

Identification of Factors Affecting Agility in Business Sector Organizations (A Case Study of Detergent Industry)

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ABSTRACT: Today, the industries face various challenges in the field of trade, and their survival depends on a timely and correct decision when confronting these factors. This has led the concepts such as competitiveness and agility to become prominent. Accordingly, different businesses and industries, in order to enhance their competitiveness, identify factors affecting their competitiveness and agility. Many scholars believe that agility is one of the inevitable and imperative requirements of companies to cover such markets. One of the Iran's most prominent and growing industries is the detergent industry, which has a significant role in production and the increase in production capacity. Therefore, in the current study, this industry has been studied in the mentioned fields. In this study, the relationship between the agility enablers and the increase in the agility level in the detergent industry, has been evaluated. A questionnaire was used to collect the required data and SPSS software was used to analyze and quantify the data. Pearson correlation test was used to investigate the research hypotheses. Finally, with regard to the positive value obtained between zero and one for the Pearson coefficient, the positive relationship between the variables has been proved and the hypotheses were confirmed.

KEYWORDS: *Effective factors, organizational agility, increase in competition power, detergent industry.*

I. INTRODUCTION

Modern companies are subject to various changes in globalization, including the emergence of global communications industries, the growth of multinational corporations, the impact of global financial markets, global warming, and international human rights action. The above factors have given the idea of the international community a special significance. Today's human knows that geographical constraints are getting smaller every day and the world becomes a single place. Globalization is a process that has existed since the beginning of human history and has been simultaneous with the modernization and development of capitalism, and its effects have been increasing since then, but a sudden momentum has emerged. Globalization is a recent process associated with other social processes, such as meta-industrialization and meta-postmodernism, or the fragmentation of capitalism. If we take a realistic look, we will see that most developed and developing countries have no way of withdrawing or abandoning, and that the livelihood of countless workers is dependent on the global economy. New communication technologies that are emerging from the Third Industrial Revolution allow us to look around the globe to find the place where our product will be cheaper and find a place where the sale of the product is more profitable than anywhere else. Consequently, globalization is not a cause, but it is the caused.

Over the past decade, most companies have chosen the strategy of rebuilding and reengineering in response to environmental challenges and changes, however these approaches were not always successful. But today, many organizations and corporations face increasingly uncertain and stable competition that has been intensified through technological innovations, change in market environments, and the change in customer needs. This critical situation has led to major reforms in the strategic vision of the organization, business priorities, and the revision of traditional models and even relatively contemporary models. In other words, it can be said that past approaches and solutions have lost their ability to cope with organizational challenges and contemporary external environments, or better to be replaced with new approaches and perspectives. Hence, one of the ways to respond to organizational change is agility. In fact, agility is a new paradigm for the engineering of competitive enterprises and organizations. On the one hand, the need for this new paradigm is based on increasing the coefficient of change in an environment that forces firms and organizations to reasonably and intellectually respond to changes. On the other hand, markets and customers are demanding cheap products, tailored to their needs and quick access to them. Hence, agility can bring victory and success in earning profit, market share, and attracting customers in competitive markets. Agility focuses on the function of personnel and organization, the value of products and services, and the constant change in the opportunities of customer acquisition, and requires constant and continuous readiness to face fundamental and superficial changes.

In one word, agile organization is always ready to learn everything new, which increases the profitability of using new opportunities (Jafarnejad & Shahaei, 2010).

In today's unstable markets, to maintain organizational survival and also to succeed, it is not enough to be lean and eliminate the wastes. Nowadays, the mere delivery of appropriate product, with the appropriate price and in the appropriate time, is not a necessary and sufficient condition to win the competition field, but it is only a necessary condition for survival in competitive environments. In markets where pricing is a key factor in customer's point of view, the smooth scheduling and waste elimination may lead to success, but the fundamental factor in many of today's markets is to satisfy customer needs in all respects, resulting in new patterns such as organizational agility. In other words, changes in today's business environments due to changes in customer needs, have led to uncertainty in decision making, and it is necessary for the organization to be flexible in dealing with this uncertainty. A successful organization is an organization with a competitive edge in new environments which can quickly adapt itself to customer needs and market changes. Today, this feature is called agility in organizations that have been considered by many of them (Razmi & Siefloori, 2007).

