

# **A Study of Assessment feature of Agility Capabilities in Social Security Organization of Kohgiluyeh and Boyer-Ahmad Province**

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## **Abstract**

Instability and change in the workplace have been important issues for research for a very long time. These very important conditions have led to investigations into working priorities, strategic attitude and the persistence of old examples or have even produced new methods that persist to date. Therefore, today, one of the best strategies for ensuring the survival and success of organizations and responding to organizational change is their concentrating on 'organizational agility'. Agility is an aware and comprehensive answer to the changing needs and achieving success by using opportunities that the organization acquires. This study is a descriptive-correlational field research attempting to measure and rank the fragility capabilities in the Social Security Organization of Kohkilooye& Boyer-Ahmad province. The population comprises 180 individuals selected through census method. For data collection, the study employs the questionnaire of fragility capabilities including aspects of speed, competency, responsiveness and flexibility. Their Chronbach's alpha coefficients equal 77%, 80%, 78% and 83%, respectively. The study also employs Kolmogorov-Smirnov test, the test of normality of the population, student's t- tests, Friedman test and test of population mean. The findings reveal that enjoying a mean of 3.3 in responsiveness and competence indices the Social Security Organization is in desirable conditions. However, enjoying a mean of 2.8 in speed indices and 2.9 in flexibility indices, this organization is in inappropriate conditions. In order to meet present and future needs of the society and obtain resources to pay short-term and long-term costs, besides paying attention to the two principles of responsiveness and competency, the Social Security Organization must take the increase of speed and flexibility into consideration, too.

**Key words:** *Agility Capabilities, Responsiveness, Competency, Speed, Social Security, Organization*

## **Introduction**

Organizations, large or small, are faced more or less with the problem of global competition. Whether you are a small organization inside a country or have a branch outside the country, you must nevertheless come to compete in international markets.

In the early 1980s, by the burst of Japan's economic bubble, many American managers thought that threats of the Japanese companies were over. However, gradually the Japanese leaders began restructuring the companies that were heavily suffering from the recession of the time. They could once keep presenting in the global competition through maintenance of the quality of their products, work efficiency and speed. Competition, thus to say, has started over with many changes in this century. They are such great changes that have brought about many new challenges for both manufacturing and service organizations, ignorance of which thus jeopardize the success and survival of these companies.

Over the past 15 to 20 years, industry conditions have changed dramatically (Yakuka Institute, 199). In this era of technology, market conditions and customers' different demands have faced various changes and led organizations towards issues such as rapid and unpredictable changes. Therefore, organizations have faced increased competitions that are due to technological innovations, chaotic and turbulent environments and changes in the costumers' demands. Rapid and significant changes in technology in the late 1960s and the 1970s, particularly in the world of electronics, were the major concerns that involved other aspects of job demands in the last two decades.

The globalization of markets, development of information technology, computer networks, etc. have made major changes in governmental organizations and technical environments. These phenomena have led to new ways of competition in economic management and social organizations. Researches on organizations together with developments have been concerned with changes and uncertainty in the work environment. Nowadays, there are few organizations that have not experienced changes within three to six months or even one year. The term 'change', in this era, refers to a variety of concepts. In certain cases it means external changes in political and social technology, customers, competitors, structure, market, or area (zone). Therefore, in order to survive and save their positions, oorganizations oscillate in different forms, willy-nilly. One of the latest organizational forms is agility. Agile organizations think beyond adaptation to the changes, but they tend more to take advantage of potential opportunities in a turbulent environment. This agility, however, is not something to be considered only for the private sector. Application of agility in governmental and non-governmental organizations can offer proper grounds for growth of dynamism in these organizations. Therefore, we need to keep in mind that, because of having a great number of clients, these organizations demand urgent agility, so as to relieve the clients' problems and help their growth and development.

The significant issue in this study is whether or not the Social Security Organization can fulfill its goals considering the daily increase in the costs, reduction of resources, growth of the organization's commitment to the target society and the insured community, the huge number of clients and urgent need for relieving their problems and responding to their demands. However, By and large the question is whether or not the notion of agility can bring about appropriate grounds for growth of the organization so that the managers and personnel would

use their capabilities and facilities in order to respond to this significant and fundamental inquiry.

### **Significance of Study**

In the previous decades the advantage of competition revolved around geographical, natural, and traditional finances and workers were assumed as main resources of a company. However, today the organizations no longer need powerful labor and geographical place and time anymore. What are of great importance today is professional and innovative human resources in organizations that are assumed as core assets of an organization. The discussion of agility although has production and service as its goals, the background directors are managers and personnel that provide agility capabilities through new ideas and creative works. Therefore, if an organization is after agility, it must consider these capabilities that consist of responsiveness, competency, flexibility and speed. Organizations with strategic perspectives need creative and innovative human resources more than before. Hemmer in the book *Reengineering* (2000) maintains that: "In present and future organizations, there is no place for acquiescence employees or those who do regular and continuous work. Organizations, on the other hand, are places for creative and innovative people that respond properly to the changes."

The Social Security Organization, as a public and non-governmental organization and intergenerational fund condominium, is the largest and most extensive social insurance that covers the largest target society in the country. In Social Security Organization, the process of conducting actions is based on the principle of proportionality and harmony between inputs (income) and outputs (costs). The organization, thus to say, needs an agile, dynamic and efficient environment in order to be able to respond to the circulation of wide insurance operations based on the principle of receiving insurance entitlement and fulfilling legal obligations, the physical presence of target society in the Organization's operational and executive unites, legal requirements, meeting the clients requirements, planning for the future prospects of the Organization, and finally presenting appropriate services to a number of about 35 million insured people, pensioners, insured disabled, etc. Therefore, the Organization, with high agility capabilities among its personnel and managers, could be an ideal organization with enough development and already defined strategies. This is possible by determining the perspective of the Organization, which wants to be a knowledge-based, efficient, sustainable and trustable organization accountable for the promotion of human dignity and fulfillment of justice by improving the quality of life and health of the insured people and their families.

