The effect of dynamism and entrepreneurship on the sustainable performance of subsidiaries in the Tehran Stock Exchange with the effect of the mediating role of competitive advantage

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Abstract **The aim of this study was to investigate the effect of dynamic capabilities and entrepreneurial orientation on firm performance by explaining sustainable competitive advantage. The present study is applied in terms of purpose. The purpose of this research is to develop applied knowledge in a specific field and is done in a form of descriptive-survey method. The study population is all companies listed on the Tehran Stock Exchange. In this study, Klein method and 200 people were used to determine the sample size of the researcher. The method of data analysis in the field of demographic variables or descriptive statistics with SPSS software and in the field of inferential statistics is structural equation modeling which is done with Smart PLS software. The results indicate that in the first hypothesis, according to the**

value of t = 9.259 and the value of p = 0.000, the hypothesis was confirmed. In other words, dynamic capabilities affect sustainable competitive advantage. Moreover, in the second hypothesis, according to t = 3.284 and the value of p = 0.001, the hypothesis was confirmed. In other words, entrepreneurial orientation has an effect on sustainable competitive advantage.

Introduction

In this world, due to the instability of the business environment and the existence of different potentials of finance, technology, and specialized manpower, there is this idea of merging small organizations and running a working group as a holding organization in order to make optimal use of the capabilities of each organization and market (Saidi Rad and Alishiri, 2020). In general, holding companies were established with the aim of increasing efficiency and improving relations and creating synergies between the parent organization and its subsidiaries in order to maintain survival and gain more market share (Jalali et al., 2021; Mehrabanpour et al., 2020). The issue that is important during this period is how to manage, organize and organizational structure of such organizations and try to improve the relationship between the parent organization and its subsidiaries so that organizations can remain competitive in the markets and have a role play (Saidi Rad and Alishiri, 2020; Jalali et al., 2021).

A review of the literature reveals that although studies on dynamic capabilities have increased, these studies have been largely conceptual and there are major issues that due to the complexity of the nature of the structure, empirical evidence is unclear such as the effects of dynamic capabilities on firm's performance. Because there is a positive and direct relationship between dynamic capabilities and firm's performance, which has been presented in previous conceptual studies, have a little empirical support (Hernandez-Linares et al., 2020). There is also very little research on mediation mechanisms and the effects of

dynamic capabilities on the performance of organizations (Zhou et al., 2019). In this regard, it seems necessary to combine mediating mechanisms in the relationship between dynamic capabilities and performance (Khan et al., 2020). In addition, although previous research has attempted to examine the effect of entrepreneurial orientation with sustainable competitive advantage, this relationship has not been sufficiently studied. In general, the study of the effect of entrepreneurial orientation on sustainable competitive advantage has focused on the industries of large and developed countries. Therefore, it must be defined whether these findings will be validated in the industries of developing countries with a unique background or they will be applied in principle (Febrian et al., 2018). In addition, previous studies have focused more on the resource-based perspective of intangible assets (Sulistyo & Ayuni, 2020). Given that studies to date have shown inconsistent and inconclusive empirical evidence on the relationship between entrepreneurial orientation and firm performance, studies that have examined the impact of entrepreneurial orientation on firms' business performance, suggest that this relationship may be surrounded by potential and interventionist mechanisms. Also, the theoretical literature on entrepreneurial action processes that link entrepreneurial orientation with performance, has not yet been developed. Thus, lack of sufficient empirical evidence on the relationship between entrepreneurial orientation and performance introduce some important research questions: how and under what conditions do companies enjoy the operational benefits of entrepreneurial orientation (Donbesuur et al., 2020). In this regard, the present study will be conducted with the aim of testing dynamic capabilities and entrepreneurial orientation on sustainable competitive advantage and firm's performance. In other words, the main question of the research includes: "What is the effect of dynamic capabilities and entrepreneurial orientation by explaining the mediating role of business on the performance of holding companies and subsidiaries of Tehran Stock Exchange?" Based on this, two hypotheses are proposed:

1a. Hypothesis 1: Dynamic capabilities affect sustainable competitive advantage

1b. Hypothesis 2: entrepreneurial orientation affects sustainable competitive advantage.

