

Strategic Agility Capabilities, Factors and their Effect on Organizational Performance: A Case Study of Iranian Banks

Mehdi Orojloo¹, Kamran Feizi², Maryam Hojati Najafabadi³

Received: 2016/8/30

Accepted: 2017/9/28

Abstract

Business evolutions, emergence of powerful competitors, rapid technological changes, change in customers' expectations, new social models, etc require firms to revisit their strategies continuously. Further, the capability of a firm to agree on a change, identify opportunities and reform resources enables it to change strategic orientations properly. New orientations need the definition of a new logic for a firm that appears in three axes of value creation, delivery and capture. In the present research, the effect of strategic agility is studied on organizational performance by examining it exactly. The population of the research is Iranian Banks with at least 5-year of experiences in this industry. According to the exploratory nature of the research, the factors of strategic agility are identified after literature review on agility, and PLS-SEM is used to measure its effect on organizational performance according to the limitations of the sample of study. Findings show that the strategic agility has a significant positive effect on the organizational performance. Also among factors affecting the strategic agility is collective commitment that has the highest effect on the organizational performance.

Keywords: Strategic Agility; Business Model; Strategic Sensitivity; Resources Fluidity; Collective Commitment.

¹ PhD Student, Allameh Tabatabai University, Tehran. Iran. Email: orojloo@gmail.com (Corresponding Author).

² Professor, Department of Industrial Management, Allameh Tabatabai University, Tehran. Iran. Email: kamranfeizi@yahoo.com

³ MSc Student, NBA, Tehran. Iran. Email: hojatimaryam67@yahoo.com

Introduction

The business nature of today's world needs high interaction between companies and customers as well as the adoption of business models in service provision according to updated technologies. In this emerging business paradigm, it is necessary to evaluate opportunities and challenges for business leadership again. Fundamental changes in technology, market conditions and customers demands have created new conditions for firms quickly and unpredictably. Against this competitive background, many firms have redefined competitive differentiation, adopted different procedures and instruments to improve their competitive positions. Acceptance of these procedures and instruments is noticed in scientific research centers to define a modern paradigm of business based on agility (Vazquez et al., 2007).

In modern markets, firms are faced with various disintegrations that often occur simultaneously and cannot be predicted easily and force organizations to revise their operations continuously to achieve a quick compatibility. In this sense, strategic flexibility that is known as strategic agility shows the organization's ability to manage market changes through a quick proactive response to market threats and opportunities (Grewl&Tansuhaj, 2001). Dreyerand and

Gronhaug (2004) mention the increasing importance of strategic flexibility as a source of competitive advantage in dynamic competitive markets for researchers and managers in recent years (Santos *et al.*, 2012).

Therefore, in a turbulent environment where markets emerge, separate, grow and die, one of the first features of the firm's success is the strategic agility or the ability to be flexible in case of new evolutions to adapt to strategic orientations of the firm and develop value creation approaches permanently. Competitive perspective has changed in recent years much more than before, and strategic planning is criticized by the opportunistic strategic agility. In such an environment, operational level capabilities must be revisited and promoted continuously and previous solutions of a firm's success cannot be used for a long time.

Response to daily fluctuations and changes including fluctuations of demand, short-term movements of competitors, changes in suppliers and unpredicted operational events are issues related to the operational level of a firm and the change in its competitive advantage is a strategic issue.

In fact, the strategic agility responds to environmental changes at a higher level than the operational agility and considers adoption of new business models as the

prerequisite and a factor updating competitive advantages of the firm.

The main questions of the research are as follows: What is agility and what are its dimensions? How is it possible to achieve agility in organizations? What is the effect of agility on organizational performance? Answering these questions can deepen and develop our understanding of the strategic agility concept and creates more research in this context. In addition, organizations can pay more attention to factors increasing the speed and agility.

Literature Review

Agility requires firms to modulate and re-engineer their processes and systems to add something beyond the existing diversity or to connect to (disconnect from) other partners providing special capabilities. Agility requires response to (unexpected) input or change of input and processes to present an unexpected but desirable output (Oosterhout, 2010). A system optimized for an initial set of conditions may be effective until the conditions are dominant. However, if the conditions change, the system will be destroyed. Higher options of system make it deal with fluctuations better. Input diversity can be only responded by diversity of actions (Price *et al.*, 1998).

Lau states that the strategic agility is a company's ability to respond to uncertainties through adjusting its

objectives and supporting its superior capabilities and knowledge. The second part, i.e. knowledge and capabilities, include individuals, processes, products and integrated systems. Strategic agility supports the development of future production strategies. As a result, it can affect market demands, create uncertainty or change customers' expectations in addition to enabling it to respond to the variable nature of domestic and environmental conditions quickly (Lau, 1996).

The strategic agility provides ability to change a company's strategy and the change of strategy is introduced as a solution for companies to respond to external changes (Li *et al.*, 2011). Hayes and Pisano define the strategic agility as a capability to change a firm's strategy together with qualifications adopted, developed and exploited according to the former strategies. In other words, a company must be able to change its competitive characteristics, adapt them to market trends quickly and adjust the focus point of its strategies dynamically. Therefore, the company is perceived not only as the inventory of products and activities but also as the inventory of capabilities being developed. Hence, strategic agility must be noticed as a program to develop capabilities (Toni&Tonchia, 2005).

The definition of strategic agility as the capacity of a company to change the mixture of its competitive priorities presented by Hayes and Pisano is one of definitions accepted in literature (Toni&Tonchia, 2005).

Clark also introduces the strategic agility in the research of competitive configurations that a company may adopt. In fact, a company has a heritage of knowledge, competence and capability making in able to enter some competitive areas: somewhere consistent with its profession. So, strategic agility can be measured by strategic options adopted by the company at a certain time (in the mixture of competitive priorities) (Toni&Tonchia, 2005).

