methods for making agile the organization.
3. Achieving knowledge of the managers in the various levels compared to their organization' current state and features.

Test of statistical population mean

Our supposition in this research is:

H₀: $\mu \leq 3$ the organization regarding each one of the variables is not agile.

H₀: $\mu \leq 3$ the organization regarding each one of the variables is agile

According to the found results, it can be observed that in all data, the significance number of the test (0.00) is smaller than the significance level (i.e., 0.05) was considered, therefore, H₀ will be rejected and the following supposition will be accepted and can be said that the organization regarding the all variables is agile.

Test analysis of Friedman's variance

H₀: there is not a significant difference between each one of the agility variables in IRIB.

H₁: there is a significant difference between each one of the agility variables of IRIB

The value of significance number (0.000) is less than the accepted significance level (0.05), therefore the H₀ will be rejected and can be said that the agility variables are not in the same level at IRIB.

KEYWORDS: Agility, Agile manufacturing, IT, Process, Supply Chain, IRIB

INTRODUCTION

Organization ability in reacting to the rapid variations of environment and response to the client's needs in our today's competitive terms. Can be considered as one of the most important advantages. In the other hand, many factors can restrict the possibility of accordance in the organizations with the variations of environment and convert the provided opportunities for the organization to a threat and therefore the continuance of competition will be difficult and expensive. structural factor and IT in the organizations and appropriateness of those two together and consistency with internal and external changes of organization, can be considered from the important issues. The exited changes around us, can multilaterally put us under pressure. the proper reaction and informed response to the complex developments, can place the organizations theoretically in the social open systems.

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Speech topics :

What is the agility ?and why do we need it ? What is the features of an agile organization ? how do we can convert the current organizations to an agile case ?

Correlated questions indicate the existence of rapid and continuous variations in the area of organizations and individuals' life. the change in the structure and processes , existence of innovations , dramatic variation in the products and available competitions in the business and technology , is a development that was created and relatively in a fixed manner continues. Ability in the recognition of market (changes in the clients' needs and following of new needs) , recognition of capacity in the design of new lines and presenting the services or products , recognition of the competitors and available and potential competitions , achieving to the strategic plan of competitive skills , providing the structural and process variations for response to the clients' needs , are from the important agile aspects.

In this research, we address the factors effective on the organization, including the market agility , processes agility , production agility , HR agility , employing IT and supply Chain. IRIB is a powerful organization to increase the knowledge level, dealing with the invasion of an alien culture and to response to the cultural need of society and our country's young population, awareness from all effective factors on the agility of cultural and knowledge system seems to be very useful for managers.

It seems now the various organizations in our country are faced with different barriers for converting their organization to an agile one that here diagnosing the effective factors on the agility and performing this research is necessary.

The background of research

In this research, the agility of IRIB is considered first and in this regard, there is not done any research now. the most important researches that up to now were done about the agility, two theses entitled as " deigning and presentation of a mathematical model to increase the production and flexibility in the pure production systems in PhD level and " presentation of a model to measure the agility in the productive organizations in the electronics industry of Iran using the fuzzy logic Ms (master of science) level.

Goldman knows the agile production including the lean manufacturing features, in order to achieve to 4 main principles as follows (Roberson & Jones, 1999):

1. The products must be as the solutions for the customers;
2. The virtual organizations must be formed when asking for offering the products in a minimum time for market via the internal or external cooperation's.;
3. Entrepreneurial approaches must be chosen in a manner that the organizations to be prosperous in the change and lack of environmental confidence.
4. The knowledge-based organizations must be formed when are able to create somewhat a concentration using IT in their hierarchical authorities.

The nest model offered 4 principal concepts for creating the agile production that we address them in the following section (Yousef et al, 1999):

1. Basic competency management: the basic competency that may be related with the company's product and has been diagnosed in two various levels (personal and company) (Kidd, pp 29 , 1994).
2. Virtual institute: in the agile production, the term of virtual institutes going to be used with various meanings. Here, our purpose is the joint investment with other companies which have a basic certain supplemented competencies. It means that the basic competencies is going to be chosen from several companies and then will be mixed inside a single phenomenon. (Kidd , pp 30 , 1994)
- 3.Ability for reshaping: the agile institutes easily can do a remarkable replacement in concentration, diversifying , shaping and reorganizing their business and offer an especial purpose as an open window toward opportunities (Yousef et al 1999).
- 4.Knowledge-based institute: defined generally and clearly the knowledge according to the production (including the individual experiences in the organization ,company's reports , historical cases, databases and etc,..)