### **Review of Literature**

Emergence of the concept of agility and agile production  
Since late 1980s to the middle of 1990s, because of wide economic and political changes all around the world, many efforts have been made in order to understand the roots and factors that are effective for new orders of global business. The US took the lead of economical movement for the first time when a paralyzing recession was rampant worldwide; especially in manufacturing sections (that was facing severe competition from Asia and the West). In 1991, a group of industry specialists observed that the index of change in workplace is much faster than the adjustment of traditional manufacturing organizations with such changes. These

organizations were unable to use the advantages of the achieved facilities; hence, this inability in adjusting to the change conditions might have caused their bankruptcy in a long time (Hormozi, 2001; Dave, 1994). Therefore, for the first time a new paradigm, entitled “a strategy for manufacturing foundations in the twentieth century: views of industry professionals”, was published and introduced to the world by Iacocca Institute. The paradigm was agreed upon in a meeting by scientific and executive professionals of industry (Nagel & Dave, 1991). Immediately after introduction of this paradigm, the term agility production was used by the public (Gunasekaran et al., 2001).

The method of Agility Production was suggested and stated in late 1990s and early 20th century (Jafarnejad et al., 1386: 94). In 1991, a group of industry specialists concluded that the amount of increasing changes in workplace is faster than the ability of traditional governmental agencies to adapt, because of the former’s adjustment (Hormozi, 2001). Therefore, after many conferences with academic and executive specialists, for the first time the Iacocca Institute introduced a new model entitled: “Manufacturing enterprise stately in the 21st century: views of industry specialists” (Banihashemi et al., 1391: 8056). Agility thinks of ‘being active’ as a strategic relative advantage and does not suffice to adjusting to the changes (passivity), but it nevertheless is after changes so as to benefit from them and make valuable opportunities for improvement and development. In this method of production, concepts such as close relationships with clients, harmony, the inner resources of the organization, and harmony with other organizations are of great importance (Jafarnejad et al., 1386: 84).

It is noteworthy to mention that agility and the gain of it is not the goal, but it, following Jackson and Johansson (2003), is assumed as a fundamental factor to keep competing in the market through instability and change. Hence, the obsession of organizations’ CEOs, specially manufacturing companies of private sectors, is how to gain agility in the organizations. To answer this question, the managers must have enough knowledge about the capabilities of their own organizations and the materials that bring about such capabilities (Banihashemi et al., 1391: 8055).

Nagel and Dave (1999) at Iacocca Research Institute in Lehigh University, in a report entitled “A strategy for manufacturing foundations in the twentieth century: views of industry professionals”, formally introduced the term agility to the colleagues; furthermore, the first person who proposed the concept “agility institute” was Peter Rucker (Jafarnejad et al., 1386: 38).

### **Definition and Basics of Agility**

Agility denotes quick and easy movement and the power to think and draw conclusions quickly (Horn by, 2000). The root of institutional agility is agile manufacturing that is introduced as responses to changes in workplace and thus the exploitation of those changes (as opportunity). In such an environment, every organization should be able to produce different products with short life cycle, redesign the products, change production methods, and have the ability to react to the changes. Enjoying such capabilities, the term “agile institute” is applied to manufacturing foundation (Jafarnejad et al., 2007: 32). Kidd (2000) maintains that agile production can be considered as a structure that has business strategies and the capability to improve the products inside the organization (Dehmorde et al., 1390: 78).

In Sharifi and Zhang's (1999) opinion, agility refers to the ability of each organization to understand and predict the changes in the business environment. Such an organization, therefore, should be able to recognize the environmental changes and look at them as factors of growth and prosperity (Jafarnejad et al., 1386: 32). Elsewhere they define agility as an ability to overcome the unexpected challenges; to counter the unprecedented business threats and take advantage and benefit from the changes as progress and growth opportunities (Dehmordeh et al., 1390: 78). Maskell (2001) has defined agility as an ability to flourish in an environment of continuous and unpredictable change. In this regard, organizations should not be afraid of changes in their workplace and thus avoid them; rather, they should conceive these changes as opportunities to gain a competitive advantage in the market environment. Makanzie (2012) believes that training and wise organizing result in the improvement of agility. Leadership must be developed so as to support agility within changes.

Marco Aurelio et al. (2012) maintain that agility is achieved through factors such as continuous improvement, communication, teamwork development and flexibility of the employees. Anabelace et al. (2012) believe that when employees are constantly looking for improvement of efficiency, the company consequently admits changes and gains agility; thus through pure manufacturing and agility, products will be distributed to customers much faster and this leads to the customers' satisfaction. Petro Hilo (2004) argues that agility of an organization is the ability to operate profitably in a competitive environment, which is replete with continuous, unpredictable and variable opportunities. Amir Hormozi (2001) also argues that agile organizations are flexible in order to respond to the changing conditions of market, and have high-speed too. In Fliedner and Vokurka's (1997) idea, agility refers to the ability to successful marketing of high-quality but low-cost products, with the minimum of waiting time, and variety of quantities that altogether is for the customers' benefit (Yaghubi et al. 1391: 132-133).