According to the above, the conceptual model of the research is as follows:
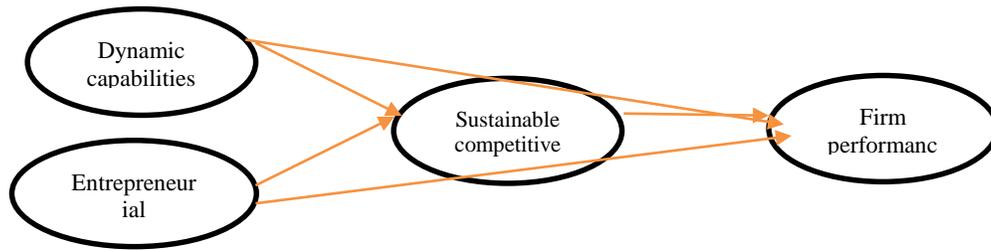

Fig.1 Research model

Literature Review

Dynamic Capability

The concept of dynamic capabilities as a source of competitive advantage has led to a wave of research. The dynamic capabilities perspective seeks to describe the success of some companies in achieving a competitive advantage in a changing environment. Zulu and Winter (2002) define dynamic capabilities as an acquired and consistent pattern of collective action through which the organization systematically creates and modifies day-to-day operational activities to obtain greater effectiveness. In other words, dynamic capabilities are evolutionary and are developed through organizational learning. In a conceptual definition, Helfat et al. (2007) defined dynamic capability as a capacity of an organization to purposefully creation, expansion, and modification of its resource base (Naghizadeh, 2014). Here, we mean the foundation of resources is tangible, intangible, and human resources and assets along with the capabilities that the organization has, has either controlled or has access to. In other words, capabilities are considered as part of an organization's resource base. Dynamic capabilities can change an organization's resource base depending on the circumstances. In other words, this definition of dynamic capabilities includes organizational learning processes that are inherent in the dimension of modernization and rearrangement. Salonke et al. (2011) combined the definition of Helfat et al. (2007) with the views of Zulu and Winter (2002) and defined dynamic capabilities as follows: An organization's ability to purposefully create,

develop, or modify knowledge resources, capabilities, or routine of the organization to improve organizational effectiveness. This knowledge-based view of dynamic capabilities implies that organizations learn from internal and external sources. Organizational learning refers to the process of improving performance through better knowledge and understanding, which allows organizations to build and to enhance their knowledge assets.

Dimensions and Elements of Dynamic Organizational Capabilities

Lawson and Samson (2001) propose a model that operationalizes dynamic capabilities with seven elements: 1) perspective and strategy, 2) controlling the foundations of competition, 3) organizational intelligence, 4) creativity and management of ideas, 5) systems and organizational structure, 6) organizational culture and atmosphere 7) and technology management. Studies have also been conducted on a variety of dynamic capabilities, during which Wang and Ahmed (2007) have identified three common factors that exist among different industries. However, different industries have had different processes for their development and improvement. These three factors include the ability to absorb external knowledge (absorbability), linking company innovation to market and product (innovation capability), and adapting resources and capabilities (alignment capability). Verona et al., (2003) also found that three types of dynamic capabilities (knowledge production and absorption, integration, knowledge, knowledge reconstruction) are needed for successful product innovation. These capabilities include three types: internal, external, and strategic (adaptive) are independent of and interconnected to each other. Strategic capabilities called adaptive capabilities provide a mechanism that enables the organization to manage and highlight its capabilities. Internal capabilities discuss the organization ability to identify and manage infrastructure to meet competitive needs (position analysis and provide the necessary skills) and to properly organize and implement changes when and where needed. The third group, external capability, surrounds the organization's communication management and required external resources as well. Based on abovementioned, the components of dynamic capabilities can be classified into five key components, including adaptive capabilities, innovation, alignment, and internal/external. In the following, each of