Considering the above-mentioned issues and the importance of research, and due to the development of detergent production industry and increased competition in domestic and international markets, as well as the environmental dynamism, organizations are able to acquire new markets and increase production and ultimately maintain long-term sustainability of the organization which are more successful in terms of competitiveness and the correct and timely use of more competitiveness strategies, and take steps keeping pace with environmental changes (agility).

Speed is perhaps the most important asset in the third millennium and the new age, known as the Information Age. In order to reduce the response time and improve flexibility, there should be formed a whole new form of organization. Today, competition is discussed in a variety of dimensions, such as the speed of product delivery, customer service delivery, product quality or service delivery, and price reductions. In lines with these objectives, the organizations need to be focused on the quick movement of information on the production, distribution, and supply of services. The faster this move, the quicker the organizations' response to market demand and requirements will be. Changes in technology and work, and the like, threaten the survival of organizations. Although organizations are aware of the importance of responding quickly to changing market conditions, they have never been able to be designed to be capable of doing so. Each organization must design itself in an agile form, in order to respond to a set of internal and external forces. Agility is generally the ability of an organization to understand environmental change and then respond quickly and efficiently to these changes. This change of environment can be technological and operational, or change in the customer needs. The term 'agile' describes the speed and the ability to respond when faced with internal and external events of the organization (Fathian & Golchinpour, 2006).

For agility in each organization, there are usually several basic capabilities, including:

- Responsiveness
- Competence
- Flexibility
- Speed

If an organization seeks agility, it needs to consider these abilities and capabilities, and build and strengthen them as much as they can (Jafarnejad & Shahaei, 2010).

In Iran, despite the potential of the consumption market of 80 million people and the new factors that stimulate the emergence of new industrial competition (the emergence of intense global competition, the creation of demand-driven markets, informed customers, cooperative relationships in the production, changes, technology development, and etc.) the idea-related threats have undermined the various manufacturing industries. An example of these threats to the detergent industry is the more active presence of foreign brands with different levels of quality and better prices. If the detergent industry in the current red ocean, by improving the level of agility and flexibility needed in the supply chain, production and distribution, price, quality and Services, cannot continue to compete, it will be eliminated entirely from the competition cycle.

In a turbulent environment (uncertain and volatile) in which companies operate, one of the most important factors in the survival and development is agility. The basic feature of this environment is change and uncertainty. What companies should do in this environment, in order to be able to keep up with the changes and maximize profits while maintaining themselves? The agile production system is a new solution to this challenge (Khoshsima et al., 2008).

It seems that change is one of the main features of organizations in the new competitive era. Today, fewer organizations can be found to have no changes in their environment for a period of 3 to 6 months or one year. Given the context that currently dominates the business world of organizations, organizations are forced to make changes in their attitudes, knowledge, approaches, procedures and expected outcomes (Sharifi & Zhang, 1999).

Changes and uncertainties in the business environment have been introduced into the research on organization and management, from many years ago. One of the most important tasks of organizations is the management of ambiguities and uncertainties (Thompson, 1967).

The turbulent era, filled with ambiguity and uncertainty, in the business environment, has been recognized as the cause of most failures in the manufacturing industry (Hooper, 2001). In addition, rapid and significant technological changes in the late 1960's and during the 1970s', permeated other dimensions of the business economy, such as markets, competition, customer needs, social factors, etc. (McCarthy, 2003).

The manufacturing industry has always been in the position of changing the paradigm. This change has been transiting from the manual production industry to mass production, and then to lean production, and in the present time, to agile manufacturing.