Although at first glance, the spectrum of definitions presented about the strategic agility may seem wide and dispersed, a closer study of the subject shows that there is a high agreement on update of competitive capabilities of firms faced with external changes or management ambitions, and reform of resources and capacities of organization is the main component of most definitions presented. To operationalize the concept of strategic agility and for semantic clarity, we use the definition presented by Doz and Kosonen (2008) to identify the constructs of the research. Doz and Kosonen (2008) think that updating competitive capabilities and

gaining the strategic agility are equivalent to business model update and state that strategic agility is the ability to adjust and modify strategic directions in business orientation as a function of strategic ambition, change of conditions, establishment of new business models and creation of innovative ways of value creation for company in addition to production of new products and services (Vecchiato, 2014).

Business model describes the design or architecture of mechanisms of creation, delivery and capture of value of an organization. Business model concept is a general concept and has led to different definitions. A large part of literature deals with elements or components of business model. Although there are different approaches of business model, a few central elements of these are agreed: business model is the design or architecture of mechanisms of creation, delivery and capture of value.

The business model concept states that the value creation occurs beyond organizational boundaries, i.e. in a network including customers and partners developing resources of organization. The framework of change in the business model defined in the present research as strategic agility includes three dimensions of value creation, value delivery and value capture that are determined by elements of

any dimensions present in most studies. Hence, a business model shows a specific set of choices of elements and their combination in a way that value creation, delivery and capture are performed.

To increase the generalizability of the research model, we use general elements of activities performed in any business model: 1) value creation (the way values are created by firms such as products and services), 2) value delivery (the way the created value is delivered to customer) and 3) capture of value (the way profits are made from the value created) (Aversa *et al.*, 2015).

Determining the way value is created, the way it is delivered to customer, and the way profit is made from it are the key issues when modeling a business model and are dependent on each other. Companies must always search and pay attention to improvements in business model (especially those improvements that cannot be imitated easily and create value for customers).

Issues related to designing a business model depend on this basic question: how can a sustainable competitive advantage be created and how are extraordinary profits obtained? In sum, a business model states the way a company creates value for customers and then, it changes payments made by customers into profit. To make an innovation profitable, business pioneer

must be superior not only in innovating products, but also in designing business model, understanding business design options and also customer's demands and technology.

Hence, the three first hypotheses of the research are as follows:

H1: Change in value creation approach of an organization is one of the strategic agility dimensions.

H2: Change in the approach of value delivery to customers is one of the strategic agility dimensions of an organization.

H3: Change in value capture approach (earning income from the created value) is one of the strategic agility dimensions.

Gaining Competitive Advantage through Business Model

Any business uses a model that explicitly or implicitly describes the design and architecture of its value creation. Development of a successful business model is not possible to ensure competitive advantage due to imitability. However, a distinct and effective business model (that is hardly imitable) is more likely to make profit. Innovation of a business model that is different and hardly imitable can be the path to the competitive advantage. Business model is a conceptual model with implicit assumptions about customers, income and expenses, variable

nature of users' needs, and likely responses of competitors (Teece, 2010).

In economic theories, it is implicitly assumed that there is no need to be concerned about the design of value for customer or income and expense structure or mechanism of value capture. Customers buy if the price of a good is less than its profitability. Producers supply when the good's price covers its production costs and the pricing system solves all problems and no business design issue emerges. In sum, formation of business models for a new or existing business or product is an unnecessary step in classical texts (Eichenet *al.*, 2015).

So, how can we consider the business model as the basis of competitive advantage creation?

First, implementation of a business model may need systems, processes and assets that cannot be provided easily. Second, the uncertainty in details of a business model may create challenges for other companies to understand and implement it. Third, even if details of a model are transparent, changes in current value-creating structures and processes are accepted less due to its risks. For this reason, a pioneer of a business model can continue its activity with no proper response of competitors (Giesenet *al.*, 2010).

Knowledge of a business model is accumulated in an organization gradually and while competitors don't access the source of knowledge, competitive advantage and superior performance is guaranteed. Therefore, it can be concluded that the necessary knowledge to apply a business model to the operational body of an organization has been developed and the main factor of competitive advantage is to transfer operational knowledge to the strategic level and use it as a competitive weapon (Teece, 2010). As it was mentioned before, the evolutionary reality that affects customers, society and cost structure of business must be understood (Ortega et al., 2014). In sum, basic facts about customers' expectations, evaluations of customers, nature and likely behavior of costs and capability of competitors are needed when designing a successful business model commercially. Generally, when basic technology of a business changes and the logic accepted to achieve customers' satisfaction changes, the business model must change too. To overcome the inflexibility due to a business model accepted by a firm, agility is required that is obtained through three meta-capabilities: strategic sensitivity, resources fluidity and collective commitment (Doz&Kosonen, 2010).

Strategic Sensitivity

What pioneers of business models gain or develop is to understand some "deep facts" about essential needs of consumers, status of competitors in terms of satisfaction of those needs and the possibility of organizational and technological improvement (Johnson *et al.*, 2008).

Entrepreneurs that understand "deep" facts and form what customers want and try to increase their satisfaction are business pioneers and understand organizational logic (Johnson *et al.*, 2008).

Entrepreneurs and managers must have intelligent assumptions about future behaviors of customers, competitors and costs (Roscaet *al.*, 2016). As a result, a company can use the advantage of being a pioneer and benefit most from the changing market opportunities where the benefits are short-term (Ojha, 2008).

Market acumen provides the ability to predict customer's needs and movement of competitors. Therefore, market acumen enables a company to be more sensitive to the taste and preferences of customer (Ojha, 2008). Close relationships with customer enable the company to search for information on customer's preferences and needs and hence, it will be responsive. The insight gained by strong relationships with customers is used to increase operational effectiveness and cost efficiency, because members of organization agree on the

vision of the company and can take effective measures (Agarwal *et al.*, 2003).

