

The Relationship Between Management Factors and Sharifi-Zhang's Agility Components in Isfahan Bank Saderat

¹Sajjad Farrokhi and ²Saeid Rajaeipour

¹Department of Executive-Strategic Management, Islamic Azad University, Isfahan, Iran

²Faculty of Khorasgan College, Isfahan University, Isfahan, Iran

Abstract: This study aimed to determine the relationship between management factors and Sharifi-Zhang's agility components in branches of Isfahan Bank Saderat. Population of the study includes all employees (n = 1100) of Isfahan Bank Saderat. Participants were selected according to Cochran formula that were estimated to be 285 employees. Data was collected by field and library studies. Standardized questionnaire of Sharifi and Zhang in 1999 and a researcher-made questionnaire of management factors were used to collect data. Face and content validity of the questionnaires were confirmed by the supervisor, experts in the field and some statisticians. Cronbach alpha was used to determine reliability of the instruments of the study. Reliability of the components of organizational agility and management factors was calculated to be 70% and 88%, respectively. SPSS version 20 was used to analyze data. Results of the study showed that there was a significant direct relationship between management factors and Sharifi and Zhang's agility components in Isfahan Bank Saderat.

Key words: Management factors, organizational agility factors, Sharifi-Zhang, agility, Iran

INTRODUCTION

In the challenging environment of the new millennium, one of the components of the increased success for organizations is focusing on the management task in competition among organizations and companies. One of the most important factors of survival and development of the companies in today dynamic environment is their agility. The basic characteristic of this environment is change and uncertainty. In such an environment, how companies should function to maintain their position in the environment and obtain maximum benefit from the changes and progress. Manufacturers, other organizations and institutions are forced to be agile in order to compete in the twenty-first century because the modern organizations face with increasing pressure to find new ways to compete effectively in a dynamic global market. Agility enhances organization ability for the supply of high quality products and services and therefore it is an important factor for the effectiveness of the organization. An agile organization combines organizational processes and individuals with advanced technology to provide high quality products and services in order to meet customer needs in short-term. Agility increases organization ability to provide good quality products and services and therefore it is important to improve organizational competitiveness and has direct effects on organizational performance.

Statement of the problem: In today competitive market, there is an urgent need to develop and improve organizational flexibility and responsiveness. Many organizations and companies face with growing stable and uncertain competition that has intensified due to technological innovations, changes in market conditions and changing needs of customers. This critical situation led to major reforms in the organization's strategic vision, business priorities and review of traditional models and even relatively recent models. In other words, it could be said that the past approaches and solutions lost their capabilities and abilities to meet the organizational challenges and external environment or they should be replaced with new approaches and perspectives. Hence, one way to respond to these organizational changes is agility. In fact, agility is a new paradigm for organizational engineering and competitive firms. One of the most important organizational factors affecting agility is management factors.

According to the novelty of agility, there is no definition accepted by everyone. In general, it could be said that agility means enjoying the changes as inherent opportunities in turbulent environments. Indeed, agility is a new paradigm for the engineering of competitive firms. The need for this paradigm is based on the increase rate of the changes in environment that forces firms to respond to changes.

The study of the agility requirements led to the conclusion that agility cannot achieve without leverage of managers' knowledge and skill (Harvey *et al.*, 1999). Sherehiy *et al.* (2007) mentioned knowledge and experience as the internal properties of workforce and managers and stated that recognition of full potential of an organization depends on the degree to which the knowledge and skills of the workforce and managers match with dynamic requirements of the workplace (Harvey *et al.*, 1999). Existence of personal skills to acquire and distribute information, predict and control problems and facilitate effective communication is important. The directors are expected to cooperate effectively in any working environment whether it is a task between teams, cooperation agreements with other companies or virtual organizations. Attitude to teamwork is considered as the person wishes (internal state) to continue working with each other in the team and other teams (Sherehiy *et al.*, 2007). states that a person working in a group may be affected by his tendency to individualism or collectivism. Attention to attitude assessment of the volunteers applied for the employment in the recruitment and selection process, establishment of a positive feedback system to agility of employees (e.g., material and non-material awards), existence of encouraging leadership and motivating environment, facilitation of the employees' access to the information, redesign of functions and business structure are the factors affecting human resource management.

