Development of oil Approaches Influenced by Effective Factors for Success of Economy-Based Entrepreneurship: A Case Study of the oil Industry

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ABSTRACT

The oil Industry is rapidly changing with the development of the international economy and the increased competitiveness of the markets. New technologies in this environment have eliminated legal, geographical or industrial barriers and have led to the introduction of new products and services in this field. The development of information technology and its expansion based on economy-based entrepreneurship in the field of oil has resulted in dramatic changes in oil industry, even e-commerce, and has facilitated customer service. This study aimed to develop oil approaches affected by effective factors for the success of economy-based entrepreneurship in the oil Industry. In other words, efforts were made to identify and prioritize the factors affecting the development of oil approaches under the impact of effective factors for the success of economy-based entrepreneurship in the oil Industry. A review of the previous studies in this field revealed that the factors affecting the development of oil approaches affected by factors involved in the success of economy-based entrepreneurship in the oil Industry were institutional, organizational, environmental, economic, technological and opportunity recognition criteria. The present research was applied in terms of goal and survey, cross-sectional regarding data collection method and timeframe. The statistical population consisted of experts in the country's oil industry system. In total, 16 individuals were selected from the central bank managers by purposive

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sampling. Data were collected using an expert questionnaire, and the fuzzy Delphi method was applied to ensure the validity of the identified indicators. In addition, the reliability of paired comparisons was assessed by calculating the incompatibility rates via the Gogus and Butcher method. In this regard, reliability was acceptable in all cases of less than 0.1. The ranking of key criteria showed that economic factors had of the highest importance, followed by institutional, environmental, organizational, opportunity recognition process, and technological factors.

1. Introduction

Today, economic growth and development affect axial development functions in the context of competitions, global evolutions, recession and boom cycles, political and security phenomena, threats and sanctions, access to natural resources, geographical location and many other external factors (Mohammadzadeh et al., 2016). On the other hand, economic development requires the developmental tendencies of entrepreneurship in order to have sustainable development (Leonidou et al., 2018). In this context, economies that rely on their internal forces and have the ability to adapt to rapid changes can survive in the world (Royo et al., 2019). From another perspective, we can build internal and external criteria for sustainable economic development based on the characteristics of economy-based entrepreneurship and propose them as an endogenous factor for economic development and growth. In other words, entrepreneurship can be considered as one of the axes of endogenous development, broad and sustainable employment creation, and the formation of a robust and dynamic economy (Toma et al., 2014).

According to novel economic theories, change of ideas and emergence of innovations are the principle base for economic development, and entrepreneurship is the most obvious means of achieving this goal (Szirmai et al., 2011). In fact, the increase of entrepreneurship in society requires the establishment of its foundations, and having favorable conditions for developing entrepreneurship is of paramount importance. Favorable conditions and factors for entrepreneurs can be examined from three dimensions of available resources, strategies, and goals of entrepreneurs, threats and opportunities in the economic environment, which play a significant role in the sustainable development of entrepreneurship. It is notable that sustainable economic development has broad dimensions, including the development of the oil industry system based on monetary and economic policies. In fact, the issue of entrepreneurial orientation in the oil industry system is the focus of attention when it comes to the issue of entrepreneurship in the macroeconomic domain. The oil industry system is the major source of financial support for entrepreneurial activities, especially in the economy of developing countries (Ogunkoya, 2018).

Nowadays, most economists and experts believe that the entrance of information and communication technology (ICT) to the field of economy and oil industry led to the formation of a revolution called "electronic commerce". Falling behind the evolution will lead to isolation in the economy world since electronic commerce has made considerable changes in the business competitive space by creating benefits such as improved productivity, reduced prices, cost savings, and changed sizes and structures of the market, as well as elimination of intermediaries and allowing manufacturers' access to end-users. The first and most important step toward success in oil in the oil Industry is recognizing and exploiting entrepreneurship opportunities (Alvani & Azar, 2019).

In fact, lack of diversity, quality and speed in providing oil services in the oil Industry as a part of the economic problems of developing countries and lack of IT infrastructure and security of servers in electronic oil industry has led to increased level of need for the development of economics-based entrepreneurial orientations at the level of these countries including Iran (Asadollah et al., 2019). The information technology has considerably affected the oil Industry in the past decade. There is a greater need to use the benefits of oil with regard to the undeniable role of advanced technologies in changing perceptual patterns of customers. Today, the mere provision of e-commerce services by a bank does not necessarily create a competitive advantage or attract new customers, and the need to develop innovative information technologies can help improve oil (Elia et al., 2020). Given the growing scope of e-commerce in the country, there is a need to provide a coherent framework based on economy-based entrepreneurial

approaches to such services (Falah Haghighi et al., 2017).