Gunasekaran's model includes the agile productions which regarding the environmental uncertainty must be responsible for the following issues:

1. Rapid changes of markets
2. Global competition's pressures
3. Reduction of offering to the market.
4. Increase of the cooperation between institutes.
5. Interaction of the value chain

6. Increase of the information value

7. Distribution / marketing / global resourcing (Gunasekaran , 1998)

Kidd (1994) suggests that AM can be considered as a structure in the company , has the ability for development of products and business' strategies . this structure is supported by three resources which are :

A: Managerial & organizational innovative structures

B: Skillful men

C: intelligent and flexible technologies.

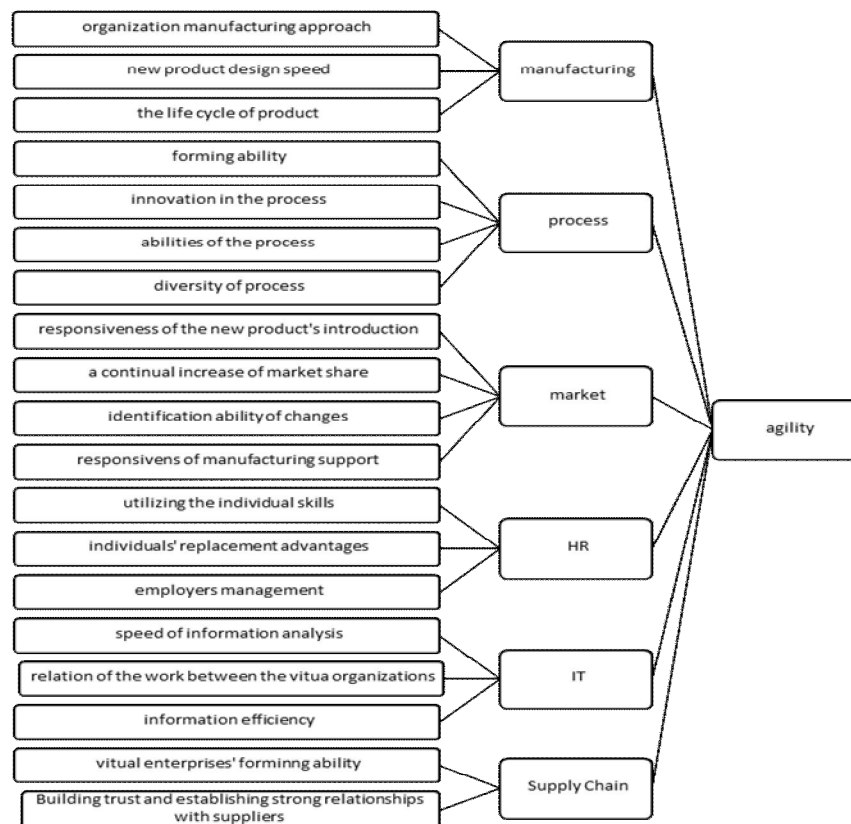
Dove, Hartman and Benson (1996) introduced the reference model of an agile institute via a case study . This model includes three parts of maturity level in the field of change management , functions and evaluation of the competitive place.

Ambrose & Morella (2004) in a research , knew the designation of an agile organization can help to adjust the discipline and change in the environment of business , because this organization permit to the organizational authorities to have much more choices , react better to the various demands , offer more new services, provide the customers' needs and a kind of competitive advantage for the organization.