Banks are one of the important organizations in the country. Increase private banks, new technologies, new banking, competition between banks has increased. In this situation, the bank can be successful with a variety of tools and features and the potential benefit in order to win the set. The expansion of electronic communication and access to the worldwide web a lot of people in the world, suitable for commercial and economic relations contact is provided. Increase of the private bank and new technologies of modern banking has increased the competition between banks. In such circumstances, a bank can be successful that uses various tools and its available facilities and potential to achieve its objectives. Development of electronic communication and access of a lot of people to the global Internet network provided a suitable ground for establishing commercial and economic associations. This led to the increased competition in banking industry and provision of electronic banking services. Bank managers should be able to recognize new opportunities of marker and update and improve organizational performance using capable human resources and provide different optimum services with a wide range of customers. Therefore, it is important to

examine the relationship between strategic factors and organizational agility of the employees working in branches of Isfahan Bank Saderat.

Significance of the study: With the transition from product-orientation and movement towards market-orientation, responding to customers' needs is the most important concern for organizations. In today business world, meeting diverse needs of customers in the expected time is the most important competitive advantage. Rapid changes and diverse customer tastes make competition difficult and organizations seek to make themselves flexible to respond to changes in order to increase their organizational effectiveness. Organizers are looking for capabilities to produce a variety of products according to customers' needs in the shortest time and lowest cost, improvement of quality, innovation in products and services and overall organizational flexibility in response to environmental needs. In this century, organizations are constantly looking for making agility and respond timely and quickly utilizing popular models in this field by making themselves agile. Many researchers believe that a system producing agility has emerged as a solution for the survival of organizations (Crocitto and Youssef, 2003).

Although, different studies have been conducted on the models of agility and factors affecting staff's agility, few studies have been done on management factors affecting Sharifi-Zhang's organizational agility components while this issue is of high importance. Competitive priorities of high speed change and new era of global economy resulted in changing operational strategies of companies. In this era, the competitive price and high quality are necessary but they do not determine a commercial success and instead speed to reach the market, quick response and flexibly to customers were considered as a fundamental principle. Therefore, the importance of speed and agility has been increased and replaced with the past competitive priorities that produced over a quarter of a century ago. Thus, this study investigated the relationship between management factors and organizational agility components of branches in Isfahan Bank Saderat, one of the organizations, in which competition is very high. According to the above, conducting this study is necessary in Isfahan Bank Saderat.

Objectives of the study

Major objective of the study: Determination of the relationship between management factors and Sharifi-Zhang's agility components in Isfahan Bank Saderat.

Minor objective of the study:

- Determination of the relationship between management factors and the accountability component of agility in Isfahan Bank Saderat
- Determination of the relationship between management factors and the competency component of agility in Isfahan Bank Saderat
- Determination of the relationship between management factors and the flexibility component of agility in Isfahan Bank Saderat
- Determination of the relationship between management factors and the speed component of agility in Isfahan Bank Saderat

Hypotheses of the study

Major hypothesis of the study: There is a relationship between management factors and Sharifi-Zhang's agility components in Isfahan Bank Saderat.

Minor hypotheses of the study:

- There is a relationship between management factors and the accountability component of agility in Isfahan Bank Saderat
- There is a relationship between management factors and the competency component of agility in Isfahan Bank Saderat
- There is a relationship between management factors and the flexibility component of agility in Isfahan Bank Saderat

There is a relationship between management factors and the speed component of agility in Isfahan Bank Saderat.

Context of the study: This study investigated employees and managers of branches in Isfahan Bank Saderat from March to August, 2015. The topic of the study is to determine the relationship between strategic factors and organizational agility in Isfahan Bank Saderat.

Operational definition of the variables: Organizational agility: Sharifi-Zhang's questionnaire was used to examine organizational agility. The questionnaire has 16 items including accountability, competency, flexibility and speed indicators. Management factors: a researcher-made questionnaire was used to examine and evaluate management factors. The questionnaire has 15 items.

Type of the variables of the study: Variables of the study include features evaluated by the researcher.

Predictive (independent) variable: Independent variables of the study include management factors.

Criterion (dependent) variable: Dependent variable of the study is organizational agility.