In other words, creating the suitable contexts and foundations for increasing entrepreneurship can be an effective model for achieving goals such as innovation, taking initiatives and presenting new functional processes and products, and improving the quality of e-commerce services (Metvaee et al., 2019). In Iran, intense competition has been created in the oil Industry due to the increased number of financial institutions and banks and the privatization of some government banks. Several government banks have joined the private banks club of the country following the implementation of Article 44 of the Constitution and have put economy-based entrepreneurship on their agenda in order to maintain and improve their share of resources and customers. In this regard, some of the services provided by the mentioned banks have emerged from innovation and pioneering while some others have come from risk-taking, independence and dominance capabilities.

Despite these entrepreneurial activities in the oil Industry of Iran, there have been a few entrepreneurial cases in the oil fields in the oil Industry to develop technological services. In addition, while most banks have established e-commerce since the early 90s based on the guidelines approved by the central bank, insufficient attention has been paid to development by entrepreneurial approaches and innovation in the field in the past few years. With this background in mind, the present study aimed to present a range of the most influential to the least effective propositions of economy-based entrepreneurship success focusing on the oil approach in the oil Industry by Fuzzy analysis with regard to the growing pace of IT development in the e-commerce section and lack of using capacities and opportunities proportional to economy-based entrepreneurship in this field while emphasizing the factors affecting the success of economy-based entrepreneurship based on cross-mix analysis.

2. Theoretical Foundations

2.1. Economy-based Entrepreneurship

Despite the fact that an entrepreneur is the most important factor in the modern economy due to the characterization of market forces in many ways, the true importance of entrepreneurship in economic theory is not well stated (Lazear, 2004). In the economics literature, scholars such as Begley et al. (1987) and Lumpkin & Dess (1996) considered entrepreneurship to be in line with creativity, assertiveness, and imagination.

Economy-based entrepreneurship moves the economy from its original equilibrium to a new direction by creating new compounds (Wong et al., 2005). In fact, the concept of economic entrepreneurship represents a kind of freedom of entrepreneurial practice in the open economic environment that requires the freedom of people in interpolation, exchange, interchange and transfer of their personal assets legally (Boudreaux et al., 2019).

People realize their potential in the free macroeconomic environment. In fact, free economic space encourages individuals to invest in increased entrepreneurial skills (Mason, 2018). Countries with higher free economic levels experience a higher level of test-error. People are allowed to test their unique and frenzied ideas for producing their new products. While a higher rate of business failure occurs in such environments, big companies such as Microsoft and Apple are born from millions of investment efforts. Economic freedom and limited government intermediation through different channels affect the development of entrepreneurship. According to classical liberal economists, the government's intervention in the economy through application and distribution by transfer payment plans, public investment, and final taxation is a barrier to economic growth and entrepreneurship activities (Bjørnskov & Foss, 2008). On the other hand, the protection of intellectual property rights is another dimension affecting economy-based entrepreneurship. People may never achieve innovative activities if they fail to properly own their creation. Economic freedom is closely related to the regulatory structure of societies and the administrative bureaucracy. The existence of multiple laws and over-regulation puts pressure on firms, especially newly established ones, which leads to their discounted work.

Another important point is the improper money, especially the inflation rate and fluctuation. Anticipating future relative prices is very important for entrepreneurs. As instability in the economy, inflation disables the effects of relative prices. Inflation causes funds to move toward unproductive sectors such as land, housing, currency, and precious metals while limiting other sectors. Therefore, inflation causes recession (Barro, 2013). Another impact of the government's intervention in the development of entrepreneurship is the limitation of economic freedoms and severe monitoring, which encourages individuals to turn to rent-seeking activities instead of entrepreneurship. In fact, corruption and rent gain a true meaning in the government and public sector (Themudo, 2014). When approaching rent and corruption resources leads to economic success, they are

encouraged to move away from the tensions of production and entrepreneurship and turn to these activities.