Agility model

Six main entrances of the model that is named as the agility areas in the organization , regarding to the definition and concept of agility and management terms governing upon the state organizations of Iran , it can be said that the entrances of suggested model have the necessary comprehensiveness. In the area of market agility ,issues such as environment of organization , ability for diagnosing the changes and providing the customers' needs , agility of processes , and processes updates the organization regarding the innovation and diversity and measures their efficiency ,agility of manufacturing is concentrated on the inter-organizational agility creation .

Exploitation from the individual skills within the organization and employing the multi-skill work forces enables the organization to be converted to an agile organization , trans-organization communications and ability of networking within the organization and forming the virtual organizations and organization's ability to outsourcing the activities , are considered as the main principles of the agile structures , and will be measured in the areas of agility in the employment of IT and agility in the supply chain. This model enables the managers using the questionnaire method to measure the agility in each one of the main areas and regarding to the agile manufacturing's conceptual elements.



The relation of agility with IT:

In order to review the effect of IT on the agile manufacturing, we divide the effect of modern IT in three Parts:

1. Accelerating the activities
2. The intelligent and automatic process of decision making
3. Enabling the distribution operation using the cooperation

Also we remind that the IT in the various levels is improved that includes the following:

1. Collaboration: the scattered designers can work together on the joint designation project using the software system of computer supported collaborative work .
2. Decision making: Strong calculations and causes of similar efforts enable us achieve the better responses
3. Profitability: resulting from the logistics currents of computer networks
4. Repair: computer systems take advantage from the AI techniques to improve the quality.
5. Understanding: input data devices collect an environment for computers and human.
6. Partners: computer system in an organization automatically selects the partner companies to perform the special orders of clients (Ahmadi, 2003).

The relation of agility with the quality of human resources:

Performance evaluation systems must be performed in the organizations such that to motivate toward the appropriate performance . According to the Goldman et al , for being successful in achieving to the agility , the organization must have some people with the following properties (1995):

1. Graduated , skillful, aware from the organization , flexible in accord with the organizational changes and performance expectations which applied by the customers.
2. Entrepreneur, having the ability, authority, initiative and good support.
3. Continuous learning must be provided for them, having the ability to learn new skills and knowledge whenever circumstance require and having the technology knowledge.
4. having a good working relationship within the organizational teams that needs multi-skill members
5. Organizations must think like organization's owners and accept responsibility of offering the services to the customers, know themselves participated in the problems and be responsible jointly for success of the organization

In the new paradigm, system of HR became very customer-oriented , this system on order to establish the new policies which supports from the job workflow , respect to employees and PA work teams , is related to the customers and cooperates with them

The relation between market and organizational market:

Sharifi and Zahng (1999) with frequent studies , classify the areas under changes in the business environment as follows:

Volatility and instability of market that is due to the growth of a little section of market , multiplicity of new products and declining the product life

The severe competition that is due to the rapid changing market, increase of the cost pressure , increasing competitiveness and short time development of new products.

Changes of the customers' needs that is due to the customized demand , increase of the qualitative expectations and more rapid delivery time.

Acceleration of technological changes that by introducing the new and efficient manufacturing facilities ,the hardware and software integration of systems will be created.

Changes of the social factors that for protection of environment ,workforce's expectations and legal pressures will be created.

Of course the reason of changes of the business world can be counted as: increasing availability to IT , severe competition on the development of I , market globalization and commercial competition , rapid growth of achievement to the technology , Changes in salary levels and job skills , environmental responsibility and resource limitations, and most importantly, increased customer's expectations (St. John et al , 2001)

The relation between the process and agility of organization:

The agile organizations easily can make a significant change in their concentration , diversification , modernization for accelerate in achieving to a special purpose such that this can create some great opportunities for the organization.

The agile system not only against the change is flexible , but is able to rapidly regenerate the system and answer to the variable needs and dynamic market and is an advanced state of a flexible manufacturing technology that has a high level of reorganization and in relation with higher level systems such as strong executive systems .the agility is away to change the manufacturing method , designation and execution of management and marketing . in the agility , our purpose is simultaneous achievement to the flexibility and high efficiency (Jafarnezhad , Shahayeï 2007)

The relation between the supply chain and agility of organization

Supply chain management is one of the pioneer businesses in the process of reengineering , cost savings and strategies of the income in today usage. (Kuax&Paganeli 2003).