Collective Commitment

General readiness for change shows perception of organization's members about the need to change and their self-efficacy in management of change. Therefore, when an organization is ready to change, it perceives the need to change and is sure about its ability for management of change. Readiness to change occurs only if senior managers recognize the need to change and are committed to support in case of changes. In addition, in an organization that is ready to change, employees must be aware of individual attractiveness of attempt to change. In other words, individual attractiveness depends on personal interests due to attempt to change. Therefore, support of senior management, individual attractiveness, self-efficacy and awareness of the attempt to change are combined to motivate the employees to try for management of change.

Hence, employees in an organization that is ready to change tend to modify their working method to adapt environmental changes. Armnakiset *al.* (1993) state how there is resistance to change when an individual is not ready to change. This is due to the perception of decrease in self-efficacy by some employees that are not ready to change mentally (Ojha, 2008).

Thus, the attempt and motivation of an organization that is ready to change are higher than an organization that is not ready to change and the organization that is ready to change can adapt to the change. Moreover, the readiness to change enables an organization to involve in a new form, because the employees of the organization accept new relations more. As a result, the formation of new cooperation will be simpler (Miller, 2010).

Resources Fluidity

Strategic agility refers to the ability of a company to achieve new forms of competitive advantages by revising organizational capacities and abilities according to business environment. These capabilities are dynamic, because companies must build, adapt and reconfigure internal and external capacities in an environment where time to market and time to produce are vital, rate of technological changes is rapid and it is difficult to determine the nature of competition and future market (Teece et al., 1997). Key resources of assets are needed to present value proposition to the target customer, such as individuals, technology, products, facilities, equipment, channels or brand. Here, the focus is on key elements creating value for customer and company and the way the elements interact with each other (Vecchiato, 2014).

Therefore, resources fluidity is the ability of an organization to cooperate with customers and partners of its business network in quick and continuous reconfiguration of the mixture of capabilities to form an innovative movement with relative facility. The increase in responsiveness of a company is achieved mainly through infrastructures, systems and processes of business structured for it. Agile companies can reorganize and even reconfigure to invest in immediate and maybe temporary opportunities of market (Bernardes and Hanna, 2009).

So, the next hypotheses of the research are as follows:

H4: Strategic sensitivity positively affects strategic agility.

H5: Collective commitment positively affects strategic agility.

H6: Resources fluidity positively affects strategic agility.

H7: Strategic agility positively affects the bank's performance.

Methodology

The present study is descriptive and has an applied purpose. The population is active banks in Iran and one person was selected from any bank to answer the questionnaire. This person was manager, head or deputy of department at least with five years of experiences and with a bachelor's degree

in management or economics or higher that was active in management or administration of projects of strategic planning of the bank. Based on previous information, we assumed that the selected sample is aware of bank agility. Hence, the purposive sampling is used in this research. The questionnaire of the study was extracted from different researches after analyzing the related texts. All used measures were not presented for banking originally. However, questions of the research and the measured concepts were related to the field of study. Hence, a source of questions related to the variables of the research was determined. When the source was created, items of different constructs were reexamined to delete vague and repeated matters. The remaining questions were arranged randomly and two experts were asked to arrange the items of the questionnaire in separate constructs based on the classification. Also, items that could not be classified in any groups were put into a separate group. Based on the classifications, Cohen's kappa coefficient was 65% and the hit rate was 69%. According to the hit rate of any construct, the questions with improper or vague words were deleted or rewritten. In this stage, two purposes were followed: identification of any ambiguity and initial evaluation of the construct validity of the measures developed. In this stage, 7

questions were removed and 11 questions were also modified slightly. The modified questions were presented to two independent experts to repeat the process. As the process repeated, Cohen's kappa coefficient was 82% and the hit rate was 81%.

All four experts mentioned above had at least five-year experience in the management of bank plans. Before arrangement, instruction, the way of arrangement and purpose of the study were explained to the experts in person, showing the satisfactory reliability of arrangement (Nahmet *al.*, 2002). Factor analysis was used to examine the construct validity.

The number of Iranian Banks active in the country is 30. As it was mentioned, these banks form the population of the study. PLS Software was used to analyze the questionnaire data according to the number of banks and the conceptual model of the research including second-order latent variable. Since the sample size is determined in PLS-SEM based on OLS regression, researchers can use size estimation rules presented by Cohen (1992) to analyze the statistical power for multiple regression models. Table 1 shows the minimum sample size required to determine the minimum R² including 0.10, 0.25, 0.50 and 0.75 in any endogenous structure in the structural model for levels

of significance 1%, 5% and 10% with the statistical power assumption 80% and a certain level of sophistication of PLS path

model (for example, the number of arrows to a construct in PLS path model) (Hair et al., 2014).

Table 1 The Proposed Sample Size in PLS-SEM for the Statistical Power 80%

Number of Arrows to a Construct	Level of Significance											
	1%				5%				10%			
	Minimum R2				Minimum R2				Minimum R2			
	0.10	0.25	0.50	0.75	0.10	0.25	0.50	0.75	0.10	0.25	0.50	0.75
1	158	75	47	38	110	52	33	26	88	41	26	21
2	176	84	53	42	124	59	38	30	100	48	30	25
3	191	91	58	46	137	65	42	33	111	53	34	27
4	205	98	62	50	147	70	45	36	120	58	37	30
5	217	103	66	53	157	75	48	39	128	62	40	32
6	228	109	69	56	166	80	51	41	136	66	42	35
7	238	114	73	59	174	84	54	44	143	69	45	37
8	247	119	76	62	181	88	57	46	150	73	47	39
9	256	123	79	64	189	91	59	48	156	76	49	41
10												

As Table 1 shows, at the level of significance 0.05 and the level of complexity 3 (maximum number of arrows to the construct), if the minimum R^2 is 0.75, the required sample size is 30 that is equal to the sample size of the research.