Organizational agility

Definition of agility: The word agility means fast movement, dexterity, ability to move fast and easy and ability for quick thinking with a clever way in the dictionary which was introduced as opportunities to respond to changes in business environment and exploit those changes. The following definitions refer to agility.

- The ability of organization in sensing, understanding and predicting changes in the business environment (Sharifi-Zhang, 1999)
- The ability to respond quickly to sudden and unpredictable changes (Goldman *et al.*, 1995)
- The ability to adapt and reshape fast
- The ability to respond effectively to customer (Katayama and Bennett, 1994)

Kidd presents agility as one of the most comprehensive definitions of agility as follows: an agile organization is a fast, consistent and conscious business that has the ability to adapt quickly in response to changes and unexpected and unforeseen events, opportunities of the market and needs of the customer (Kidd, 2000). Despite, the many definitions of agility, none of them contradict each other and these definitions show the idea of speed and change in business environment.

The nature of organizational agility: Goldman *et al.*, (1995) believe that organizational agility means value to the customer, readiness to encounter with the changes, attention to the employee's skills and build partnerships in employees. Sharifi and Zhang (1999) believe that agility includes time of learning and adaptation to changes in times which leads to changes in the maintenance and provision of services and its result is the learning of task performance, operation and changes in the shortest time. Moreover, its result for the organization is the response to changes, exploitation of the changes and benefits of the changes as an opportunity (Sharifi and Zhang, 1999).

Foundation of agility originates from speed, flexibility, innovation, pre-reaction, quality and profitability (Yusuf *et al.*, 1999). Dove said that speed of response and knowledge management are two fundamental elements and supplements of organizational agility (Crocitto and Youssef, 2001). Dove believes that

high-tech information and manufacturing result in agility production and production of agility by lowering costs, increasing speed and improving the quality bring about organizational agility. According to the researchers, accountability and flexibility that result from effective relationship between leadership, employees, customers and suppliers, has a very close relationship with agility. Dimensions of firm agility are a complex phenomenon that must be seen to be systematic and agility is also a complex concept that has been proposed to achieve the four dimensions (Goldman *et al.*, 1995).

Output (products as a comprehensive solution to meet customer satisfaction). Ability to build a product does not specify a competitive capability. Reduction of the cost of machinery, access of product designers to powerful computer design tools, increase in international trade developed distribution of these products and manufacturers were led to the direction in order to see beyond the product and provide a distinctive combination of product, information and long-term services with each customer. In fact, organizations have to provide solutions to specific problems (issues) of the customer and focus on value received by customers of the product.

Data (cooperation to enhance the competitiveness or creation of virtual organization); providing a perfect solution for any particular customer with the resources of a company alone cannot be achieved. This is especially true when company focuses on their core competence. Therefore, cooperation to create solutions for our customers appears essential. In fact, internal and external cooperation's are the intended strategies and target of the supply of products to market in the minimum time by leveraging resources is partnership and achieving these goals would be only achieved by forming virtual organizations and fast partnerships in manufacturing.

Effective external factors (change and uncertainty); the most difficult factor facing companies is rapid change. Factors such as decrease in product cycle, decrease in the time of conception to the time of sale, acceleration of the rate of technology development, increase in the trade globalization, increase in the density of electronic communications and rapid population growth all contribute to the climate of change. External changes imposed can be considered in the two following parts:

- Large-scale social and historical change that will not be affected by a trade unit
- Changes that can be imposed by rival companies on a commercial unit. For example, segmentation of the product and creation of similarities in expensive products with high diversity that are imposed by competitors

Therefore, organizations should be organized to survive and progress in an environment of change and uncertainty in such a way that have flexible and innovative organizational structures in order to promote quick decision. Agile producers should keep staff that can convert change and uncertainty into growth and develop entrepreneurial organizations. Internal operation (leveraging the impact of information and people): it states the ability of the company in faster response to changes compared to the competitors. Of course, this is done by motivation, entrepreneurial of individuals and organization of permanent consistent teams. Yet, organizational structure is constantly reshaping. People and information will be the key separators in the world of tomorrow. Therefore, agility involves decentralized authority and leveraged value of human and information resources. Such organizations are called knowledge-based organizations (Gunasekaran *et al.*, 2001).

These four dimensions are the basis of definition of agile enterprises and agility is a comprehensive term that influences all areas of business such as production, marketing, design and organization. Agile is a combination of physical products, services and information that will change with changing the customer needs.