Kay and Prince (2003) believe that agility means responding to sudden changes and meeting customers' oscillating demands based on factors such as price, specification, quantity, quality, and timely delivery. By and large, these many definitions of agility depict a dynamic, condition-oriented, ready-to-change, and growth-oriented organization. The tendency to dynamism is due to the conditions by which a company achieves agility, while these conditions might not be effective, whatsoever. Similarly, the reason for condition orientation is that market environment affects the level of needed agility. The reason for change-acceptance factor is that agility is dependent on an organization's move towards adjustability and compatibility. Finally, agility is growth-oriented. This characteristic is achieved through the organization's ability in recognizing and reconfirming perspectives, restructuring strategies, innovation in skills and techniques (Jafarnejad et al., 1386: 36-35).

### **The main approaches to the concept of institutional agility**

Agility experts such as Goldman, Dave, Persis, Sharift and Zhang, Joseph, Sarhaddi, Gunasekaran, Turang Lin, etc. have defined different components and dimensions for agility. Although basics of agility goes back to Goldman and his colleagues, the mentioned figures have developed this concept as well, and based on environmental conditions and organizational circumstances, they have added certain other components to it. Kidd (1994), throughout researches, has provided two approaches for understanding and defining agility; the first

approach consists of all definitions and ways of technology in the last two decades. For instance, Joseph and his colleagues maintain: "agility is the combination of developed and well-known technology and manufacturing methods." The second approach in agility is very accurate and integrated. The main emphasis of this approach is the ability to adapt, although it really does not respond quickly. Agility is the speed and adaptability of the company's components and also presentation of business model, and different manufacturing (Jafarnejad et al., 1386: 140-138).

Sorolodis&Valavanis (2002) have emphasized that it is very difficult to design indices for agility due to the multidimensional nature of agility. They have proposed a framework based on Fuzzy Logic that consists of four structures for agility production: production, marketing, personnel and information. They have characterized a number of parameters for each structure. Production infrastructure is concerned with plant, processes, equipment, and material handling and deployment, etc. and can be measured in terms of required time and cost to respond to the changes in production system. Market infrastructure puts its emphasis on the external environment of an organization (including customer service and market feedback). They suggested that infrastructure must be determined through the ability of an organization to identify opportunities and features of products and services to customers. Personnel's infrastructure can be determined through the size of their education and motivation. Finally, information infrastructure refers to the flow of information inside and outside the organization and can be measured based on management ability and expansion of information in the desired area. In 2003, they said that the elements of a company are the goals, destination and technology; however, they put distinctions between agility from flexibility. They believe that flexibility is the overall capability of a factory in changing from one direction to another, while agility is the strategic capability of an organization in compatibility with uncertainty and sudden changes in the market. There are a number of features for an agile organization (Nikpoor, 1389:174-175):

1. Flexibility and adaptability
2. Responsiveness
3. Speed
4. Integration and low complexity
5. Equipping core competencies
6. High quality and product improvement
7. The culture of change

Low has implemented seven institutional agility factors in evaluation of an organization: customer enrichment, responsiveness, structure, dynamism, teamwork and partnership, organizing in order to create competitive advantages, leveraging the relationships and the impact of people and information, and the informative aspect of products (McCarthy, 2003). Based on the above factors, Zain et al. (2004) give a four-factor framework regarding Goldman et al.'s model on the evaluation of agility of organization: customer enrichment, organizing in order to create competitive advantages, alignment of people and information, and responsiveness (Jafarnejad, 1386: 161-156).

## **Aspects of agility in the state sector**

The findings show that most agile state organizations take seven agility aspects into consideration. These aspects include organizational change, leadership, culture and values, customer services, information technology (electronic government), and performance management. These aspects are explained below (Jafarnejad et al., 2007: 113).

### **1. Organizational change**

Richard Beckhard is a pioneer in organizational change. "People do not resist changes; rather, they resist the application of changes." Yet today changes occur more quickly than before (Banihashemi et al., 2012: 8056). Pioneering state organizations could more quickly design and implement their intended change plans to affect the entire organization and produce measurable results within twelve to eighteen months. Organizations do this partly through searching for innovative and effective methods to perform tasks and activities (Jafarnejad et al., 2007: 114).

### **2. Leadership**

Agility is the result of effective leadership. The findings show that influential leaders could increase the extent to which investment in agility yields successful organizational changes. True leaders are those who test new patterns, approaches and views, and come to a final vision which they try to build. Leaders of agile organizations are able to influence the nature of change, too (Shahayee & Rajabzadeh, 2006).

### **3. Culture and values**

Each organization enjoys its own specific identity and culture enforceable among the organization and its employees as an unwritten contract. Unlike non-agile organizations, culture in agile organizations is dynamic, i.e. it is based upon trust and confidence in the leaders and respect for the employees. In really agile cultures, employees could achieve growth and success. State organizations are not conservative; rather, they are ready to review and reform structures and processes to meet changing needs. Such institutes discover creativity, new ideas and innovative behavior. They know that lightening leadership burden all through the organization increases their agility (Jafarnejad et al., 2007: 116-117).

### **4. Customer services**

As an organization becomes agile, it succeeds in the management of communication with others although relatively few companies have succeeded in taking examples of the company plans which have directed customers from costly channels to low-cost ones. That is because the majority of state institutes that we know mostly attempt to change customers' behavior through rules and crimes.

### **5. E-government (electronic government)**

The influence of information technology in all aspects of life has substantially changed methods through which people communicate with the society and methods through which the society involves people in its own performance. In this regard, the idea of electronic government has attracted attention all over the world and the developed countries have taken measures to

achieve this objective. E-government employs information and communication technology to provide social, administrative and economic services to increase productivity, improve services and provide citizens and businesses with information.