these components is described one by one (Heidari, 2017). Dynamic organizational capabilities is a concept that includes three main components, which are (1) measurability, (2) comprehensibility, and (3) the ability to reshape the dynamic organizational capabilities that, according to Tess et al. (2007) can be divided into three categories. First, measurement capabilities which include the organization activities in monitoring and controlling changes in the practical environment and identifying new opportunities. Second, perceptual capabilities include the organization activities to foster creativity and innovation, such as brand management, as well as business models, and third is reshaping capabilities, which are activities to coordinate assets (like reengineering processes) (Heidari, 2017).

Variables and Dimensions Related to Organizational Performance

Theoretical framework and various studies show that many variables are related to performance, the most important of which are: Organizational-social factors: Some of the organizational-social factors that are the source of performance are salaries, wages, promotions, and organizational-social principles. Environmental factors: these factors of the activity including management style, working group and conditions. Nature of activity: Activity has an important role in determining the level of performance, the content of which are: the amount of responsibility and variety of activities. Personal factors: People who have a generally negative attitude always complain about everything related to the job. Besides, some personality traits are such that they increase performance (Khademi, 2017). Desler identifies four categories of factors affecting employee performance:

Task reward factors that include: a) positive reinforcement in organizations, b) rewarding effective performance. Individual factors that include: a) Principles of individual behavior, and) Basic concepts of motivation. Organizational factors that include: a) leadership and organizations, b) groups and their impact on performance, c) organizational structure and theory, d) organizational relationships and decision making. Organizational changes that include: a) Interpersonal relationships, b) Assessment of learning and education (Ismailpour, 2016). Elsewhere, the variables affecting performance are stated as follows:

a) Cultural effects of the organization on the individual, b) Organizational structure, c) Physical conditions governing work, d) Effects of groups and relationships of colleagues

Goldsmith Hershey has identified the following seven main factors in recent research on performance factors:

Ability: is relevant work knowledge, relevant work experience and talent.

Credibility: refers to the appropriateness of management decisions. This proportion is related to the accepted laws and norms. The more credible the decisions and the more coordinated the policies of the organization, the more accepted it will be.

Recognition or clarity (**role understanding**): means understanding and accepting the work, time, place and how to do it. Job goals and plans should be clear and the person should know the priorities in their work. In addition, determining the scope of work and job descriptions are effective factors in accepting and understanding the role correctly.

Environmental adaptation: is the control of factors outside the organization that these can affect the performance of the organization. This is beyond the control of the individual and the organization, but directly affects performance. The key elements of the environment are: competition, changing market conditions, socio-cultural factors, policies, laws and regulations.

Motivation or desire: motivation is an internal stimulus for an external action by a human being, which may be physical, mental or artistic.

Organizational help or support: is the support that employees need to do their job successfully and effectively. Factors such as budget, equipment and tools, etc. are effective variables in successful performance. Performance Feedback: The purpose of formal and informal presentation of daily performance results to the individual (Haghighi et al., 2019).

The level of performance is often low due to the incompatibility of the person with the job. Performance will increase when a person's skills and interests are aligned with the job and people have the opportunity

to improve their performance. Clarity of performance goals and expectations as well as feedback is another important factor in human performance. According to Wok Chiu, clarity and challenging the goal and also accepting it, are three important features in improving employee performance. Employees need job feedback to develop their performance. If employees make a lot of effort and have a lot of ability but do not have a good understanding of their job, their performance will probably not be good in the eyes of their managers and most of the products they make, may be lost. According to Hershey and Blanchard, the biggest barriers to high performance are the ambiguity of organizational expectations and responsibilities (Safari, 2015).

Table 4.