Basic capabilities of organizational agility: Agility usually includes several basic capabilities in every organization that are as follows: Accountability means the ability to identify changes, rapid response and exploitation of it. Competency: an extensive set of capabilities that provides productivity of activities in order to achieve the organization's goals. Flexibility: the ability to process different products and services and achieve multiple purposes with the basic facilities. Speed: the ability to perform tasks and activities when possible (Lin *et al.*, 2006).

Therefore, if an organization seeks for agility, it should consider these features, foster and reinforce them as much as possible so that it increases the efficiency of the organization. The properties of an agile organization are as follows:

- Information-based
- Concentration of activities on the competencies
- Flexibility
- Elimination of overheads
- Creativity
- Coordination with virtual structures
- Lack of hierarchy
- Focus on key capabilities

Management factors

Managers and change: Rapid change is the most striking feature of the contemporary society. Most strategic measures fail either due to inattention of management to the changes or complete attention of management to the prediction of the future; that is, management does not pay attention to the flexible exploitation of the intended strategy. Given the comprehensiveness of the speed of change, strategic success is possible if the manager is able to control such changes.

In an environment that is constantly changing and evolving, success can be achieved if people and organizations set their goals according to the conditions with new initiatives and innovations and always be prepared to face challenges. Management of the change at the highest level is that the director can control the change and guide it. Pioneer leaders make changes in the situation rather than passivity against changes. This means that pioneer managers and organizations predict not only changes and react against it but also take actions ahead the changes and even implement principles and rules that lead to their specific desired changes. The best actors are those who lead changes in their personal life and work environment.

As leader, the pioneer people control the process and speed of changes and provide an environment that constantly supplies the system output. Management of the changes and developments is not so simple. Identification, discovery and pursuit of the uncertain development paths are difficult to do because it cannot be focused on specific changes in this path and cannot be passive and wait for the future, but there is a balance between the status quo and the future. Peterson believes that it is clear that tolerance of the change is one of the valuable features of managers in the third millennium. Robbins and D Senzo also believe that if a change did not exist, the management task was a relatively simple task and planning had no problem because today did not differ from tomorrow and the problem of organization was also solved. Since the environment was stable, it did not need further match. Similarly, the decision was extremely simple because the consequence of any decisive decision almost was predictable. The managers' task was simple if competitors did not introduce new products and services, if the customers did not demand new demands, if regulations of the government did not change at all, if technology did not upgrade or if the needs of the staff was always the same.

Creativity of managers: Any human being has creativity talent and therefore creativity should not be monopolized by certain people because prevention of factors inhibiting

the emergence of creativity is stronger than the existence of creativity talent. If mind releases from assumptions and subjective chain models, ability of creativity and use of new thoughts can be practically doubled in the short term. Every manager must be creative. Creativity means the ability to use mental abilities to create a new idea or concept. Survival of organizations depends on their reconstruction. Reconstruction of organizations is made by coordinating the objectives with current situation and reform and improvement of methods of achieving these goals.

Management and decision making: Charles Hendy believes that the present era is the era of change and aversion to tradition which leads to severe contradiction and conflicts in organizations. Manuel Castells analyzes and examines the current era characterized by information and emergence of a new identity. Other scholars have similarly promised a new era that is derived from communication and information technologies. Insight and knowledge are the two pillars for the decision system. Information and communication technologies as a suitable decision assistant for the manager made his role more difficult in the decision-making. On the one hand, the size of information available for the managers has been increased and on the other hand availability and distribution of information on other levels have challenged the superiority of managers in terms of access to information than others. Therefore, pillars of insight and qualitative ability of management are of higher importance. In this context, freedom from bondage of wide volume of data needs to know how to make decisions and use optimally creative thinking, value thought and appeal of the decision-making techniques.

Ralph Kinney, winner of the Award for Book of the America Year in the field of decision analysis in 1994 stated that: "In today's complex world that is known as the era of rapid change and uncertainty, two types of knowledge are of key importance. The first is knowledge of future research that is interpreted as identification of knowledge. The second type of knowledge is the knowledge of decision making that deals with the sensitive issue of problem-solving and its derivatives. Such knowledge will determine effectiveness of a society. No doubt, it is important at least from the mental and theoretical perspective to be able to create a meaningful glorious future and consider it as our destination to national development travel. However, what is more important is the ability and competency of finding ways that can make this future a reality.