## **6. Performance management**

An agile organization focuses on two main issues simultaneously. Besides, an agile organization controls how new measures are taken and enables the leadership to decide appropriately where more resources are required to ensure the success of the required plans. An agile organization evaluates its success by using significant indices based upon future performance objectives (Jafarnejad et al., 2007:118-11).

### **Principles of agility in the state sector**

Vandhausen (2003), in his study published in a book entitled 'Toward Agile State Sectors' introduces fourteen vital signs for agility in the state sector which he mentions briefly. Three of these principles include:

1. Predicting events, understanding the required changes and changing the service structure based upon them.
2. The ability to learn how to better perform activities and face challenges
3. Enhancing efficiency and effectivity of the resources available in the State Sector

According to these principles, vandhouseen introduces fourteen signs of agility in the State Sector as follows:

1. Predicting and understanding variable demands of the citizens
2. Redesigning operations along with changes in demands of the laws and and citizens.
3. Enjoying extensive interaction, emplooyees and citizens
4. Reducing the number of steps to do a process
5. Providing more suitable communication channels for the citizens
6. Sympathizing with the citizens in individual, local and national crises
7. Providing people with their requiredinformation
8. Thinking of progress, taking lessons from the experiences and institutionalizing the resulted insight
9. Offering better services to the citizens in all places
10. Controlling the state and value of all resources and maximally changing information into property.
11. Outsourcing, and obtaining goods and services to increase preparedness and economy, together with minimum dependency on others
12. Preserving core competence, developing skills and abilities to use in certain times
13. Taking and implementing appropriate, collective decisions by using information technology and expanding and communicating information and news through appropriate communication channels
14. Encouraging the citizens to perform governmental activities by using the most efficient existing methods

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- b. Appropriate technology (hardware and software) or sufficient technological ability
  - c. Quality of products and services
  - d. Effectivity in terms of expenditure
  - e. High index of introducing new products
  - f. Change management
  - g. Enjoyment of knowledgeable, competent and proficient employees
  - h. Efficiency and effectivity of the operations (purity)
  - i. Internal and external cooperation
  - j. Integration and cohesion (Sharifi&Zhang, 1999: 20)
3. **Flexibility:** refers to the ability to initiate various processes and achieve different goals by using the same facilities. This capability includes the following items:
- a. Flexibility in the size of the product
  - b. Flexibility in the pattern or the body of the product
  - c. Structural flexibility and the controversial issues of the organization (Sharifi& Zhang, 1999: 20).

Flexibility could be divided into three categories

1. **Product flexibility:** refers to the capability to participate in the introduction of new products and quickly changing the existing ones in order to meet the needs of the current variable market.
2. **Process flexibility:** refers to the capability to participate in the production of numerous goods, quickly change the production from one product to another, produce new or renewed products, and deal with the wide range of various raw materials.
3. **Infrastructure flexibility:** refers to the capability to adapt oneself and the organizational structure to the changes (Nouri&Radfoard, 2005: 121).

Together, these three flexibility categories comprise the aggregate flexibility of a company and are necessary for the company's quick response to environmental uncertainty conditions (Nouri&Radfoard, 2005: 122).

4. **Speed:** refers to the ability to perform the activities in the least possible time.

This capability includes the following items:

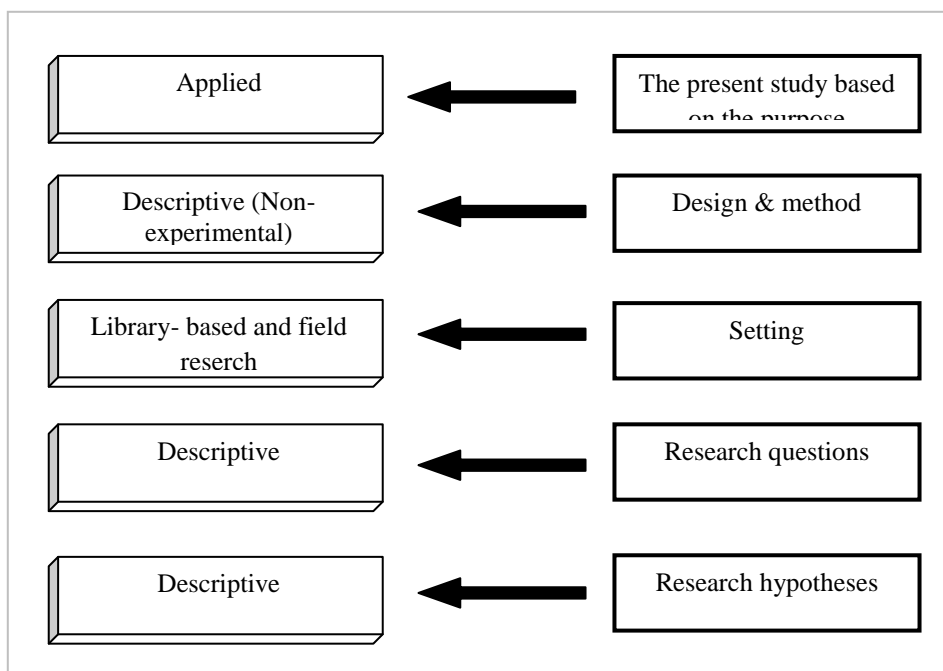
- a. Quick and timely supplying of products to the market
- b. Speed and time limit of delivery or dispatch of products or services
- c. Speedy course of operations (Dahmardeh et al. 1390: 79-82).