The mass and lean production systems have been widely reviewed and restudied to ensure stability and endurance in challenging the changing nature of the business environment. Methods that have been formerly used to solve existing problems in the efficiency of systems such as mass production and also, all kinds of techniques and tools related to them, are not now as responsive and effective as they used to be (Hormazi, 2001; Kid, 1994; Ganascaran et al, 2001; Dugasi et al., 1997).

The change in how organizations approach towards businesses, the change in the method of communication between customers and suppliers, and the change in cooperation with their competitors, can bring a favorable status to organizations. In the intellectual sense of this purpose, it should develop a new strategic vision beyond traditional systems, and take steps towards new dimensions of competitiveness, other than cost and quality. Therefore, survival and affluence in these turbulent situations will allow organizations to have the basic capabilities to understand their changing environments and respond appropriately to any unexpected change. Also, opportunistic measures to conquer new markets and respond to new customer needs are other important features that are essential for success in the current environment of the business. In this turbulent situation, the only way to adapt to the environment, as well as exploiting opportunities and meeting customer needs, is to evaluate and improve the agility of the organization (Jafarnehad & Shahaei, 2010).

The purpose and benefits of improving and enhancing organizational agility can be summarized as follows (Fathian et al., 2005):

1. Faster advancement of the organization towards predetermined goals
2. Better service, lowering prices and strengthening the organization in domestic and international markets
3. Obtaining value in relation to investment in IT
4. Reducing the amount of dedicated IT budget
5. Establishing the necessary coordination between IT service providers
6. The organization's ability to change processes and improve operations and internationalize activities
7. Responsiveness of the organization to the needs of customers
8. Increasing employee's satisfaction
9. Correct response to changes
10. Significant development of employee skills
11. Increasing the operational and operational values
12. Attention and emphasis on organization control
- 13- Progress in the structure of organizational processes
14. Improving the organization's efficiency by controlling and reducing costs
15. Acquiring the technological excellence in domestic and international competition
16. Improved cost control

The current study aimed at evaluation of the relationship between empowering, the underlying, and the effective factors on improving the level of agility in the dimensions of accountability, flexibility, speed and competence, and its role in globalization, in the detergent industry. These factors are selected based on previous studies that are fully aligned with the agility processes in the detergent industry.

In the current study's conceptual model, when it comes to the concept of agility and the development and improvement of organizational agility, the role of enablers and underlying factors must be explored. Each of these effective components will be further elaborated in the research concepts. The main variables in the conceptual model are divided to dependent and independent variables. The dependent variable is the degree of agility of the organization and its dimensions, which increases under influence of the independent variable (underlying factors).

Independent variable is the underlying factors that include consolidation and integrity, competence, team building, technology, quality, change, participation, market, education, welfare, and comfort. These variables are selected based on previous studies and research, and based on the opinions of industry experts that play a significant role in increasing agility.



Figure 1: the conceptual model of the study

Table 1: the variables, the underlying and effective factors on agility concepts and the increase in agility levels

Dimensions and components	Related features
Consolidation and integrity	Simultaneous implementation of the activities Integration of the company Employee access to information
Competence	Redesigning the functions and structure of the company Multiple Participation Features
Team building	Decentralized decision making Empowering people in working teams Intermediate teams The presence of teams in the boundaries of the company
Technology	Awareness of new technologies Leadership and excellence in using current technology Enhancing knowledge and skills in the field of technology Flexible manufacturing technology
Quality	Observing quality throughout the product life cycle Having products with a high added value Designing the right of ownership for first time Short development cycle courses
Change	Culture of change Continuous improvement
Participation	Having a relationship based on trust with customers and suppliers Quick association and partnership
Market	Strategic relationship with customers Close relationship with suppliers Response to Changes in Market Requirements Introducing new product Customer-based innovations customer satisfaction
Education	Training and continuous development learning organization Multi-skilled and flexible staff Improving staff skills
Welfare and comfort	Employee satisfaction

Variables and Dimensions of Organizational Agility from the viewpoint of Sharifi and Zhang are:

1-Responsiveness:

It refers to the ability to identify changes, respond quickly, and benefit from them (Jafarnehad & Shahaei, 2010).