The supply chain is a set of organizations which cooperate together and in this cooperation different activities from raw materials supply to the product delivery in hands of customer will be done in an integrated form.(Bertolini&Boilakua 2004)

METHODOLOGY

Generally to perform any research, some data must be collected that using them the hypotheses will be tested . To collect the data, various measurement tools exist that the information in a clear method qualitatively and quantitatively will be presented such that effectively to be used. Then the statistics methods proper to analyze the data are used.

This research is practical and regarding the collecting data is descriptive that was used from library and field method to collect and achieve the required information. In the literature section related to the research, to be introduced more with the discussed topic, the library method was used . In this method, the most of cases due to being new, were prepared via the study of English articles available in the Internet and English books. In this method using the questionnaire and distribution of it among the statistical population instances, the data from this population was collected.

Data collecting method

In the any research, real data collecting regarding the research purpose has the main importance. he process of data collecting includes the activities that its result is the data collecting to measure the numerical sizes of indices and an explanation of qualitative properties related to the elements which were studied . Anyway, the collected data is based on the research's hypotheses test and generally the main purpose of data collecting is this issue too. In this research to collect the data and achieve the information was used from and questionnaire that within it to evaluate each one of the research's hypotheses was used from several questions designed in the framework of Likert' standard.

Questionnaire

In order to confirm the questionnaire's durability, the alpha coefficient was calculated for two sections of questionnaire that this coefficient was equal to 96 % . to confirm the reliability of two questionnaires , this questionnaire was at disposal of 10 professors of management and was confirmed yet. In the next stage , questions related to each one of factors based on the result of factorial analysis and concepts designated in the literature , were classified in the framework of indices.

Then according to the comments of experts and obtained alpha coefficient for each set and each index, after applying the required adjustments, the final indices for each factor were obtained. The questions of questionnaire that regarding to the research' hypotheses were compiled, in a closed form and with Likert scales (very low , low, medium , high , very high).this questionnaire includes 52 questions. The questionnaire was presented in the appendix.

The statistical population in this research includes the managers' population of IRIB that is about 800 persons. After the distribution of final questionnaire, we analyzed the data using the SPSS. To collect the required data from the statistical population, 220 questionnaires were returned.

THE METHODS OF DATA ANALYSIS

To review each variable regarding the agility was used of SPSS and t-test and to prioritize the variables regarding the agility was used of Freidman test.

In this research, a questionnaire for distribution among the managers of IRIB was compiled and randomly distributed.

Average test of an statistical population

Our hypothesis in this research is:

H0: $\mu \leq 3$ The organization regarding to each one of the variables is not agile.

H1 : $\mu > 3$ The organization regarding to each one of the variables is agile .

In this research , we have put the base on this that the likert's standard , we considered the data 3 to higher than 3 as agile one and according to this the data was compared with the number of 3 and below results were obtained.

(Except the free question that was placed at the range of 10 and 5 and higher than 5 was considered the agile case.)

RESULTS

If the significance number of the test to be higher than the supposed value (0.05) , the H0 will be confirmed and variable value is equal with 4 , ie, the status of variable is moderate .if the significance number of test to be lower than the supposed significance number (0.05) , the H0 will not be confirmed. For decision making about being bigger or smaller than the average value of 3 , we must look at the upper and lower limit.

If both limits have the negative sign , the mean value is smaller than 3 and the status of variable is inappropriate. If both limits have the positive sign , the mean value is bigger than 3 and the status of variable is appropriate.

According to the results , it seems that in all data the significance number of test (0.00) is smaller than the significance level (0.05) , therefore, H0 is rejected and H1 is accepted and can be said that the organization is agile considering all variables.

Table: investigating the state of each variable

Agility	variable
Moderate - good	Manufacturing
moderate	Process
Moderate-good	Market
moderate	HR
Good	IT
	Supply chain
Moderate -good	Total

Table : the review of the purpose state

Agility	purpose
Moderate-good	Organization total agility

According to the results, the organization regarding the responsiveness to any types of variables, showed a moderate –good agility from itself.