## Methodology

In order to determine the rate of agility capabilities, this study employs Sharafi& Zhang's model. The best start for a research is to begin it with questions. Therefore, the main question of this

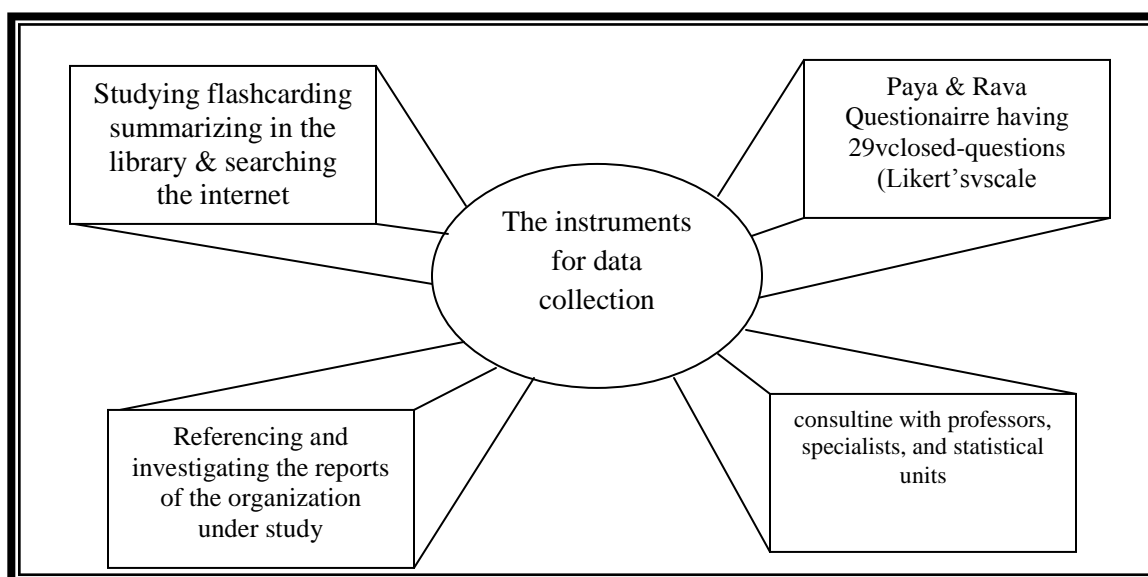
research is, in what conditions is the Social Security Organization in terms of the aspects of agility capabilities (speed, competency, responsiveness and flexibility)?

This research employs library methods and investigation of texts as well as field methods such as the use of questionnaires. The study aims at identifying attributes, preferences, characteristics and behaviors of people in the society by visiting them. This study is a descriptive survey and is based upon the following table.



Source: design by the researcher

The data collection tools in this research are as follows:



In order to measure agility, 29 questions have been used. The questionnaire has 29 items designed by the Likert Scale in 5 choices. The following table shows the questionnaires. Afterwards, by using LISREL program and the presented diagrams and considering the fact that the factor coefficients are greater than 0.5 percent, the questions were approved.

Table 1. Supporting questions relating to each variable

Variable	Questionnaire's items
Speed index	1-6
Competency	7-13
Responsiveness	14-20
Flexibility	21-29

The speed aspect:

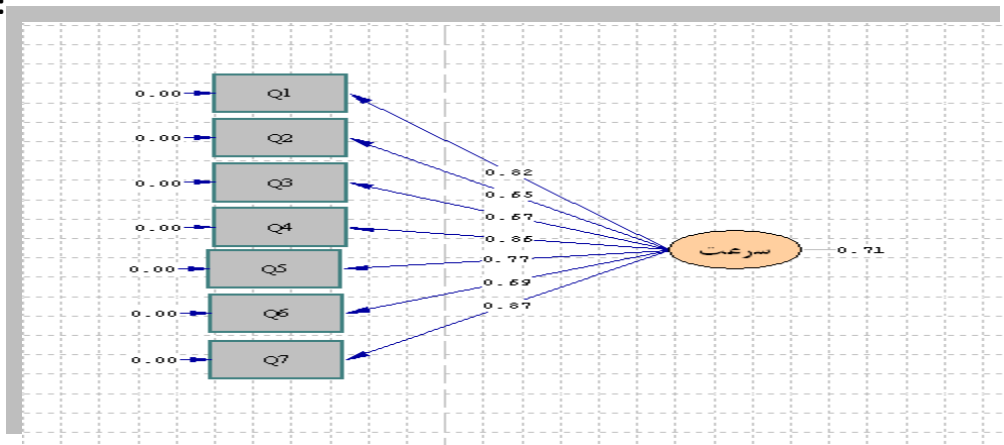


Diagram 1. Confirmatory factor analysis related to the speed index

The competency aspect:

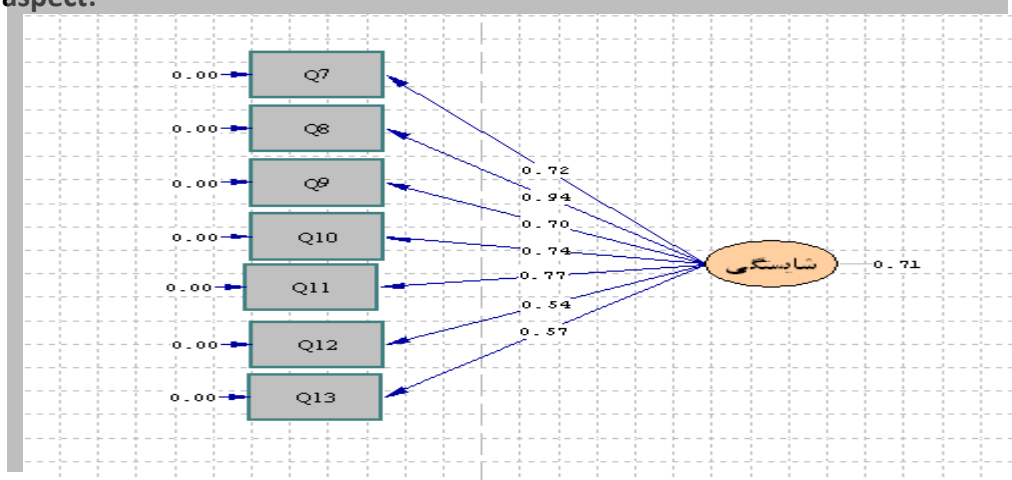


Diagram 2. Confirmatory factor analysis related to the competency index

The responsiveness aspect:

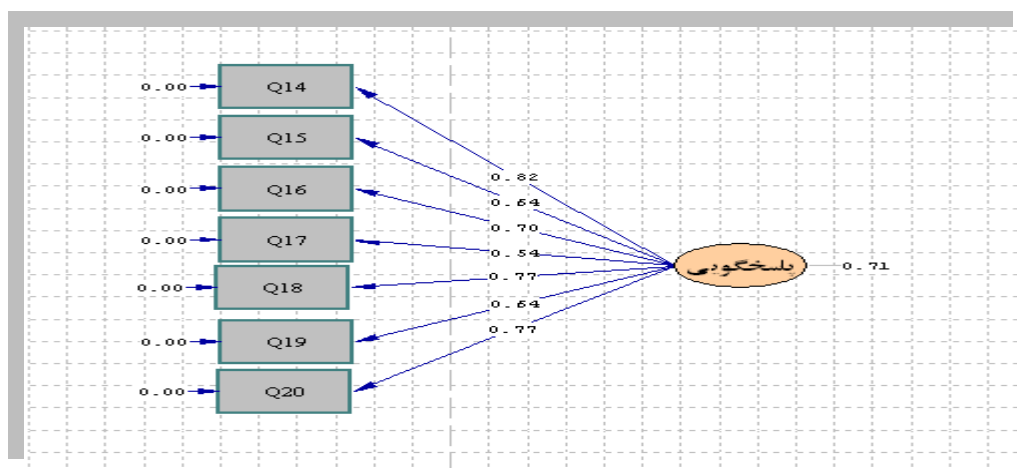


Diagram 3. Confirmatory factor analysis related to the responsiveness index

The flexibility aspect:

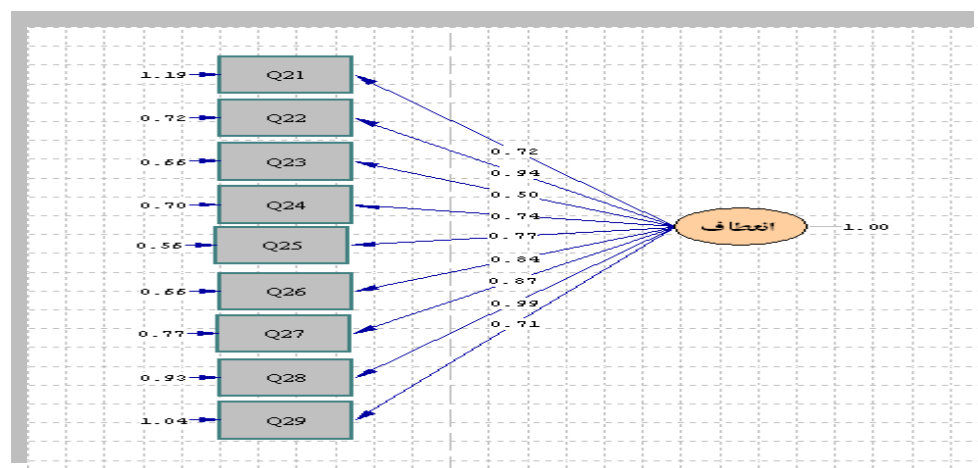


Diagram 4. Confirmatory factor analysis related to the flexibility index

### Reliability of the questionnaire

Chronbach's alpha is employed to calculate the internal consistency of the measurement tools including the questionnaires or tests which measure some features. In order to calculate Chronbach's alpha, first the variance of the scoresubsumed under the questions of the questionnaire (or test) and the total variance must be calculated and then their values must be calculated by using the following formula (Bazargan, 1997).

In this research which was conducted by distributing 20 questionnaires, the Chronbach's alpha coefficient is as follows:

Chronbach's alpha of the variables

Hypothesis	components	Relevant questions	Value of Chronbach's alpha
First hypothesis	speed	1-6	./77
Second hypothesis	competency	7-13	./80
Third hypothesis	responsiveness	14-20	./78
Fourth hypothesis	flexibility	21-29	./83
Total			./83

### Data analysis procedures

In this study, Kolmogorov-Smirnov test is used to investigate the normality of the distribution of variables, variance analysis is used to investigate the significance of the difference between the variables, Friedman test is used to investigate the significance of the difference between the supporting variables, and the test of population mean is used to investigate the relations of the research variables to the testing of the research hypotheses in the statistical population.

### Test of normal distribution of the data

Kolmogorov-Smirnov test (KS) is used to investigate the claim made about the distribution of the data of a quantitative variable. In this test, a null hypothesis is the claim made about the type of data distribution (Azar&Mo'meni, 2002). In this research, the normal distribution of the data is investigated by using KS test. As shown in the following table, the results of this test indicate that all factors in the investigated sample follow normal distribution because the level of significance is above 5%. Thus, in order to test the hypotheses, parametric statistical tests could be used.

