



ISSN: 0976-3376

Available Online at <http://www.journalajst.com>

ASIAN JOURNAL OF
SCIENCE AND TECHNOLOGY

Asian Journal of Science and Technology
Vol. 10, Issue, 09, pp.10160-10164, September, 2019

RESEARCH ARTICLE

DESIGNING AND EXPLAINING THE AGILITY STRUCTURAL MODEL OF GOVERNMENTAL ORGANIZATIONS STUDY: NATIONAL IRANIAN SOUTH OIL COMPANY

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ARTICLE INFO

Article History:

Received 12th June, 2019

Received in revised form

15th July, 2019

Accepted 18th August, 2019

Published online 30th September, 2019

Key words:

Agility Drivers, Agility Capabilities,
Agility Enablers, Agility Structures,
Government Agency

ABSTRACT

This research is from the point of view of purpose, applied and heuristic and from the point of view of nature, it is descriptive-survey which has used thematic analysis and structural equation modeling method. Therefore, this research was a mixed research that was done by qualitative and quantitative methods. Data were collected using a researcher-made questionnaire. The validity of the research instrument was obtained by the expert opinion and opinions of the supervisor as well as by the factor validity, the results of which confirm the validity. Reliability of the research tool was calculated using Cronbach's alpha method and this coefficient was favorable. He was aware of the oil industry and organizational agility. The sample of the study consisted of 394 managers and staff randomly selected from the expert group by snowball method. Data were analyzed using descriptive statistics and inferential statistics by SPSS and LISREL software. The results of the data analysis showed that the structural dimensions of agility of government agencies include agility drivers, agility capabilities, agility enablers, and agility structures. After analyzing the data, it was concluded that agility drivers, agility capabilities, agility enablers and agility structures had a significant and positive impact on structural agility in National South Oil Company and some suggestions were made in this regard.

Citation: Behnam YarzadehDehkordi, Ebrahim Moradi Hezarvand, Mohammad Hasan Mohsennasab, Abdol Karim Gayem and Kamran Yeganegi, 2019. "Designing and Explaining the Agility Structural Model of Governmental Organizations Study: National Iranian South Oil Company", *Asian Journal of Science and Technology*, 10, (09), 10160-10164.

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INTRODUCTION

In today's competitive environment, business has undergone profound and profound changes that have led to increased global competition and the speed of market changes. The new business era in the 21st century has recognized change as a key feature. This situation is rooted in factors such as over-competition, globalization, and technological advances. To survive and thrive in such a highly competitive environment, sensitivity and response to threats and organizational opportunities are essential (Hong *et al.*, 2012) so one of the things that can be critical in helping organizations and their planning. Achieve; professional ethics in the organization. Today, knowledge, speed and flexibility are introduced as the top features of 21st century organizations.

Therefore, managers in organizations in a turbulent and changing world will have to adapt to competitions and methods. Agility is generally the ability of an organization to understand environmental change and then respond quickly and efficiently to change. This environmental change can be technological and business changes or changing customer needs. The word "agile" describes the speed and responsiveness of an organization's internal and external events. Agile organizations must not only be responsive to existing change, but must also be able to gain competitive advantage with an arrangement (Agrawal *et al.*, 2014). Speed is perhaps the most important asset in the Third Millennium and the Information Age. Be it. A completely new form of organization must be created to reduce response time and improve flexibility. Competition nowadays comes in many dimensions, such as the speed of product delivery or customer service, increasing product quality, or offering services or reducing product prices. To this end, organizations must focus on the rapid flow of information in production, assembly,

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distribution, supply, and so on. The faster this move, the faster organizations will respond to market demand and demand. Technology and business changes threaten the survival of the organization. Few intelligence agencies can change their internal forces and control the influential foreign forces. Although most organizations have been aware of the importance of responding quickly to changing market conditions, they have never been able to design to be able to do so. Every organization must design itself agile to respond to a set of internal and external forces. Virtual organizations are a complete example of agile organizations that are emerging at a high rate today and can respond to this new need (Ebrahimi, 2013). The world is undergoing rapid and unavoidable changes due to the phenomenon of globalization, and Iran, which is strong in terms of underground capabilities and human capabilities, must adapt to these rapid changes. The specialist and creative Iranian manpower working in organizations is a valuable resource that can be used for development and development, provided it has the necessary information and knowledge. Today, organizations are looking for effective mechanisms to improve efficiency and meet numerous and serious challenges in global competition (Tsang & Lin, 2011). The emerging paradigm is agility. In concept, it is a step forward in creating new meanings for better performance and success in the organization and in practice is a strategic approach considering the new conditions of the organizational environment (Amirnejad *et al.*, 2015).