Internal Backgrounds

Research results	Researcher name	Research year
The pattern of capital structure of companies listed on the Tehran Stock Exchange is a function of variables such as the amount of fixed assets of the company, the size of the company and its profitability.	Bagherzadeh	2003
In general, there is a positive relationship between capital structure and corporate profitability. In addition, the optimal capital structure can be determined in some industries.	Namazi and Shirzadeh	2005
There is a significant negative relationship between capital structure (debt ratio) and corporate performance (return on investment, return on equity, and pre-tax profit-to-sales ratio). In other words, companies with high debt ratios are less profitable.	Ardabili and Bigler	2006
Profitability is one of the factors affecting the capital structure (debt ratio) and according to a hierarchical view, there is a significant negative relationship between these two variables.	Kordestan and Najafi Imran	2008
Profitability is one of the factors affecting the structure of capital That has a negative and	kymiagari and Einali	2008

Research results	Researcher name	Research year
significant relationship with it.		
Presence of a positive relationship between the ratio of total debt to equity with systematic risk and rejection of sub-hypotheses related to the relationship between long-term debt to equity ratio, long-term debt to total assets ratio, total debt to total assets ratio, the ratio of the percentage change in earnings per share to the percentage change in operating profit and the ratio of operating profit to earnings before taxation with a systematic risk.	Islami Bidgoli And Mazaheri Tahmasb	2009
There is a significant relationship between the past values of the market with the structure of capital and changes in the structure of capital, and the evidence does not support the theory of market timing.	Kordestani And Pirdavari	2012
Stock price is very sensitive to the share offering, while according to the simulation, this is less common for the P/E. Analysis shows that the role of earnings per share in stock price fluctuations is very effective.	Mousavi Haghighi & Sotoudeh	2013
In order to confirm the theory of hierarchy, volatility, profitability, and the structure of the company's assets have a negative relationship with the capital structure.	Sarlak et al.	2015
The relationship between asset structure, firm size and profit volatility with capital structure was positive	Hassani and Pakmaram	2017
The research findings showed that the diversification strategy, capital structure and profitability in the companies accepted in the 42 S.M. Mousavi Hanjani, S.J. Iranban stock exchange has have a significant relationship.	Mousavi Hanjani And Iranban	2019

Method

Considering that in this research, the effect of dynamism and entrepreneurship on the sustainable performance of subsidiaries in the Tehran Stock Exchange with the effect of the mediating role of competitive advantage is discussed, and by conducting a questionnaire and a survey of all companies present in the Tehran Stock Exchange, the results will be expressed without interference and seizure; consequently, a descriptive method is used in this type of research. This research can be categorized in the set of applied research due to its special application in the performance of companies. Data collection and information in this research is based on survey method. In this research, structural equation modeling will be used. The Klein method was used by the sample size. Questionnaire: Alves et al. (2017) questionnaire including 5 questions is used to operate the firm's performance variable. Tajeddini (2010) questionnaire including 6 questions is used to operate the firm's performance variable. Al-Hamadi questionnaire (2020) including 6 questions is used to operate the firm's performance variable. Chang (2019) questionnaire including 3 questions is used to operate the firm's performance variable. Cronbach's alpha method was used to determine the reliability of the test.

$$\alpha = \frac{k}{k-1}\left(1 - \frac{\sum_{i=1}^{k} S_i^2}{\sigma^2}\right) \quad \text{or} \quad \alpha = \frac{k\overline{C}}{\overline{V} - (k-1)\overline{C}}$$

Data analysis of this research will be done in two parts: descriptive statistics and inferential analysis. In this research, descriptive statistics such as graphs are used to analyze demographic data and inferential statistics such as Kolmogorov-Smirnov (K-S) tests for data normality and simple correlation coefficient and linear regression tests will also be used to analyze the research data. Using software, the method of data analysis in the field of demographic variables or the same descriptive statistics with SPSS software and in the field of inferential statistics is the modeling of structural equations that is done with Smart PLS software.

Findings

The results of the analysis of demographic variables show that 64% of respondents are men and 36% are women. Demographic variables also show that in terms of education, 13.7% of respondents are associate and less, 33.5% have a bachelor's degree, 41.8% have a master's degree and 11% have a Doctorate or higher.