Knowledge management process: Knowledge is an important source of competitive advantage and value creation and is known as an essential factor for sustainable development and, in general, a decisive factor for companies and organizations with global aspirations. Knowledge management is a continuous regular process and a developing cycle that leads to add and further manage knowledge over time. This cycle has three processes: acquisition of knowledge; knowledge acquisition is the process of search, discovery, storage and retrieval of relevant knowledge within and outside the organization. In order to identify the mechanisms of knowledge acquisition, it can be placed in two categories: a source within the organization and a source outside the organization. Internal source of knowledge acquisition: staff's mind (tacit and implicit knowledge) or organization database that is in the form of coded information. External source of knowledge acquisition that enters new knowledge into organization and is performed by modeling and cooperation within organizations.

Knowledge sharing process: Knowledge sharing defines as dissemination, exchange and share of the knowledge created, acquired and stored in the organization through group meetings, questions and answers from the elites or even sending e-mail to the members of the organization. Application of knowledge: intellectual activity that is manifested through various thoughts and actions. From the perspective of most researchers, this process is the most important stage of knowledge management. Application of knowledge in work performance, especially the research productivity of faculty members in any university system plays a vital role.

Managers and appropriate information: Experience and research has shown that proper information has the following features and as will be discussed below, information systems provide many of these features for managers.

Features: Timeliness: Just that information should be used that are notified to the manager in appropriate time. The delay in collecting, processing or sending information makes the necessary information useless reports.

Relativity: That information suitable that are in the working domain of the manager and are related to his tasks whether the information is for planning or decision-making. Moreover, Relativity includes a consideration that refers to the position and level of manager in the organization.

Accuracy: If information is accurate, managers will use it with confidence for their work. However, there is nothing as absolute precision in the world of information.

Details: Data details must have minimum minor cases. Existence of any preposition meaning more processing, more analysis and more space probably lead to a less valuable decision.

Frequency: Information must be repeated if it is related to the kind of decision or activity. Most reports in the normal mode are produced in cyclic intervals (daily, weekly, monthly, etc.).

Understandability: The ability to understand the information that is displayed in a special form and style must be easily understandable for managers. Information producer must have technical knowledge, proper individual characteristics as well as group characteristics and sufficient awareness. This is the only way of valuing information.

Conceptual model of the study

Dimension of organizational agility:

- Agility
- Management factors
- Accountability
- Flexibility
- Competency
- Speed

Literature review: Sorolodis and Valavanis emphasized that due to the multi-dimensional and fuzziness of the concept of agility, it is difficult to design its indicators. They have suggested a framework based on fuzzy logic knowledge which contains four structures of agility: manufacturing, market, personnel, information. They identified several parameters and measures for each original structure. Based on a comprehensive literature review, Tronglin presented a conceptual model for agile organization. In this model, change is the most important factor driving agility and this change can be mainly found in customer demand, competitive criteria, market, technology and social components. On the one hand, the agile organization needs a set of capabilities to cope and deal with these changes that include flexibility, competence, responsiveness and speed.

In their study of abilities making organizational agility, Vazquez-Bustelo and Avella (2006) concluded that organizational agility increases profit, customer satisfaction, the market space of organization and enablement of employees in the organization. Rui and

coauthors examined development of organizational agility using information technology and capability of supply chain. They used structural equation modeling to test theoretical concept of 310 small to medium developing companies in Australia across different industrial sectors. Results show that information and communication technology cannot contribute to agility of companies using the increased supply chain processes including integration, information sharing and coordination.

MATERIALS AND METHODS

The present study intends to determine the relationship between management factors and Sharifi-Zhang's agility components in Isfahan Bank Saderat. The study is an applied descriptive-correlational research, in which data was collected by field studies. Descriptive study describes and interprets what exists and attends to the existing conditions and relationships, common beliefs, current processes, visible effects or developing processes at present time. When a researcher faces with two or more sets of information, he can use this type of research. In this study, the researcher dealt with correlation between management factors and Sharifi-Zhang's agility components in Isfahan Bank Saderat.