2.2. Research Background

Putnins & Sauka (2019) conducted a research entitled "Why does entrepreneurial orientation affect company performance?" to evaluate the entrepreneurial orientation based on three criteria of innovation, risk-taking and pioneering of its impact on corporate performance. According to their results, all three entrepreneurial orientations had significant, positive impact on the performance of companies. In another research, Sánchez-Torres et al. (20180 evaluated the effect of behaviors of social purchase and intention to buy on e-commerce, concluding that e-commerce could be affected by

various factors such as customers' trust, satisfaction and loyalty at the level of markets, especially in

competitive markets. In 2017, Crnogaj & Bradač Hojnik used the data of 24 high-income countries during 2006-2010, concluding that economic freedom in the union field had a positive effect on the development of productive entrepreneurship. In addition, these scholars realized that individual decision-making for entrepreneurship was closely related to cultural and social norms.

3. Research Method

This was an applied research in terms of purpose and descriptive-survey regarding nature and method. In order to achieve the goals of the present study, we identified and extracted effective indices of economic entrepreneurship success with the oil approach in the oil Industry by conducting comprehensive library surveys and evaluating past studies. These indices are shown in Table 1.

Table 1. Factors of economic entrepreneurship success with the oil approach in the oil Industry

Main factors	Resources
Institutional factors	Simandan (2015), Szirmai et al. (2011), Sobel et al. (2017), Casero et al. (2013), Asadi (2019), Bahrinejad et al. (2018)
Economic factors	Wiseman & Young (2011), Wong et al. (2005), Urbano & Aparicio (2016), Nyström (2008), Sameti and Shahnazi (2006)
Environmental factors	Meoli et al. (2019), Morgan & Anokhin (2019), Wong (2014), Casero et al. (2013), Darvish et al. (2012)
Organizational factors	Meoli et al. (2019), Lee et al. (2011), Gumusay & Bohne (2018), Chavez et al. (2017), Alvani et al. (2013)
Technological factors (technology)	Han & Kim (2019), Elia et al. (2020), Ramezanpour Nargesi et al. (2015), Bahrinejad et al. (2018)
Factors of the opportunity identification process	Szirmai et al. (2011), Sobel et al. (2017), Casero et al. (2013), Darvish et al. (2012)

In the next stage, the sub-indices or secondary factors affecting the economic entrepreneurship process among the entrepreneurship experts in the oil Industry were identified using the Fuzzy Delphi Method (FDM). After that, the mentioned components, as well as multi-criteria decision-making techniques (e.g., Fuzzy AHP) and the opinions of the selected experts were applied in the next stage to rank the actors affecting the success of economy-based entrepreneurship with the oil approach in the oil Industry. Given the use of a questionnaire and Fuzzy AHP method, and with regard to the need for opinions of experts (N=10-12) (Asgharpour, 2008), 16 experts who were highly familiar with economic entrepreneurship issues with an oil approach in the oil Industry were

selected by purposive (judgment) method. As mentioned above, the Delphi and the pairwise comparison questionnaires were developed and distributed among the participants. Afterwards, the Fuzzy AHP method was applied to prioritize the components.

The data analysis was carried out based on the paired comparison questionnaire and AHP technique using the Expert Choice software. The reliability of this questionnaire was estimated, rendering a Cronbach's alpha coefficient of 0.80. On the other hand, the content and structural validities of this instrument were confirmed by the approval of the respective professors and the use of the confirmatory factor analysis, showing a factor load of less than 0.5 for each item.

3.1. Fuzzy Delphi Method

The Delphi technique can be applied to recognize and screen the most important decision-making indices. In fact, the Delphi technique is a group knowledge acquisition method, which is also used for qualitative issue decision-makings. The Delphi method is carried out based on responders' views and involves the use of verbal phrases to assess the viewpoints of participants. Verbal expressions have limitations in fully reflecting the respondent's mental secrets; for instance, the alternative "high" is different for the person A, who is a strict person, compared to person B. If a definite number is used to quantify the views of both individuals, the results will be skewed. Therefore, this problem can be eliminated by developing a suitable Fuzzy range. The traditional Delphi method has always suffered from expert convergence, high running costs, and the possibility of exclusion of some people. To improve the traditional Delphi method, Murray et al. introduced the concept of integrating the traditional Delphi method with fuzzy theory in 1985 (Clibbens et al., 2012). The fuzzy Delphi implementation algorithm can be used to determine the importance of and screen indices. The implementation algorithm consists of four steps, as follows:

1. Determining the appropriate spectrum for fuzzy verbal expressions
2. Fuzzy integration of fuzzy values
3. Defuzzification value
4. Selecting the threshold and screening the criteria

In this study, Likert five-point scale and triangular fuzzy numbers were used to implement the fuzzy Delphi method. fuzzy degress and separations are considered normal. Table 2 shows the verbal expressions and the corresponding fuzzy numbers.