Agility is a new paradigm in the production environment. The production environment has undergone several transitions (from handicraft to mass production and now the latest example of agility) and has been driven largely by desirable demands for excellence in an ever-changing environment and by small, modular sizes and expensive information production. (Sharp, 2012). Agility differs from lean production. Lean manufacturing, for example, is referred to as a flexible operational architecture, while agility creates a reshaping operational architecture. At the same time, mass production competition is considered a norm for world trade. Enterprises must be in the line of professional change to succeed (Jafarnejad&Shahabi, 2007). *Dove* considers comprehensive quality management, statistical process control, and business process reengineering as current transfer strategies, and lean manufacturing, customer-centric, mass-demand-based production, learning organizations' networks, and virtual-based firms. Recognizes and ultimately views agility as the primary need of the business in order to gain the profitability and adaptability of the organization (Sheehy, 2014). The core of advanced manufacturing and information technologies is manufacturing agility and organizational agility. At present, various organizations, especially large organizations, are having difficulty implementing the process of organizational agility and especially agility planning (Ramesh & Davidson, 2007). One of the most important reasons for the sluggishness and erosion of this organizational process is the continuous, widespread and unforeseen changes in the technology or mission of an organization. Problems and potential changes are anticipated in the current organizational processes, and solutions are considered appropriate. As such, they must be managed and controlled when changes occur (Yaghoubi *et al.*, 2011). Some of the problems that occur when unexpected changes occur during the agility process are causing the process to execute or even fail (Katunen, 2009). - Lack of quality orientation - Produce a huge amount of documentation - Lack of accountability - Over-emphasis on technical issues

rather than teamwork - Use of inappropriate methodologies - Lack of initiative and creativity in people and strict adherence to plans and observations - Existence of long phases and cycles - inappropriate expert and management meeting - costly. The current aggravating process is very fragile when faced with unforeseen changes, so its implementation is compromised and may even lead to failure. A lot of time and cost is wasted and agility does not have the required results and effectiveness (Maskell, 2011). This crisis will be compounded by factors such as high volume of documentation, the difficulty of modeling, the difficulty in producing products, the existence of inappropriate long-cycle methodologies, the existence of unethical and uncooperative people, and so on. If there is no change we will have no problem! And if changes are foreseeable, however extensive and overwhelming they can be, they can be managed and controlled with proper planning and increasing the flexibility of organizational architecture, and resolving inappropriate factors such as high volume of documentation with specific solutions (Zain *et al.*, 2015).

The world is increasingly dependent on oil. The world today does not tolerate any disruption to oil supply. Short-term disruption of oil can cause enormous damage to the world economy. Oil is the most basic, yet the cheapest source of energy for development, which plays a key role in the economy of the oil-exporting countries and is the determining factor in the realization of their strategic plans. Due to the importance and special status of oil revenues in Iran, National Iranian South Oil Company has an important and special position. The company is one of the largest and most experienced technical and production units in the country with a variety of oil extraction, installations, equipment and organizations. The fast-moving flow of specialized information in this industry is essential for the development of research and the promotion of staff knowledge. Understanding this necessity has always given special attention to education and research, gathering and organizing different sources of information. It is noteworthy that the facilities and equipment of the oil industry require equipment and spare parts to be maintained and maintained in order to continue operating. Characteristics of the facilities and devices used by the oil industry and the importance and sensitivity of the activities of the oil industry, and in particular its decisive role in the economic system of the country, require serious attention in the effective and safe maintenance of these facilities and installations as well as in the execution of pre-defined projects and programs. It requires the use of new experiences and knowledge. The National Iranian South Oil Company as Iran's largest government organization includes the headquarters, general offices and subsidiaries, satellite companies in the provinces, oil companies across the country, vast geographical areas, large numbers of staff and staff, and a strong role of agility in maintaining the rule of law. In its various sections, it is a noteworthy case for industry research.