Statistical population of the study: Population of the study includes all employees (n = 1100) working in Isfahan Bank Saderat.

Sample of the study and sampling: Participants were randomly selected according to Cochran formula that were estimated to be 285 employees. Data was collected by field and library studies. Cochran formula is displayed below.

$$n = \frac{\frac{z^2 pq}{d^2}}{1 + \frac{1}{N} \left(\frac{z^2 pq}{d^2} - 1 \right)}$$

Where:

n = Sample size

N = Size of the statistical population (size of city and province size)

z = Percent of standard error of acceptable confidence

p = A proportion of the population having certain traits (e.g., male population)

q = 1-p: a proportion of the population lacking in certain traits (e.g., female population)

e = Reliability or possible optimum accuracy

Table 1: Factor loadings of factor analysis of Sharifi- Zhang's agility components

Hidden factors (latent variables)	Measurement indicators (observed variables)	Factor loadings	Sig.
Organizational agility	Accountability	0.58	0.001
	Competency	0.57	0.001
	Flexibility	0.38	0.001
	Speed	0.44	0.001

Organizational agility: Accountability = d1, Competency = d2, Flexibility = d3, Speed = d4

Table 2: Factor loadings of factor analysis of the management factors

Latent variable	Factor loadings	Sig.
Management factors	0.73	0.001

Instruments of the study: Data was collected by field and library studies. Library studies (visiting the library, using the papers base, valid sites and so forth) were used to gather information of the review of the literature. In the field study, the researcher directly visited branches of Isfahan Bank Saderat and distributed the questionnaires among employees and managers. Then, the researcher collected the completed questionnaires. Standardized questionnaire of Sharifi and Zhang (1999) was used to collect data. The questionnaire had 16 items that considered indicators of accountability, competency, flexibility and speed to examine organizational agility. A researcher-made questionnaire of management factors were used to collect data that included 15 items.

Validity of the questionnaires: Validity of the organizational agility questionnaire was examined by the researchers in previous studies and was confirmed by the professors and experts in the field. Validity of the strategic factors questionnaire was also approved by the experts in the field. Construct validity of the organizational agility questionnaire was tested by confirmatory factor analysis using AMOS18 Software. According to the statistics obtained in Table 1, results of confirmatory factor analysis has a logical and acceptable fitness. Indicators of $\chi^2/df = 1/026$, CFI = 0/999, NFI = 0/998, GFI = 0/996 and RMSEA = 0/009 show that model of measuring latent variable of organizational agility has acceptable fitness and construct validity in different aspects.

Construct validity of the strategic factors questionnaire was tested by confirmatory factor analysis using AMOS18 software. Results of the confirmatory factor analysis show that measurement model of the latent variable of management factors has acceptable fitness and construct validity in different aspects (Table 2).

Reliability of the questionnaires: There are different ways to determine reliability. Cronbach's alpha coefficient was used to determine internal consistency.

$$r_a = \frac{j}{j-1} \left(1 - \frac{\sum S_j^2}{S^2} \right)$$

Where:

r_a = reliability

J = Number of subsets of the questionnaires items

S_j^2 = Variance of jth subtest

S^2 = Total variance of the test (Table 3-5)

Table 3: Reliability of the questionnaires of management factors and components of organizational agility

Variable	Reliability
Management factors	0.79
Accountability	0.71
Competency	0.72
Flexibility	0.79
Speed	0.71

Table 4: Scores of the variable management factors

Statistics	Management factors
No.	285
Mean	3.67
Median	3.67
Mode	4.00
SD	0.420
Skewness	-0.382
Kurtosis	3.850
Maximum	2
Minimum	5

Table 5: Scores of the variable organizational agility

Statistic	Organizational agility	Accountability	Competency	Flexibility	Speed
No.	285	285	285	285	285
Mean	3.70	3.72	3.78	3.63	3.66
Median	3.69	3.75	3.80	3.75	3.67
Mode	4	4	4	4	4
SD	0.309	0.519	0.444	0.441	0.489
Skewness	-0.462	0.008	-0.386	-0.436	-0.259
Kurtosis	2.561	0.483	1.288	1.489	0.517
Minimum	2	2	2	2	2
Maximum	5	5	5	5	5