2-Competence:

It refers to the ability to achieve the goals and objectives of the organization (Jafarnehad & Shahaei, 2010).

3. Flexibility:

It is the ability to flow into different processes and achieve different goals using the same facilities (Jafarnehad & Shahaei, 2010).

4-Speed:

It means the ability to perform activities in the shortest possible time (Jafarnehad & Shahaei, 2010).

II. METHODOLOGY

In the current study, a statistical population included all managers of Golrang Industrial Group, who were involved in decision making, strategy formulation, and implementation of the strategies, who were 63 senior managers. The power of decision making and the level of authority of managers in implementing the organization's strategies as process owners in each unit is the main factor for inclusion in the statistical population and, on the other hand, the common attributes of all managers at the strategic and operational levels in all units of the organization are membership in the committee of Organization Excellence, TQM Implementation Committee, and Implementation of ISO9001: 2015. According to the principle of systemic thinking, the agility should be implemented for greater effectiveness, in all units of the organization's units including the production, trading, supply, marketing and sales units, HR departments, and supporting units such as administrative units, logistics, technical units, and HSE.

Due to the limited number of members of the statistical population, a census is used instead of sampling. Accordingly, the sample size includes the entire statistical society.

In terms of the objective, the current study is of applied type, since it uses the cognitive background and information provided through fundamental research to meet the human needs and to improve and optimize the tools, methods, objects and patterns for development, comfort, and promotion. In general, the objective of these studies is to develop and improve methods, tools, and commodities with structures and, therefore, there are considered as applied research (Sarmad, 2001). In other words, after statistical tests and discussion and conclusion, the relationship between the factors affecting the agility in Pakshoo Corporation, can be studied. In terms of the data collection, the current study is of descriptive-correlational method. Descriptive studies consist of a set of methods whose purpose is to describe the conditions or phenomena under investigation. Descriptive research can be more about the existing conditions or assisting the decision-making process, and includes several branches: survey research, correlation research, action research, case study, and post-event research. In correlation research, the relationship between variables is analyzed based on the purpose of the research, which is completely in line with the purpose of the current study. Therefore, in this study, the correlation analysis method was used with a case study of the detergent industry.

The main data collection instruments in the current study are library-based research and questionnaires. The main data collection instrument in the current study was a questionnaire.

The current study is a descriptive study which consists of a two-part questionnaire of which the first part of is agility empowering in the organization. Organizational agility is an effective response to a changing and unpredictable environment and the use of those changes as opportunities for organizational progress. Organizations should not be afraid of changing their working environment and should not avoid them. They should consider making the change as an opportunity to gain competitive advantage in the market environment and maximize its benefits.

The second part contains 29 questions. The factors affecting the agility of organization are set in four agility indicators as accountability, competency, flexibility, and speed. The scoring scale is based on the Likert scale and includes very low, low, moderate, high and very high options from one to five.

III. CONCLUSION

There is a significant relationship between the factors affecting the agility concept and the increase in organizational agility and globalization of the detergent industry.

Variables that affect agility are the ten main variables defined as consolidation and integrity, competence, team building, technology, quality, change, participation, market, education, welfare and comfort. The detailed investigation of the variables is indicative of the confirmation of all the underlying hypotheses that lead to the acceptance of the main hypothesis. Therefore, effective factors on the concept of agility are also effective on increasing the level of agility and globalization and internationalization of the organizational activities of the detergent industry, and there is a positive and significant relationship between them.

In addition to the research, there are four main indicators in increasing agility that include accountability, competence, flexibility, and speed, whose positive and significant relationship with agility is proved by the Pearson coefficient. According to the current study, the responsiveness with Pearson coefficient of 0.918, the suitability with Pearson coefficient of 0.921, flexibility with Pearson coefficient of 0.725, and speed with Pearson coefficient of 0.847, express that with the increase in levels of these factors, the agility in the detergent industry is also increased, which will lead to the internationalized and globalized activities of these corporations.

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