RESEARCH METHODOLOGY

The present research requires information on the current status of the subject under study to answer the research questions and to test the research hypotheses, which is not already available. Therefore, this research is based on basic information that is collected, formulated, produced and collected in a survey. The purpose of this study is applied research and it is one of the research methods in terms of its method.

Cronbach's alpha coefficients	Dimensions	Structural Model of Agility of Government Organizations
0/87	Agility drivers	
0/88	Agility capabilities	
0/91	Agile enablers	
0/92	Leadership agility	
0/89	The whole questionnaire	

Table of Concepts and Examples of Topics Identified in Interview Number A

Sub themeTitle	Theme sub code	The concept title identified and the quotation associated with it	Concept Code
Agile processes	Sub theme 1	Regulation Business Network Flexible processes Convenient and flexible structure	Concept 17
Agility capabilities	Sub theme 2	Speed Skill Competence flexibility	Concept 15
Ability of agility instruments	Sub theme 3	Fair and reasonable reward system Strategic planning and management Communication and Cooperation Continuous learning Innovation and creativity	Concept 18

Table of Concepts and Examples of Themes Identified in Interview Number B

Sub themeTitle	Theme sub code	The concept title identified and the quotation associated with it	Concept Code
Leadership agility	Sub theme 1	Set agility field	Concept 17
Agile processes	Sub theme 2	Culture and values	Concept 15

Table of Concepts and Examples of Themes Identified in Interview Text Number C

Sub theme Title	Theme sub code	The concept title identified and the quotation associated with it	Concept Code
Leadership agility	Sub theme 1	Set agility field	Concept 17
Agile processes	Sub theme 2	Culture and values	Concept 15

Table of Concepts and Examples of Themes Identified in Interview Number D

Sub themeTitle	Theme sub code	The concept title identified and the quotation associated with it	Concept Code
Agility capabilities	Sub theme 1	Quality	Concept 17
Ability of agility instruments	Sub theme 2	Integrity	Concept 15

Table of Concepts and Examples of Themes Identified in Interview Number E

Sub theme Title	Theme sub code	The concept title identified and the quotation associated with it	Concept Code
Agility capabilities	Sub theme 1	Organizational Structure electronic government Create synergies human resources Intelligence Operational process	Concept 17
Ability of agility instruments	Sub theme 2	Global competition Environmental responsibility Increasing customer expectations of quality and service Cultural and social factors	Concept 15

Because in the present study, the researcher has used inferential statistics and structural equation modeling to investigate the influence of variables and the relationships between them. Also, this study is a cross-sectional study because it deals with data related to a particular time period. The present study is a descriptive research that uses Delphi method. Since the present study seeks to elucidate the dimensions of organizational agility structure in government agencies (studied by National South Oil Company), experts and experts are interviewed to obtain baseline data and then use a questionnaire to confirm the variables. The library method with regard to books, journals, reports, and websites is used to gather theoretical backgrounds and backgrounds, and the field method is used to collect research data. Whereas Delphi method is used to institutionalize organizational agility dimensions. To collect the research model data, questionnaires, databases, computer networks, books, magazines were also used. In this part, the survey method was used in which the primary data were produced and collected and the written questionnaire was used for data collection.

The questions were selected from a conceptual model by the researcher himself and then the Delphi team approved. The validity and reliability of the questionnaire questions after designing, formulating and consulting with experts and confirming them, we distributed some of them as bases after collecting and analyzing them after obtaining validity and reliability of questionnaire among The target Delphi group was distributed. Questionnaire was a closed-ended questionnaire that was graded in Likert spectrum and distributed among the Delphi group in two stages. Questionnaires and final components were extracted. Questionnaires, databases, computer networks, books, magazines will be used for data collection. In this section, a survey method was used in which primary data were generated and collected. Written questionnaire was used to collect the questions.

The statistical population of this study consists of two statistical and sample populations. The first statistical population: 15 experts, university professors who were informed in the field of organizational agility and also had

information about the products. Delphi samples are selected at random. Among the experts, experts and managers in the field of academia and industry, 15 of them are randomly selected as members of the Delphi Group. The method of selecting Delphi members will be the snowball method. In the snowball method the first expert sample represents the second expert random sample and so the chain continues.