The data are normally distributed

H0 :

The data are not normally distributed

H1 :

Kolmogorov-Smirnov test

Factor/variable	Mean	Standard deviation	Level of significance
Speed index	2/8673	/89812	./12
Competency index	3/3003	/85598	./07
responsiveness	3/4710	/71833	./23
Flexibility	2/9690	/88519	./16

Test of the research questions (hypotheses) based upon the results of the test of the population's mean

In this test, the statistical hypothesis is stated in the following way:

**The main hypothesis:** the social Security Organization of Kohgiluyeh & Boyer-Ahmad Province enjoys agility capabilities.

$\mu \geq 3$  :Null hypothesis

$\mu < 3$ : A lternative hypothesis

In order to test this hypothesis, the alternative hypothesis assumes that the mean score of response on the confidence level is 95 percent greater than 3 and the null hypothesis supposes that the mean score of responses is smaller than or equal to zero.

According to the table bellow, the value of 't' is significant and the alternative hypothesis is proven. Therefore, the Social Security Organization of Kohgiluyeh and Boyer-Ahmad province enjoys agility capabilities.

Single sample test relating to the main hypothesis

Main hypothesis	Mean	t	Degree of freedom	P
Agility	3/1	3/6	179	./000

The first hypothesis: there is a relation between responsiveness and agility capabilities in the Social Security Organization of Kohgiluyeh& Boyer-Ahmad province.

Null hypothesis: $\mu \leq 3$

Alternative hypothesis: $\mu > 3$

In testing this hypothesis, the the alternative hypothesis states that the mean score of responses on the confidence level is 95 percent greater than 3 and the null hypothesis assumes that the mean score of responses is smaller than or equal to zero.

According to the following table, the value of 't' is significant and the alternative hypothesis is proven. Therefore, there is a relation between responsiveness and agility capabilities in the Social Security organization of Kohgiluyeh& Boyer-Ahmad province.

Single ample test relating to the first hypothesis

First hypothesis	Mean	T	Degree of freedom	P
Responsiveness	3/3	8/7	179	./000

The second hypothesis: there is a relation between the speed index and agility capabilities in the Socail Security Organization of Kohgiluyeh& Boyer-Ahmad province

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Null hypothesis:  $\mu \leq 3$

Alternative hypothesis:  $\mu > 3$

In order to test this hypothesis, the alternative hypothesis states that the mean score of responses on the confidence level is 95 percent greater than 3 and the null hypothesis assumes that the mean score of responses is smaller than or equal to zero.

According to the following table, the value of 't' is not significant and the alternative hypothesis is disproven. Therefore, there is no relation between the speed index and agility capabilities in the Social Security organization of Kohgiluyeh & Boyer-Ahmad province.

**Single sample test relating to the second hypothesis**

Second hypothesis	Mean	t	Degree of freedom	P
Speed	2/8	-1/9	179	./06

The third hypothesis: there is a relation between competency and agility capabilities in the Social Security Organization of Kohgiluyeh & Boyer-Ahmad province.

Null hypothesis:  $\mu \leq 3$

Alternative hypothesis:  $\mu > 3$

In order to test this hypothesis, the alternative hypothesis states that the mean score of responses on the confidence level is 95 percent greater than 3 and the null hypothesis assumes that the mean score of responses is smaller than or equal to zero.

According to the following table, the value of 't' is significant and the alternative hypothesis is proven. Therefore, there is a relation between competency and agility capabilities in the Social Security organization of Kohgiluyeh & Boyer-Ahmad province.

**Single sample test relating to the third hypothesis**

Third hypothesis	Mean	t	Degree of freedom	P
Competency	3/3	4/7	179	./000

The fourth hypothesis: there is a relation between flexibility and agility capabilities in the Social Security Organization of Kohgiluyeh & Boyer-Ahmad province.

Null hypothesis:  $\mu \leq 3$

Alternative hypothesis:  $\mu > 3$

In order to test this hypothesis, the alternative hypothesis states that the mean score of responses on the confidence level is 95 percent greater than 3 and the null hypothesis assumes that the mean score of responses is smaller than or equal to zero.

According to the following table, the value of 't' is not significant and the alternative hypothesis is disproven. Therefore, there is no relation between the flexibility and agility capabilities in the Social Security organization of Kohgiluyeh & Boyer-Ahmad province.

Single ample test relating to the fourth hypothesis

Fourth hypothesis	Mean	t	Degree of freedom	P
flexibility	2/9	-/46	179	./09

## Results and suggestions

### 1. the main hypothesis

The Social Security Organization of Kohgiluyeh & Boyer-Ahmad enjoys agility capabilities. In order to test this hypothesis, the test of population mean and student's t-test were conducted and the findings prove this hypothesis. ( $\mu=3.1$ ,  $t=3.6$ ,  $P=.000$ ) Therefore, the Social Security Organization enjoys agility capabilities.