In order to analyze and evaluate the proposed research model, structural equation modeling with partial least squares approach has been used. With the help of Smart PLS software, first the external model and then the internal model are evaluated.

Table 1. Variables in the questions

Firm's performance	Sustainable competitive advantage	Entrepreneurial orientation	Dynamic capabilities	
			0/837	Q1
			0/897	Q2
			0/904	Q3
			0/917	Q4
			0/910	Q5
		0/868		Q6
		0/839		Q7
		0/852		Q8
		0/818		Q9
		0/886		Q10
		0/847		Q11
	0/825			Q12
	0/906			Q13
	0/858			Q14
	0/818			Q15
	0/805			Q16
	0/899			Q17
0/868				Q18
0/901				Q19
0/872				Q20

To evaluate the reliability, it used two Cronbach's alpha tests and shared reliability. The value of both tests must be greater than 0.7.

Table 2. External model reliability tests

Combined reliability	Cronbach's alpha	Variables
0/952	0/937	Dynamic capabilities
0/941	0/924	Entrepreneurial orientation
0/941	0/925	Sustainable competitive advantage
0/912	0/855	Firm's performance

The reliability of the measuring instrument is also confirmed. In order to measure validity, two types of convergent and divergent validity must be evaluated. Convergent validity is evaluated by means of extraction variance (AVE) test and divergent validity is evaluated and tested by Fornell-Larker criterion which is placed on the root matrix diameter of the mean value of extraction variance related to each variable.

Table 3. External model validity tests

Fornell-Larker criterion				AVE	Research variables
FP	SCA	EO	DC		
			0/894	0/798	Dynamic capabilities (DC)
		0/852	0/655	0/726	Entrepreneurial orientation (EO)
	0/853	0/711	0/780	0/727	Sustainable competitive advantage (SCA)
0/880	0/785	0/725	0/741	0/775	Firm's performance (FP)

The observation showed that the external model of the research is reliable in terms of validity and reliability. Therefore, by confirming the

validity and reliability of the external model, the internal model of the research should be evaluated.

The coefficient of determination is to examine, evaluate and predict the behavior of latent dependent variables of the model by independent latent variables. In other words, this test demonstrates the extent to which the behavior of dependent variables is predicted by independent variables. The values obtained from this test are compared and interpreted with three values of 0.19, 0.33 and 0.67, which are weak, medium and strong predictive power, respectively.

Table 4. Determination coefficient test

The amount of variance defined	Variables
0/679	Sustainable competitive advantage
0/696	Firm's performance

The results obtained from the above table and its comparison with the mentioned three values show that the behavior of both variables of sustainable competitive advantage and firm performance is predicted at a level higher than very strong. Since there are no real fit indices in the variance-based approach, alternative qualitative indices are used to evaluate the fit of the internal model. The values obtained from this test were evaluated based on three values of 0.02, 0.15 and 0.35, which showed poor, medium and strong quality, respectively. The quality of the structural (internal) model should also be evaluated.
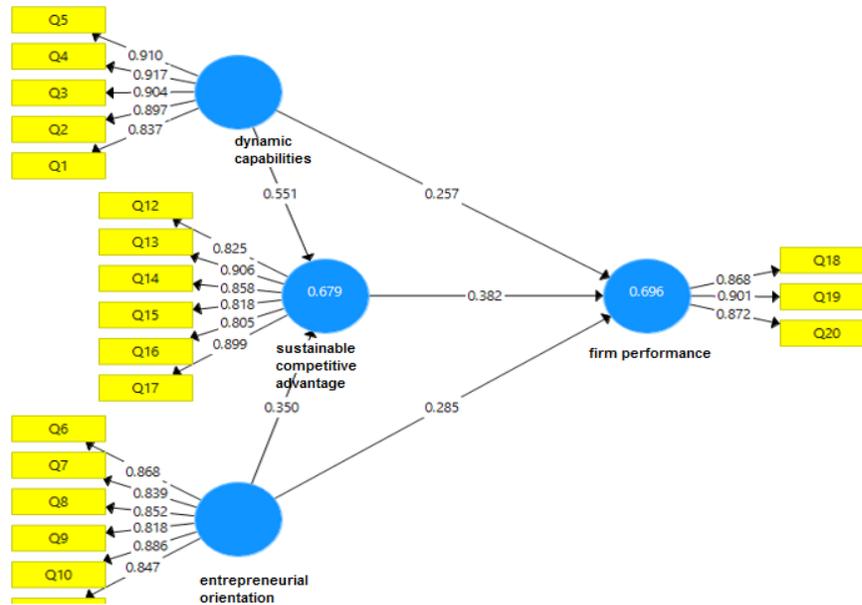
Figure 1. Research model in the significant mode of standard coefficients