Findings

To analyze the research data, various analyses are used. First, convergent and divergent validity and coefficient of

correlation between variables of the research are examined. Then, the construct validity of the questions is examined using confirmatory factor analysis. Finally, the hypotheses are tested using PLS.

Table 2 shows validity and reliability of variables of the research. The acceptable level of factor loadings is 0.5. According to Figure 1, all factor loadings of the questions are larger than 0.6. Hence, it is not necessary to delete them.

Table 2 Validity and Reliability Indices

	AVE	Composite Reliability	R Squared	Cronbach's Alpha	Shared Values
Strategic Agility	0.59	0.92	0.75	0.9121	0.59
Collective Commitment	0.61	0.82	0	0.6799	0.61
Performance	0.66	0.85	0.83	0.7371	0.66
Resources Fluidity	0.52	0.76	0	0.5533	0.52
Strategic Sensitivity	0.54	0.77	0	0.7487	0.54
Value Capture	0.61	0.82	0.86	0.6821	0.61
Value Creation	0.70	0.87	0.94	0.7871	0.70
Value Delivery	0.68	0.86	0.87	0.7629	0.68

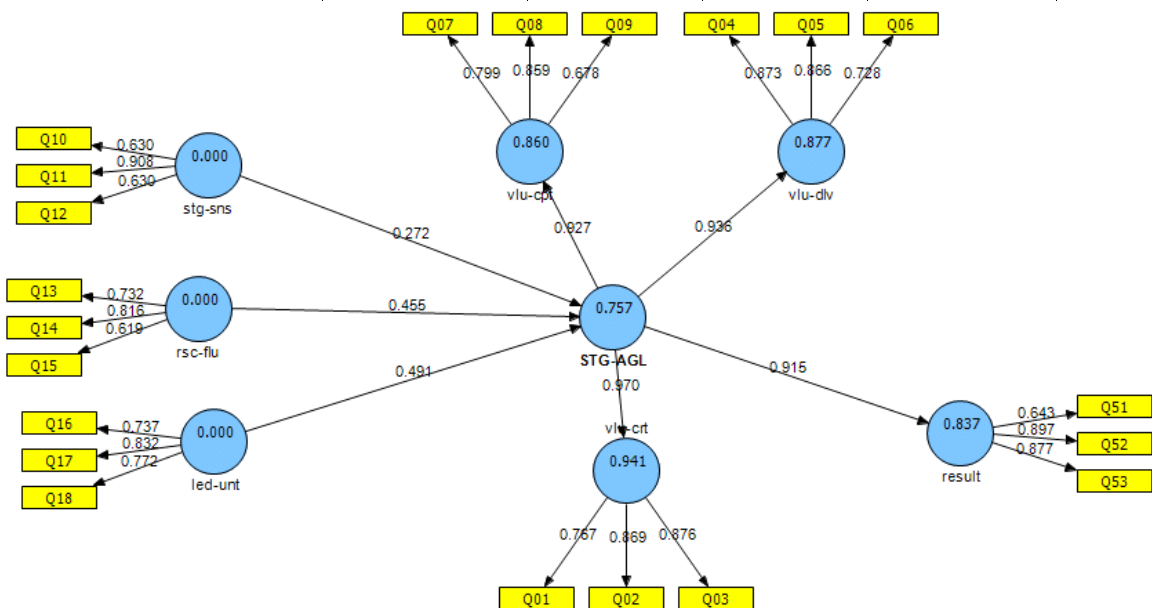


Fig 1SEM in the Case of Path Coefficients

For Cronbach's alpha, the variable "resources fluidity" has the minimum value (0.55) as in the table above. Normally, the value 0.7 is chosen to ensure convergent validity. However, the range from 0.5 to 0.6 is accepted for exploratory works (Aranda, 2003). The values obtained show that the convergent validity

of the measurement instrument is acceptable. Composite reliability coefficients are also above 0.7, supporting the appropriate fit of the measurement models. For the second-order latent variable "strategic agility", CR and AVE are calculated as follows:

$$CR(\text{strategic agility}) = \frac{(0.927 + 0.969 + 0.936)^2}{(0.927 + 0.969 + 0.936)^2 + (0.139 + 0.059 + 0.123)} = 0.961$$

Convergent validity is examined with AVE of variables and as it is shown in the table, AVE is above 5.0 for all first-order variables, showing suitable convergent

validity of all first-order latent variables. AVE of the second-order latent variable "operational agility" is as follows:

$$\text{AVE (operational agility)} = \frac{0.927^2 + 0.969^2 + 0.936^2}{3} = 0.892$$

After confirming validity and reliability of measures of the constructs, the results of the structural model are evaluated, which shows how latent variables are connected to each other. However before this stage, the collinearity of the structural model must be tested. Collinearity shows that an independent variable is a linear function of other independent variables. If collinearity is high in a regression equation, it shows that there is a high correlation between independent variables and the validity of the model is suspicious. VIF (Variance

Inflation Factor) is used to examine the collinearity of the constructs. If the value of the criterion is equal to 5 or above it for a construct, at least 80% of the value defined by the construct is explained by other constructs. Therefore, there is no need to keep the construct in the model.

In our proposed model, the collinearity of the variables including strategic sensitivity, resources fluidity and collective commitment as independent variables of strategic agility must be evaluated. Table 3 shows the calculated VIFs.

Table 3 Variance Inflation Factor

Dependent Variable:	Independent Variable	t	Sig.	Tolerance	VIF
Strategic Agility	Collective Commitment	4.729	0.000	0.875	1.143
	Resources Fluidity	4.441	0.000	0.917	1.090
	Strategic Sensitivity	2.611	0.015	0.828	1.208

As it is observed, all VIFs are less than 5 and the collinearity between predictor

variables is not significant in the structural model. So, analysis of the structural model

can be performed without merging or removing the constructs.