Freidman's variance analysis test

Prioritization of the studied variables in relation with the agility of IRIB

H0 :There is not a significant difference among the existed state of all agility variables in IRIB.

H1: there is a significant difference among the current state of each of the agility variables in IRIB .

Results: the value of significance value (0.000) is smaller than the accepted significance level (0.05) , therefore , H0 is rejected and it can be said that the agility variables in IRIB don't have the same rank.

Prioritization of variables in relation with the agility of IRIB in accordance compared with the average of rank using the Friedman's variance analysis.

Average of rank	variables
3.68	manufacturing
2.53	process
3.63	market
2.34	HR
4.41	IT
4.41	Supply chain

According to the Table , IT and supply chain have the highest rank and HR have has the lowest rank of agility.

Conclusion

In the researches done by experts of agility such as Goldman ,Peris , Sharif& Zhang et al and others , the different components were presented for agility . Pris et al suggested an generic model for the agility . Goldman know the formation of a virtual organization , leveraging the impact of people & information m internal and external collaboration and skill in the changing as base for the agility.

Rick Dove know the organizational agility in the balance between the knowledge management and obtaining the skills in the field of changing .

He for better understanding , know the factors of agility which are used for the measuring the ability of reaction, including cost , time , strength and range.

Sharifu& Zhang under the influence of comprehensive literature review and field researches , introduce a model composed of three axes as drivers, capabilities andenablers. Hilgersberget al added the 4th dimension of network to the Sharifi& Zhang' model.

In fact, each one of the models in order to introduce the agility structure have observed the agility from a different point of view and this has caused that the different models , asymmetric structure in the different dimensions of agility to be existed that generally are not comparable together and of course all of them are correct and complementary of each other.

In the current research , some factors such as IT and HR like the previous models can be observed as well as regarding to the comprehensive model that obtained from reviewing all models , the organization is agile regarding to the all effective factors in the agility , and in the test of Friedman the supply chain and IT are in the first rank of the agility and following them , the manufacturing , market and business processes will be placed and finally the quality of HR is in the final ranking.

Suggestions

With regard to the reviews performed in IRIB , IRIB compared to the all defined variables in the current research is agile and in order to improve the current terms , we must pay more attention to the HR fields and business processes.

HR mostly includes some issues as : exploiting from skills and individual abilities , ability of replacing the skills , motivational issues , delegation , tram working and welcome to the changes , that in this poll , gained more lower rank than other variables.

And organization should use their HR in all affairs and give more authorities to people and survey from them about the various cases to motivate and reinforce the arsines and their cooperation in the organization and they also know the organization and its products from their own and make their efforts further in improving the work programs and adapt to rapidly changing of external environment and competitors. Regarding the business processes similarly also must be paid more attention

to the below cases: Innovation in the work processes, risk-taking for creating the competitive advantages, initiative and acceptance of diversity. To achieve this goal, must the amount of authorities of persons and units to be more and not to be afraid from the outcome of their work and the necessary supports to be applied by the organization to a variety of new products.

Manufacturing variable in the current review has assigned a good state for itself .In this variable, issues such as speed of designing the products , manufacturing the new products and attention to the products' life cycle have been addressed. The organization specially in the recent years has paid more attention to the audiences' needs and specially young society and manufactured more products in accordance with audiences' interests and was very successful.

From the external environment aspect of organization and response to the society' needs, the agility of organization is in a good state and this shows the organization' power in the introduction of the new products and continuous increase of market share and attracting the audiences toward its products and ability of diagnosing the variables. And for protection and upgrading it, we should have an updated awareness from the audiences' needs and be informed from its changes.

If, it is necessary, the organization should address to the processes and sub-structures. Since that the intelligence agencies are faced with large forces such as suppliers' customers, internal & external competitors and each one have a special effect on the organization , each organization should design itself in line with answering a set of internal & external forces , for being agile one that designation of the virtual organizations is a clear instance of organization's flexibility in line with the variables.

With respect to this that the time factor can has the important effects in discussed results of this research, therefore , it is better that the research to be repeated in the several years intervals and created changes to be considered.

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