Table 5. Investigation of research hypotheses

Results	Statistic P	Statistic T	route coefficient	hypothesis
Confirmation	0/000	9/259	0/551	The first hypothesis
Confirmation	0/001	3/284	0/257	The second hypothesis

The explained variance examines, evaluates, and predicts the behavior of the model's latent dependent variables by independent latent ones. In other words, this test shows the extent to which the behavior of dependent variables is predicted by independent peers. The values obtained from this test are compared and interpreted by three values of 0.19, 0.33 and 0.67, which are weak, medium and strong predictive power, respectively.

Table 6. Downey model quality test (structural)

Values Q^2	Research	dependent

	variables
0/465	Sustainable competitive advantage
0/510	firm performance

Comparing the results of the above table with the mentioned values, it is clear that the predictive quality of both dependent variables of the research, including strategic brand management, customer value creation, and brand performance is placed on a much higher level than strong. This test uses specific values from both internal and external models to evaluate the fit quality of the overall model and is compared with three values of 0.01, 0.25 and 0.36, which mean weak, medium and strong, respectively.

Conclusion:

Considering the importance and value of research on organizational performance, the main purpose of research is to investigate the impact of dynamism and entrepreneurship on the sustainable performance of subsidiaries in Tehran Stock Exchange with the mediating role of competitive advantage and based on this goal, model and theoretical framework of research is formed. The research method is based on the purpose is considered an applied research, which is because using the analytical model of the research, strives to show how to influence the dynamic capabilities and entrepreneurial orientation on the firm's performance by explaining the mediating role of sustainable competitive advantage. The questionnaire is a tool for measuring research variables. Accordingly, in order to measure the research variables, the firm performance questionnaire of Alves et al. (2017), Tajeddini entrepreneurship orientation (2010), Al-Hamadi sustainable competitive advantage (2020) and the firm's performance of Chang questionnaire (2019) were used which is the basis of the present research questionnaire and includes closed-ended questions with a Likert scale. Content validity was used to assess the validity of the questionnaires and Cronbach's alpha formula was used to assess the validity of the data. In the present study, data analysis has been done in two ways: descriptive and inferential. In the descriptive analysis of the obtained data, the demographic characteristics of the managers have

been drawn in the form of frequency diagrams, and in the inferential method, the statistical test of the structural and analytical equation model has been used to accept or reject the hypotheses. Findings show that dynamic capabilities and entrepreneurial orientation by explaining the mediating role of sustainable competitive advantage affect the performance of companies. In the first hypothesis, dynamic capabilities affect sustainable competitive advantage. Given the value of t = 9.259 and the value of p = 0.000, the hypothesis was confirmed; in other words, dynamic capabilities affect the sustainable competitive advantage. The second hypothesis: Entrepreneurship orientation has an effect on sustainable competitive advantage. According to t = 3.284 and the value of p = 0.001, the hypothesis was confirmed; in other words, entrepreneurial orientation has an effect on sustainable competitive advantage.

References

Ismailpour, Najma, (2016). Measuring the Performance of Information and Communication Technology Organization, Regional Urban Studies and Research, Volume 7, Number 27, pp. 21-42.