Significance factors Z are all above 1.65, showing the significance of the relationship between variables at the level of confidence 90%. In addition, the relations between latent variables related to strategic agility and its dimensions are above 2.57, showing that the main variable is explained by its dimensions properly. Also, all R^2 values related to the

$$GoF = \sqrt{\overline{communalities} * \overline{R^2}}$$

Where *communalities* is obtained from the average shared values of the first-order latent variables, i.e. shared values of collective commitment, performance, resources fluidity, strategic sensitivity, value capture, value creation and value delivery, are obtained and $\overline{R^2}$ takes

$$\overline{communalities} = 0.619 \text{ and } \overline{R^2} = 0.854$$

According to the three values 0.10, 0.25 and 0.36 as weak, medium and strong respectively for GoF, the value 0.727 for GoF shows the strong fit of the model of

endogenous variables of the model are equal to 0.67 or above it, showing the strong fit of the structural model. Also, all R^2 values of the endogenous variables of the model are equal to 0.67 or larger than it, showing the strong fit of the structural model.

To examine the overall fit of the model that controls measurement and structural modes, GoF is calculated as follows:

average values of R^2 related to the first and second order endogenous latent variables into account, including strategic agility, performance, value capture, value creation and value delivery. Their values are presented in Table 2. The values obtained are as follows:

the research. In Table 4, the overall effect of the exogenous constructs is indicated on organizational performance and other latent variables.

Table 4 Significance Test of Structural Model Results

Path	Path Coefficient	t-values	Significance	Error Probability
Strategic agility->performance	0.91	36.0	***	0.000%
Collective commitment->strategic agility	0.49	4.4	***	0.013%
Resources fluidity ->strategic agility	0.45	4.2	***	0.020%
Strategic sensitivity->strategic agility	0.27	2.3	**	2.459%
Strategic agility->value capture	0.92	45.2	***	0.000%
Strategic agility->value creation	0.96	99.8	***	0.000%
Strategic agility->value delivery	0.93	38.8	***	0.000%
Collective commitment->performance	0.44	4.2	***	0.019%
Resources fluidity ->performance	0.41	4.1	***	0.027%
Strategic sensitivity->performance	0.24	1.7	*	8.463%

*p<0.10, **p<0.05, ***p<0.01

So, Table 4 confirms the relationship between constructs of the model (structural section) and hypotheses of the research are supported. As data of the table show, the relationship between strategic sensitivity and strategic agility and that between strategic sensitivity and performance are significant at the level of confidence 95% and 90%, respectively.

Conclusion and Suggestions

Updating central capabilities of a firm is the basic factor of the life of organizations in turbulent environments. Meanwhile, the role of business model is undeniable as a framework showing the firm's capabilities.

The main purpose of the present research was to analyze the causal role of strategic agility on organizational performance and determine its dimensions and factors. For this purpose, general dimensions of value creation, value delivery and value capture were introduced as strategic capabilities of the firm, which must update its central capabilities under this framework. However, achievement of these central capabilities was tested through three basic factors including strategic sensitivities, resources fluidity and collective commitment.

Findings of the research show that respondents agree on the issue that the

change in approaches of value creation, value delivery and value capture is equivalent to the change in business model or agility at the strategic level. Hence, hypotheses related to the dimensions of strategic agility are supported. In other words, if a bank wants to change its business model, it must apply certain changes to the three dimensions mentioned above.

Value creation refers to products and services presented by a bank for which a client is ready to pay. In fact, it includes values provided by the bank to the client, and includes features of the provision:

- Change in approach of new product delivery (external companies)
- Change in knowledge creation approaches
- Change in the delivered value (creation of value from collateral properties for non-current assets, facility in the interaction between different groups of customers, provision of value pack (service) instead of a certain service to customer, provision of a wide range of services instead of a narrow range of services)

Value delivery refers to the target market of the bank. It also refers to the relationships built with target customers.

- Modern advertising approach (outsourcing advertisement and payment through percentage of sales increase, advertisement in exchange for free services)
- New procedure for service provision or sales channel (e.g. using in-person service provision channels apart from branches, using branches as the channel of non-bank service provision, sales by customer-pyramid companies, etc.)
- Customer segmentation (change of target customers or the way service is provided to different segments of customers- e.g. production without brand and packaging by different companies to cover all segments of market, activity in a new segment ignored by the industry).

Finally, value capture refers to the amount and the way customers are ready to pay for the services provided.

- New approaches of products and services pricing (discount system, reverse auction, demand-based pricing and change in pricing strategies, etc.)
- New approaches of income model (provision of a free product to customer and only getting the amount of accessories,

independence of branches in terms of loss and profit)

- New approaches of cost management (using the customer for cost reduction such as self-service automation)

The results support the main hypothesis of the research. In other words, strategic agility affects performance. All hypotheses related to agility dimensions and those related to agility factors were also supported. Also, the results of the study show that the most important factor to achieve strategic agility is collective commitment, and a firm that intends to be successful in three dimensions of agility mentioned above needs to be successful in three following measures: managers' perception of objectives and using it to lead decisions on commercial progress, managers' support of change, and managers' agreement on principles directing the employees' behavior in performing banking activities. Also, "managers' support of change" has the most important effect on collective commitment among three measures mentioned above. In regard to the direct effect of agility factors on organizational performance, we showed that collective commitment has the highest effect on organizational performance and the next ranks belong to resources fluidity and strategic sensitivity.

The results obtained in the study are very important to understand the strategic agility better and it is worthy to note that generalization of the results of the research to other fields must be performed cautiously according to the limitations of the study in which only active banks in Iran were taken into account. In addition, results obtained with larger populations and in other fields can be an attractive subject for future research. In other words, it can be said that the commitment of senior managers is very effective in the success of the adoption of a new value creating model in a bank. Together with the change in the pattern of resources distribution along with the committed change, the commitment can lead to the desired result in value creation and capture. In addition, although perception of market evolutions has the lowest effect on the change in business model, its effect is significant. For this reason, it is recommended that managers follow certain processes to observe market evolutions.