2. The first hypothesis: there is a relation between responsiveness and agility capabilities in the Social Security Organization of Kohgiluyeh & Boyer-Ahmad province. In order to test this hypothesis, the test of population mean and student's t-test were conducted and the findings prove this hypothesis. ( $\mu=3.3$ ,  $t=8.7$ ,  $P=.000$ ) Therefore, there is a relation between responsiveness and agility capabilities in the Social Security Organization of Kohgiluyeh & Boyer-Ahmad province and the research hypothesis is proven.
3. The second hypothesis: there is a relation between the speed index and agility capabilities in the Social Security Organization of Kohgiluyeh & Boyer-Ahmad province. ( $\mu=2.8$ ,  $t=1.9$ ,  $P=.06$ ). According to the findings, there is no positive, significant relation between the speed variable and agility capabilities and thus the hypothesis is rejected.
4. The third hypothesis: there is a relation between competency and agility capabilities in the Social Security Organization of Kohgiluyeh & Boyer-Ahmad province. In order to test this hypothesis, the test of population mean and student's t-test were conducted and the findings prove the hypothesis. ( $\mu=3.3$ ,  $t=4.7$ ,  $P=.000$ ) Therefore, there is a relation between the competency variable and agility capabilities of the employees of the Social Security Organization of Kohgiluyeh & Boyer-Ahmad province and the research hypothesis is proven.
5. The fourth hypothesis: there is a relation between flexibility and agility capabilities in the Social Security Organization of Kohgiluyeh & Boyer-Ahmad province. ( $\mu=3.3$ ,  $t=-46$ ,  $H=2.9$ ). In order to test this hypothesis, the test of population mean and student's t-test were conducted and the findings shown in the table reveal that there is no positive, significant relation between the flexibility variable and agility capabilities and thus the hypothesis is rejected.

## Conclusions

The purpose of this study was to evaluate agility capabilities in the Social Security Organization. Using student's t-test and mean tests, the study investigates the conditions of the Social Security Organization of Kohgiluyeh & Boyer-Ahmad province in terms of all the four aspects (i.e. responsiveness, speed, competency and flexibility). The study shows that responsiveness and competency indices in the Social Security Organization are in desirable conditions but

speed and flexibility indices are in undesirable conditions. The two desirable indices approved by the above-mentioned tests are considered as strong points that the managers of the Social Security Organization must optimally use. However, the two indices of speed and flexibility are a warning for the managers of the Social Security Organization and they must attempt to provide a suitable ground to design effective plans in this connection and make changes in the organization by using technology, the required training, conferment of authority and empowerment. Therefore, the establishment of an agile system could substantially help the managers of the Social Security Organization to face challenges and possible future threats. Of course the important point in institutionalizing this system is that by adopting a systematic point of view, all organizational elements and factors related to each other and influencing the system must be taken into consideration.

### **Suggestions to the Social Security Organization based upon the research findings**

Encouraging agility capabilities in the employees of the Social Security Organization is not directly possible. Therefore, in order to encourage such capabilities in organizational environments, their pre-conditions must be identified, reinforced and managed. As investigated in this research, responsiveness, speed, competency and flexibility are of the important pre-conditions influential in employees' agile behavior. The findings of this study show that among the four aspects of agility capabilities, responsiveness and competency had the greatest impact and flexibility had the smallest impact on agility. Accordingly, the managers of the organization must adopt strategies to increase agility in their employees.

#### **The first hypothesis:**

In order to improve and preserve the responsiveness capability, the following are recommended to the Social Security Organization:

1. The organization must design and implement the system of rewards and benefits and the timely payment of them and assure the employees to pay their fair reward on time and preserve justice.
2. The organization must devote more time to handling and scientifically and logically responding to the demands of the employees and the target society.
3. The organization must pay attention to the needs of the employees and those of the target society and attempt to meet these needs as much as possible.
4. Attention must be paid to the current technology.
5. Changes must be applied to improve the current conditions and meet the future needs.
6. The organization must attempt more to establish proportion between organizational knowledge and the employees' ability in offering quality services.
7. The organization must help the employees to overcome the problems of their performance in the workplace.

#### **The second hypothesis**

In order to improve the speed capability, the following are recommended to the Social Security Organization:

1. The organization must enhance the necessary speed and efficiency as well as precision and accuracy to respond to the changes.
2. The organization must use information technology and modern technology to perform its activities so that all services and activities of the organization are performed through the Internet and clients are prevented from physically visiting the organization.
3. The organization must pay attention to the speed of the implementation of the processes.
4. The organization must offer scientific, functional and practical trainings to teach the employees to implement changes in the shortest time.
5. The organization must attempt to send and receive information on time and all the information must be accessible as an online network among the branches of the organization.
6. The organization must design a comprehensive system to transfer information among the employees on time so that they are informed of all the organizational information and news. This provides a ground for the employees' cooperation.
7. The organization must recognize the employees' skills and knowledge and use them to offer services.
8. The organization must shorten and make clearer the work processes to offer services more quickly.

### **The third hypothesis**

In order to improve and preserve the competency capability, the following are recommended to the Social Security Organization:

1. The organization must use new ideas and opinions offered by the employees.
2. The organization must try to improve its relationship with the employees.
3. The organization must establish an efficient communicative network among the employees.
4. The organization must employ modern technology, especially devices such as the Internet, etc., to improve official communication.
5. The organization must provide an information bank for human resources, as well as an integrated, comprehensive and coordinated set of the information about the employed human resources.
6. The organization must pay attention to training programs and training needs.
7. The organization must greatly value committed, disciplined employees.
8. The organization must take into account commitment, knowledge, proficiency, background and work experience in descending order in appointing employees.
9. The organization must establish a system of regular communication with the employees.

### **The fourth hypothesis**

In order to improve speed capability, the following are recommended to the Social Security Organization:

1. The organization must confer authority on lower levels. This paves the way for the employees' active cooperation.

2. The organization must make the decisions in a decentralized way.
3. The horizontal structure or low complexity must be facilitated in the organization
4. The organization must offer a clear definition for the responsibilities and options to the employees.
5. The organization must benefit from the views and suggestions of the employees.
6. The organization must devote more time to the employees' requests.

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