Table 6: Statistics of Kolmogorov-Smirnov for normality of the variables

Variable	Kolmogorov-Smirnov	Sig.
Management factors	1.302	0.10
Sharifi-Zhang's agility component	1.366	0.084

Table 7: Pearson and Spearman correlation statistics relating to the relationship between strategic factors and organizational agility in Isfahan Bank Saderat

Variables statistic	Organizational agility				
	Pearson	Sig. value	Values	Relationship	Type of relationship
Management factors	Correlation coefficient	Significance	No.	-	-
	0.472	0.001	285	Yes	Direct

Table 8: Analysis of variance of the regression model of the relationship between strategic factors and accountability in Bank Saderat

Source of changes	Total squares	df	Mean square	R	R^2_{adj}	F	Sig.
Regression	12.455	5	2.491	--	--	--	--
Residue	67.024	279	0.229	0.404	0.148	10.85	0.001
Total	76.479	284	--	--	--	--	--

Table 9: Accountability is different with regard to the level of management factors

Variable	B estimation	SE	β standard estimate	t-value	Sig.
Management factors	0.358	0.087	0.290	4.129	0.001

Validity of the model durbin-Watson ratio is 1.5

This study determines the state of the variable organizational agility and its dimensions taking into account parameters such as mean, median, mode, standard deviation, skewness, kurtosis and so forth. The average organizational agility, median, mode, standard deviation, skewness and kurtosis, respectively were estimated to be 3.70, 3.69, 4, 0.309, -0.462 and 2.561. Table 6 shows the state of dimensions of organizational agility (Table 7).

RESULTS AND DISCUSSION

Normality of the variables

Major hypothesis of the study; there is a relationship between management factors and Sharifi-Zhang's agility components in Isfahan Bank Saderat: Data analysis shows that Pearson correlation coefficients between the two variables of strategic factors and organizational agility was calculated to be 0.472 and $-p < 0.001$ and less than significance level of 0.05; that is, absence of a relationship is rejected and thus there is a significant relationship between strategic factors and organizational agility in Isfahan Bank Saderat. This is approved with regard to the distribution points as well as the fitted line. In addition, a positive correlation coefficient and slope of the fitted lines show a direct relationship between these two variables (Table 8).

Minor hypotheses of the study: There is a relationship between management factors and accountability component in Isfahan Bank Saderat (Table 9). Accountability is different with regard to the level of management factors. Thus, there is a relationship between management factors and accountability (Table 10). There is a relationship between management factors and competency component in Isfahan Bank Saderat (Table 11).

Table 10: Relationship between management factors and competency component in Isfahan Bank Saderat

Source of changes	Total squares	df	Mean square	R	R ² _{adj}	F	Sig.
Regression	7.999	5	1.60	0.378	0.128	9.305	0.001
Residue	47.968	279	0.172	-	-	-	-
Total	55.967	284	-	-	-	-	-

Table 11: Competency is different with regard to the level of management factors

Variable	B estimation	SE	β standard estimate	t-value	Sig.
Management factors	0.343	0.075	0.324	4.570	0.001

Validity of the model durbin-Watson ratio is 1.5

Table 12: relationship between management factors and flexibility component in Isfahan Bank Saderat.

Source of changes	Total squares	df	Mean square	R	R ² _{adj}	F	Sig.
Regression	5.239	5	1.048	-	-	-	-
Residue	50.087	279	0.180	0.308	0.078	5.836	0.001
Total	55.325	284	-	-	-	-	-

Table 13: Flexibility is different with regard to the level of management factors

Variable	B estimation	SE	β standard estimate	t-value	Sig.
Management factors	0.185	0.077	0.176	2.416	0.016

Validity of the model durbin-Watson ratio is 1.523

Table 14: Relationship between management factors and speed component in Isfahan Bank Saderat

Source of changes	Total squares	df	Mean square	R	R ² _{adj}	F	Sig.
Regression	8.970	5	1.794	-	-	-	-
Residue	58.909	279	0.211	0.364	0.117	8.497	0.001
Total	67.879	284	-	-	-	-	-

Table 15: Relationship between management factors and speed

Variable	B estimation	SE	β standard estimate	t-value	Sig.
Management factors	0.135	0.083	0.116	1.623	0.106

Competency is different with regard to the level of management factors. Thus, there is a relationship between management factors and competency (Table 12). There is a relationship between management factors and flexibility component in Isfahan Bank Saderat Table 13. Flexibility is different with regard to the level of management factors. Thus, there is a relationship between management factors and flexibility (Table 14). There is a relationship between management factors and speed component in Isfahan Bank Saderat (Table 15).