Similar researches on the dimensions of strategic agility, the impact of market orientation on strategic agility, the moderating role of knowledge management, the impact of agility on innovation, the impact of agility on competitive capabilities and performance and, the role of information systems on

strategic agility, the impact of strategic thinking of managers on marketing performance, the effect of sensitivity to market changes on strategic flexibility, the impact of resource flexibility on innovation and performance (Li, Su, & Liu, 2010), as well as the impact of asset management on strategic agility, the role of corporate leadership in changing business models and in other economic sectors, also confirm in part the findings of this study.

The results obtained in the present study are very important to understand the strategic agility better and its limitations must be taken into account.

The first imitation of the research is related to generalization of the results to different populations. Besides the limited populations of the research, i.e. banks of the country, the industrial banking field also contributes to its limitations. Also, the low number of respondents affected the analysis method and software used. In fact, the most important reason of using PLS method for analyzing data of the questionnaire was the number of respondents.

It must be noted that although a survey aims at maximizing the generalization, its measurement accuracy and text realism are low. Since the present study has a cross-sectional design, assumptions cannot be proved to test stability, causality and

dynamics. In addition, it is not easy to ensure the qualification of respondents, especially when answers are anonymous. Finally, another limitation that affects the results is the economic downturn in Iran's economy and its problems that involved banks of the country. At present, banks spend lower budgets for R&D activities and are more focused on affairs such as reduction of non-current facilities. In other words, most banks are active with a defensive approach rather than an aggressive approach, and their main problem is competitions based on the interests paid to the clients rather than the services provided. Currently, banks are faced with a fatal competition over the interest paid to the clients to absorb more deposits, and this has led to payment of facilities with no strong validation. All of these issues have exposed the banks to unsuitable emergency situations and made them not to prioritize investment in new activities and projects that can be profitable in long term.

References

- [1] Hair, J. J., M. Hult, G. T., Ringle, C. M., & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* United States of America: SAGE Publications, Inc.
- [2] Sherehiy, B. (2007). A Review of Enterprise Agility: Concepts, Frameworks, and Attributes, *International Journal of*

Industrial Ergonomics, NO. 37, Pp. 445–460.

[3] Bernardes, Ednilson Santos & Hanna, Mark D. (2009). A Theoretical Review of Flexibility, Agility and Responsiveness in the Operations Management Literature: Toward a Conceptual Definition of Customer Responsiveness, *International Journal of Operations & Production Management*, Vol. 29, Pp. 30 - 53

[4] Agarwal, S., Erramilli, M. K., & Dev, C. S., (2003). Market Orientation and Performance in Service Firms: Role of Innovation. *Journal of Services Marketing*, Vol. 17 Iss: 1, Pp. 68 - 82.

[5] Vázquez-Bustelo, Daniel, Avella, Lucía & Fernández, Esteban (2007). Agility Drivers, Enablers and Outcomes: Empirical Test of an Integrated Agile Manufacturing Model, *International Journal of Operations & Production Management*, Vol. 27 No. 12 Pp. 1303-1332

[6] Aranda, D. A., (2003). Service Operations Strategy, Flexibility and Performance in Engineering Service Operations Strategy. *International Journal of Operations & Production Management*, Vol. 23 No. 11, Pp. 1401-1421.

[7] Arman, M., & Musavi, S. J., (2015). 'Investigating the Impact of Strategic Agility on Strategic Innovation'. First International Conference on Economics, Management, Accounting, Social Sciences. Mashhad: Iranian Management Association, Atrak Research Group.

[8] Abdullah, Firdaus, Suhaimi, Rosita, Saban, Gluma & Hamali, Jamil (2011). Bank Service Quality (BSQ) Index: An Indicator of Service Performance, *International Journal of Quality & Reliability Management*, Vol. 28 Iss 5, Pp. 542 - 555

[9] Bask, A. H., Tinnila, M., & Rajahonka, M., (2010). Matching Service Strategies, Business Models and Modular Business Processes. *Business Technology/Logistics*, Vol. 16, No. 1, Pp. 153-180.

[10] Bitner, M. J., Faranda, W. T., Hubbert, A. R., & Zeithaml, V. A., (1997). Customer Contributions and Roles in Service Delivery. *International Journal of Service Industry Management*, Vol. 8, No. 3, Pp. 193-205.

[11] Rosca, Eugenia, Arnold, Marlen & Bendul, Julia C. (2016). Business Models for Sustainable Innovation e an Empirical Analysis Business Models for Sustainable Innovation e an Empirical Analysis. *Journal of Cleaner Production* 1-13

[12] Teece, David J. (2010). Business Models, Business Strategy and Innovation. *Long Range Planning* No. 43, Pp. 172-194

[13] Chen, L.J., Chen, C.C., & Lee, W.R., (2008). Strategic Capabilities, Innovation Intensity, and Performance of Service Firms. *J. Serv. Sci. & Management*, 2008, 111-122.

[14] Combe, I. A., & Greenley, G. E., (2004). Capabilities for Strategic Flexibility: a Cognitive Content Framework. *European Journal of Marketing*, Vol. 38 No. 11/12, Pp. 1456-1480.

[15] von der Gracht, Heiko A. (2012). Consensus Measurement in Delphi Studies Review and Implications for Future Quality Assurance. *Technological Forecasting & Social Change*, NO. 79 1525–1536

[16] Vecchiato, Riccardo (2014). Creating Value through Foresight: First Mover Advantages and Strategic Agility. *Technological Forecasting & Social Change*.