Jalali Farahani, Kambiz, Abbaspour Esfadan, Ghanbar, Ariani, Somayeh (2021). The effect of management style and value creation mechanism of the holding headquarters on the performance of Shasta Holding companies (Case Study: Subsidiaries of General Industrial Investment Holding), Seventh International Conference on Research in Management, Economics and Development.

Haghighi, Mohammad Ali; Ahmadi, Iman; Ramin Mehr, Hamid (2019). Investigating the effect of organizational justice on the performance of organizational culture management staff, the seventh year, twentieth issue, autumn and winter.

Heidari, Ali, (2017). Relationship between Dynamic Capabilities and Firm's Performance with Operational Capabilities Mediation, Business Management Perspective, Volume 15, Number 3, pp. 125-140.

Khademi, Mehdi (2017). Capabilities of the marketing unit and the performance of the organization, analysis of the mediating role of decision influence, business management perspective, Volume 15, Number 3, pp. 91-106.

Saidi Rad, Majid, Alishiri, Bahram (2020). Designing a Strategic Model for the Management of Government Holdings, the Sixth International Conference on Research in Management, Economics and Development.

Saidi Rad, Majid, Alishiri, Bahram (2020). Designing a Strategic Model for the Management of Government Holdings, the Sixth International Conference on Research in Management, Economics and Development.

Safari, Ali (2015). Investigating the Relationship between Knowledge Management, Entrepreneurship and Performance in the Cultural Heritage Organization and Tourism Management Studies, Volume 9, Number 28, pp. 95-113.

Mehrabanpour, Mohammad Reza, Rai Azabadi, Mohammad Ebrahim (2020). Identify and prioritize investment requirements in holding companies from the perspective of resistance economy policies. Bi-Quarterly Journal of Economic Research, Volume: 16, Issue: 31.

Naghizadeh, Mohammad, (2014). The Impact of Dynamic Capabilities on Product Innovation Capacity in Iranian Pharmaceutical Companies, Innovation Management, Volume 2, Number 3, pp. 27-51.

Alhamadi, M. S. (2020). Impact of Strategic Intelligence on the sustainable competitive advantage of Industries Qatar. *Global Journal of Management And Business Research*.

Alves, A. C., Barbieux, D., Reichert, F. M., Tello-Gamarra, J., & Zawislak, P. A. (2017). Innovation and dynamic capabilities of the firm: Defining an assessment model. Revista de Administração de Empresas, 57(3), 232-244.

Donbesuur, F., Boso, N., & Hultman, M. (2020). The effect of entrepreneurial orientation on new venture performance: Contingency

roles of entrepreneurial actions. Journal of Business Research, 118, 150-161.

Febrian, A. F., Maulina, E., & Purnomo, M. (2018). The influence of social capital and financial capability on sustainable competitive advantage through entrepreneurial orientation: Empirical evidence from Small and Medium Industries in Indonesia using PLS-SEM. Advances in Social Sciences Research Journal, 5(12).

Hernandez-Perlines, F. (2018). Moderating effect of absorptive capacity on the entrepreneurial orientation of international performance of family businesses. Journal of Family Business Management.

Khan, S. Z., Yang, Q., & Waheed, A. (2019). Investment in intangible resources and capabilities spurs sustainable competitive advantage and firm performance. Corporate Social Responsibility and Environmental Management, 26(2), 285-295.

Sulistyo, H., & Ayuni, S. (2020). Competitive advantages of SMEs: The roles of innovation capability, entrepreneurial orientation, and social capital. Contaduría y administración, 65(1), 10.

Tajeddini, K. (2010). Effect of customer orientation and entrepreneurial orientation on innovativeness: Evidence from the hotel industry in Switzerland. Tourism management, 31(2), 221-231.Na, Y. K.,

Zhou, S. S., Zhou, A. J., Feng, J., & Jiang, S. (2019). Dynamic capabilities and organizational performance: The mediating role of innovation. Journal of Management & Organizat