CONCLUSION

The study is a correlational research aiming at investigation of the relationship between the management factors and Sharifi-Zhang (1999)'s agility components. Population of the study includes all employees (n = 1100) of Isfahan Bank Saderat. Participants were selected according to Cochran formula that were estimated to be 285 employees. SPSS version 20 and Amos Software were used to analyze descriptive data. Results of the study showed that there was a relationship between management factors and Sharifi and Zhang's agility components in Isfahan Bank Saderat.

Discussion of the hypotheses of the study: The study of the relationship between management factors and Sharifi-Zhang's agility components. There is a significant direct relationship between management factors and Sharifi-Zhang's agility components in Isfahan Bank Saderat. In other words, positive changes in management factors lead to positive changes in organizational agility.

There is a relationship between management factors and responsiveness in Isfahan Bank Saderat: There is a significant linear relationship between management factors and responsiveness in Isfahan Bank Saderat. Management factors such as leadership skills, perception skills and communication skills affect significantly the sale success of modern banking services. Management factors of long-term investment with low costs, ability of investment in the research and development, ability of maximization of stakeholders' investments and financial ability have significant direct effects on the organizational responsiveness of branches of Isfahan Bank Saderat.

There is a relationship between management factors and competency in Isfahan Bank Saderat: There is a significant linear relationship between management factors and competency in Isfahan Bank Saderat.

There is a relationship between management factors and flexibility in Isfahan Bank Saderat: There is a significant linear relationship between management factors and flexibility in Isfahan Bank Saderat. Management factors are the most important predictor of flexibility. Therefore, chiefs of Isfahan Bank Saderat can have significant effects on the strength of the organizational agility and flexibility through development of organizational strategic plans of the expansion of the ability of internal and external operation, long term planning for bank, greater and better supervision on bank operations, proper and timely decision and creativity in decision-making.

There is a relationship between management factors and speed in Isfahan Bank Saderat: There is not a significant linear relationship between management factors and speed in Isfahan Bank Saderat.

REFERENCES

- Crocitto, M. and M. Youssef, 2003. The human side of organizational agility. *Ind. Manage. Data Syst.*, 103: 388-397.
- Goldman, S.L., R.N. Nagel and K. Priss, 1995. *Agile Competitors and Virtual Organizations*. Van Nostrand Reinhold, New York.
- Gunasekaran, A, R. Mcgaughey and V. Wolstencraft, 2001. *Agile Manufacturing: The 21st Century Competitive Strategy*. Elsevier, USA., ISBN: 9780080526881, pp: 25-49.
- Harvey, C.M., R.J. Koubek and C.L. Chin, 1999. Toward a model of workforce agility. *Int. J. Agile Manuf.*, 2: 203-218.
- Katayama, H. and D. Bennett, 1999. Agility, adaptability and leanness: A comparison of concepts and a study of practice. *Int. J. Prod. Econ.*, 60: 43-51.
- Kidd, P., 2000. Two definitions of agility. <http://www.cheshirehenbury.com/agility/twodefinitions.html>.
- Lin, C.T., H. Chiu and Y.H. Tseng, 2006. Agility evaluation using fuzzy logic. *Int. J. Prod. Econ.*, 101: 353-368.
- Sharifi, H. and Z. Zhang, 1999. A methodology for achieving agility in manufacturing organisations: An introduction. *Int. J. Prod. Econ.*, 62: 7-22.
- Sherehiy, B., W. Karwowski and J.K. Layer, 2007. A review of enterprise agility: Concepts, frameworks and attributes. *Int. J. Ind. Ergon.*, 37: 445-460.
- Vazquez-Bustelo, D. and L. Avella, 2006. Agile manufacturing: Industrial case studies in Spain. *Technovation*, 26: 1147-1161.
- Yusuf, Y.Y., M. Sarhadi and A. Gunasekaran, 1999. Agile manufacturing: The drivers, concepts and attributes. *Int. J. Prod. Econ.*, 62: 33-43.