- [17] De Toni, Alberto & Tonchia, Stefano (2005). Definitions and Linkages between Operational and Strategic Flexibilities. *Omega*, NO.33, Pp. 525 – 540.
- [18] Teece, David J., Pisano, Gary & Shuen, Amy (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, Vol. 18, No. 7. Pp. 509-533
- [19] Doz, Yves L. & Kosonen, Mikko (2010). Embedding Strategic Agility A Leadership Agenda for Accelerating Business Model Renewal. *Long Range Planning*, No. 43 Pp. 370-382
- [20] Li, Yuan , Su, Zhongfeng , Liu, Yi & Li, Mingfang (2011). Fast Adaptation, Strategic Flexibility and Entrepreneurial Roles. *Chinese Management Studies*, Vol. 5, Iss 3, Pp. 256 – 271,
- [21] Aversa, Paolo , Haefliger, Stefan , Rossi, Alessandro & Baden-Fuller, Charles (2015). From Business Model to Business Modeling: Modularity and Manipulation. *Advances in Strategic Management*, Vol. 33, Pp. 151-185.
- [22] Grawe, S. J., Chen, H., & Daugherty, P. J., (2009). The Relationship between Strategic Orientation, Service Innovation, and Performance. *International Journal of Physical Distribution & Logistics Management*, Vol. 39 Iss: 4, Pp. 282 - 300.
- [23] Grewal, R., & Tansuhaj, P., (2001). Building Organizational Capabilities for Managing Economic Crisis: The Role of Market Orientation and Strategic Flexibility. *Journal of Marketing*, Vol. 65, No. 2, Pp. 67-80.
- [24] Harvey, J., Lefebvre, L., & Lefebvre, E., (1997). Flexibility and Technology in Flexibility and Technology in. *International Journal of Operations & Production Management*, Vol. 17, No. 1, Pp. 29-45.
- [25] Idris, W. M., & AL-Rubaie, M. T., (2013). Examining the Impact of Strategic Learning on Strategic Agility. *Journal of Management and Strategy*, Vol. 4, No. 2, <http://dx.doi.org/10.5430/jms.v4n2p70>.
- [26] Ojha, Divesh (2008). *Impact of Strategic Agility on Competitive Capabilities*. Clemson University
- [28] Javalgi, R. , Whipple, T. W., & Ghosh, A. K., (2005). Market Orientation, Strategic Flexibility, and Performance: Implications for Services Providers. *Journal of Services Marketing* 19/4.
- [29] Johnson, J. L., Lee, R. P.-W., & Saini, A., (2003). Market-Focused Strategic Flexibility: Conceptual Advances and an Integrative Model. *Journal of the Academy of Marketing Science*. Vol. 31, No. 1, Pp. 74-89.
- [30] Li, Y., Su, Z., & Liu, Y.,. (2010). Can Strategic Flexibility Help Firm Profit from Product Innovation? *Technovation*, No. 30, Pp. 300–309.
- [31] Long, C., (2000). Measuring Your Strategic Agility. *Consulting to Management*; Vol. 11, No 3, Pp. 25-29.
- [32] Moon, B.J., (2013). Antecedents and Outcomes of Strategic Thinking. *Journal of Business Research* 66, 1698–1708.
- [33] Nahm, A., Rao, S., Solis-Galvan, L., & Ragu-Nathan, T., (2002). The Q-Sort Method: Assessing Reliability and Construct Validity of Questionnaire Items at A Pre-Testing Stage. *Journal of Modern Applied Statistical Methods*, Vol. 1, No. 1, Pp. 114-125.
- [34] Menor, Larry J. & Roth, Aleda V. (2007). New Service Development Competence in Retail Banking: Construct Development and Measurement Validation. *Journal of Operations Management*, No. 25 PP. 825–846.

- [35] Nielsen, C., & Lund, M., (2014). *Business Model Design Networking, Innovating and Globalizing*. Bookboon.
- [36] Oosterhout, M. V., (2010). *Business Agility and Information Technology in Service Organizations*. Erasmus University Rotterdam.
- [37] Overby, E., Bharadwaj, A., & Sambamurthy, V., (2006). Enterprise Agility and the Enabling role of Information Technology. *European Journal of Information Systems*, Pp.120–131.
- [38] Price, D., Beach, R., Muhlemann, A., Sharp, J., & Paterson, A., (1998). A System to Support the Enhancement of Strategic Flexibility in Manufacturing Enterprises. *European Journal of Operational Research*. No. 109, Pp. 362-376.
- [39] Johnson, Mark W., Christensen, Clayton M. & Kagermann, Henning (2008). Reinventing Your Business Model, *Harvard Business Review*.
- [40] DOVE, RICK (2001). *Response Ability the Language, Structure, and Culture of the Agile Enterprise*. New York: John Wiley & Sons, Inc
- [41] Roth, A. V., (1996). Achieving Strategic Agility through Economies of Knowledge. *Planning Review*, Vol. 24 Issue: 2, Pp.30-36.
- [42] Santos-Vijande, M. L., López-Sánchez, J. Á., & Trespalacios, J. A., (2012). How Organizational Learning Effects a Firm's Flexibility, Competitive Strategy, and Performance. *Journal of Business Research* 65, Pp. 1079–1089.
- [43] miller, jozeph c. (2010). *Service Agility A Crucial Component of Service Strategy*. Michigan State University.
- [44] Brozovic, Danilo, Nordin, Fredrik & Kindström, Daniel (2016). Service Flexibility: Conceptualizing Value Creation in Service. *Journal of Service Theory and Practice*, Vol. 26, Iss 6, Pp. 868 – 888.
- [45] Corrêa, Henrique Luiz & Gianesi, Irineu Gustavo N. (1994). Service Operations Flexibility, International Conference of the European Operations Management Association.
- [46] Aranda, Daniel Arias (2003). Service Operations Strategy, Flexibility and Performance in Engineering Service Operations. *International Journal of Operations & Production Management*. Vol. 23 No. 11, Pp. 1401-1421
- [47] Smith, W. K., Binns, A., & Tushman, M. L., (2010). Complex Business Models: Managing Strategic Paradoxes Simultaneously. *Long Range Planning* 43, 448e461.
- [48] Lau, R.S.M. (1996). Strategic Flexibility: A New Reality of World-Class Manufacturing. *Advanced Management Journal*, V. 61, (2), Spring, Pp. 11-15
- [49] Taran, Y., Nielsen, C., Montemari, M., Thomsen, P., & Paolone, F., (2016). Business Model Configurations: a Five-V Framework to Map Out Potential Innovation Routes. *European Journal of Innovation Management*, Vol. 19 Iss 4, Pp. 492 - 527.
- [50] Teece, D. J., Pisano, G., & Shuen, A., (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, Vol. 18, No. 7, Pp. 509-533.
- [51] Ortega, Salvael, Furr, Nathan, Liman, Erin & Flint, Caleb (2014). The Science of Social Impact Innovation: How to Deliver More Impact through Innovative to Deliver More Impact through Innovative. *International Journal of Innovation Science*, Vol. 6, No. 2, Pp.73-83.
- [52] Trethowan, J., & Scullion, G. (1997). Strategic Responses to Change in Retail