Second Statistical Population: All staff employed by the National South Oil Company of the South includes managers in the three highest, middle and operational ranks, comprising more than 3,000 people. To confirm the indices and hypotheses tested by Morgan and Cohen table, 394 people were selected randomly from the statistical population as the sample of the subjects.

Reliability of research tools: Reliability is one of the technical features of compilation tools. This index is related to the stability of the results. When a research tool is reliable, its reuse in a research yields nearly identical results. They also defined reliability as the correlation between a set of scores and another set of scores in an equivalent test that was obtained independently of a subject group. Reliability of a measure demonstrates the consistency and consistency of the concept under consideration and helps evaluate the suitability of a measure (Dana yeefard *et al.*, 2014) in order to maintain research reliability. As can be seen for all industrial product marketing indices, according to the relevant dimension, the Cronbach's alpha coefficient was calculated using SPSS statistical software and is shown in the following tables. Cronbach's alpha coefficient, if higher than 0.7, indicates that the respondents agree that the questionnaire has high stability and reliability. As can be seen in the table above, the Cronbach's alpha is in all cases approved. In principle, the closer the Cronbach's alpha value is to the good reliability of the questionnaires, the higher the reliability of 0.89 indicates a very good reliability of the questionnaires.

Data analysis: Semi-structured interviews with emphasis on the heuristic approach were used in this study. This decision was made because the purpose of the research was to identify in-depth and initial identification by theoretical models for future empirical research based on qualitative findings. Therefore, it is considered that based on the results of this research we can identify ideas that can be used for conducting quantitative research with large statistical sample with theory testing approach. At the beginning of the study, it was planned to schedule interviews with about 15 randomly selected administrators, university professors, and experts given the expected time for the research. Prior to conducting the interview, telephone and face-to-face interviews were arranged on the timing of the interview. But despite many efforts for various reasons, such as some people's unwillingness to do interviews and some other administrative problems, it was not possible to interview all of them. At the beginning of the interview in general, the purpose of the study was mentioned and it was emphasized that the interviews would be used for research purposes only. And the identity of the individuals will not be identified in any future research reports or articles. Given the research questions, the following questions were considered in the interview as the main questions. And given its semi-structured nature, further questions were raised with regard to the answers and in order to clarify the meaning of the answers provided. At the end of each interview session, the

interviewees were also asked to add additional information if they had any questions.

Question 1: What is the structural model of agility in government agencies (Case Study: National South Oil Company)?

Subsection 1: What are the key components of the agility structure of government agencies?

Subsection 2: What are the indicators of agility structure of government agencies?

The text of the interviews was carefully implemented and used with the notes taken for analysis. The theme analysis method is widely used in qualitative research to analyze the text of interviews. In this way, the interview is first transcribed from the audio recording of the interview session and completed using notes taken during the interview sessions. Then, by carefully studying these texts, they first identify for each of the interviews all the independent ideals in terms of concepts (such as formulating organizational agility rules) and sub-themes (each dimension) and then assign each one a code. Was. The following tables are the concepts identified in the interview texts that are categorized as sub-themes. These sub-themes became more generalized, leading to the identification of key themes (key components of the agility structure of government agencies).

Data analysis in this study was done using expert method. The expert method is the most common form of interview analysis for generating meanings. By using this method, first coding and classifying existing text units into meaningful and logical categories (themes) with consideration of the three characteristics of learning, mutual exclusion and independence. Was. The main themes and sub-themes (conceptual categories) extracted based on the topic under discussion were presented. To calculate the reliability of the interviews, test-retest reliability and in-subject agreement were used. To calculate test retest reliability, three interviews were selected and each of them was coded twice by the researcher at a 15-day interval. The total number of disagreements in this time interval is 180, the total disagreement between the two times is 165, and the total disagreement in these two times is 50. The test-retest reliability of the interviews was 0.76. Since this is more than 0.60, it is acceptable.

Summary and Conclusion

As it can be seen from the research findings, the structural dimensions of organizational agility have been confirmed in the main dimensions. The scientific purpose of this paper was to present a desirable model for the agile structural model of the National Iranian South Oil Company. In this model, by defining the dimensions and related indices, it transformed oil industrial units into productive units.

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