Banking in the UK. *International Journal of Bank Marketing* 15/2, Pp. 60–68.

[53] Waldner, F., Poetz, M. K., Grimpe, C., & Eurich, M., (2015). Antecedents and Consequences of Business Model Innovation: The Role of Industry Structure. *Advances in Strategic Management*, Vol. 33, Pp. 347-386.

[54] Wall, S., Zimmermann, C., Klingebiel, R., & Lange, D., (2010). *Strategic Reconfigurations Building Dynamic Capabilities in Rapid Innovation-based Industries*. Cheltenham: Edward Elgar Publishing, Inc.

[55] Giesen, Edward, Riddleberger, Eric, Christner, Richard & Bell, Ragna (2010). When and How to Innovate Your Business Model. *Strategy & Leadership*, Vol. 38 Iss 4 Pp. 17 - 26

[56] von den Eichen, Stephan Friedrich, Freiling, Joerg and Matzler, Kurt (2015). Why Business Model Innovations Fail? *Journal of Business Strategy*, Vol. 36 Iss 6 Pp. 29 - 38

[57] Wyer, P., Wyer, P., & Matthews, P., (2010). Fostering Strategic Learning Capability to Enhance Creativity in Small Service Businesses. *Serv Bus* 4:9–26 , DOI 10.1007/s11628-009-0086-2.

[58] Yeung, J. H., Selen, W., Sum, C.-C., & Huo, B., (2006). Linking Financial Performance to Strategic Orientation and Operational Priorities. *International Journal of Physical International Journal of Physical*, Vol. 36 No. 3, Pp. 210-230.

[59] Zhang, M. J., (2005). Information Systems, Strategic Flexibility and Firm Information Systems, *J. Eng. Technol. Manage.* 22, 163–184.

بررسی عوامل و قابلیت‌های چابکی استراتژیک و تأثیر آن بر عملکرد سازمانی: بانک‌های ایران به عنوان نمونه

مهدی اورجلو^۱، کامران فیضی^۲، مریم حجتی نجف‌آبادی^۳

تاریخ پذیرش: ۱۳۹۶/۷/۷

تاریخ دریافت: ۱۳۹۵/۶/۹

چکیده

تحولات فضای کسب کار، ظهور رقبای پر قدرت، تغییرات سریع تکنولوژیک، تغییر انتظارات مشتریان، الگوهای جدید اجتماعی و... باعث شده تا بنگاه‌ها نیازمند بازنگری‌های مداوم در استراتژی‌های خود باشند. قابلیت یک بنگاه در اجماع روی تغییر، درک فرصت‌ها و بازشکل‌دهی منابع خود می‌تواند آن را قادر به تغییر مناسب جهت‌گیری‌های استراتژیک کند. جهت‌گیری‌های جدید نیازمند تعریف منطق جدید کسب ارزش برای بنگاه است که در سه محور خلق، ارائه و تصرف ارزش خود را نمایان خواهد ساخت. در این تحقیق برآنیم تا با بررسی دقیق‌تر مفهوم چابکی استراتژیک تأثیر آن بر عملکرد سازمان را مورد توجه قرار دهیم. جامعه آماری این پژوهش بانک‌های ایرانی با حداقل سابقه فعالیت پنج سال در این صنعت، هستند. با توجه به ماهیت اکتشافی این تحقیق، پس از مطالعه ادبیات موضوع در حوزه چابکی، عوامل و ابعاد چابکی استراتژیک شناسایی شده و برای سنجش تأثیر آن بر عملکرد سازمانی، با توجه به محدودیت‌های نمونه مورد مطالعه از مدل‌سازی معادلات ساختاری به روش PLS استفاده شد. یافته‌ها نشان می‌دهد، چابکی استراتژیک بر عملکرد سازمانی تأثیر مثبت و معنا دار دارد. همچنین در میان عوامل تأثیر گذار بر چابکی استراتژیک، تعهد جمعی، بیشترین تأثیرگذاری بر عملکرد سازمانی را داراست.

واژه‌های کلیدی: چابکی استراتژیک، مدل کسب و کار، حساسیت استراتژیک، انعطاف‌پذیری منابع، تعهد جمعی

۱. دانشجوی دکتری، دانشگاه علامه طباطبایی، تهران (نویسنده مسؤل).

۲. استاد گروه مدیریت صنعتی، دانشگاه علامه طباطبایی، تهران، ایران.

۳. دانش‌آموخته کارشناسی ارشد دانشگاه تهران، تهران.