Table 2. Fuzzy five-degree spectrum for evaluating indices

Verbal valuable		Fuzzy value	Triangular fuzzy number
Very low	VL	$\tilde{1}$	(0, 0, 0.25)
Low	L	$\tilde{2}$	(0, 0.25, 0.5)
Moderate	M	$\tilde{3}$	(0.25, 0.5, 0.75)
High	H	$\tilde{4}$	(0.5, 0.75, 1)
Very high	VH	$\tilde{5}$	(0.75, 1, 1)

The threshold should be specified after selecting the best fuzzification method, Fuzzy integration (fuzzy mean method was used in this study) and defuzzification (the surface center method was used in this research). The threshold is normally considered at 0.7, which can vary in different studies depending on researchers. If the definite value of defuzzification of the Fuzzy integration of experts was larger than the mentioned amount, the index would be accepted. Otherwise, the index would be rejected.

3.2. Fuzzy Hierarchical Analysis Process

While the goal of applying the hierarchical analysis, approach is to obtain the opinion of experts, the conventional hierarchical analysis method does not properly reflect human thinking. This is due to the fact that precise numbers are used in the pairwise comparisons in the method. A Fuzzy hierarchical analysis method is proposed to overcome this problem. In the Fuzzy hierarchical analysis method, the decision-makers were asked to compare the elements of each level with others and express the relative importance of the elements by using Fuzzy numbers after preparing the hierarchical chart. An example of a triangular Fuzzy number along with the verbal phrase and triangular Fuzzy comparisons are shown in Table 3, which can be applied in the Fuzzy hierarchical analysis method.

Table 3. Triangular fuzzy spectra of pairwise comparisons

Theological expression of the comparative status of i to j	The fuzzy equivalent	Inverse fuzzy equivalent
Equally Preferred	(1, 1, 1)	(1,1,1)
Intermediate Level	(1, 2, 3)	$\left(\frac{1}{3},\frac{1}{2},1\right)$
moderately Preferred	(2, 3, 4)	$\left(\frac{1}{4},\frac{1}{3},\frac{1}{2}\right)$
Intermediate Level	(3, 4, 5)	$\left(\frac{1}{5},\frac{1}{4},\frac{1}{3}\right)$
Strongly Preferred	(4, 5, 6)	$\left(\frac{1}{6},\frac{1}{5},\frac{1}{4}\right)$
Intermediate Level	(5, 6, 7)	$\left(\frac{1}{7},\frac{1}{6},\frac{1}{5}\right)$
very strongly Preferred	(6, 7, 8)	$\left(\frac{1}{8},\frac{1}{7},\frac{1}{6}\right)$
Intermediate Level	(7, 8, 9)	$\left(\frac{1}{9},\frac{1}{8},\frac{1}{7}\right)$
Extremely Preferred	(9, 9, 9)	$\left(\frac{1}{9},\frac{1}{9},\frac{1}{9}\right)$

Prioritizing the main factors of economic entrepreneurship opportunities with the oil approach was carried ou in six steps using fuzzy hierarchical analysis.

- **First step:** there are n elements in a cluster. In total, $\frac{n(n-1)}{2}$ comparisons were estimated using the equation below. Given the presence of six criteria in the research, a total of 15 pairwise comparisons were made.

$$\frac{n(n-1)}{2} = \frac{6(6-1)}{2} = 15 \qquad (1)$$

- **Second step:** after that, the views of experts were fuzzied, and the geometric mean method was applied to integrate experts' opinions in the AHP method.

$$F_{AVE} = \left(\prod(l), \prod(m), \prod(u)\right) \qquad (2)$$

- **Third step:** the fuzzy expansion of each row will also be calculated as follows.

$$\tilde{S}_i = \sum_{j=1}^{n} x_{ij} \qquad (3)$$

- **Fourth step:** afterwards, the fuzzy sum of the sum of the elements of the preferences column is calculated.

$$\sum \tilde{S}_i = \sum_{i=1}^{n}\sum_{j=1}^{n} x_{ij} \qquad (4)$$

- **Fifth step:** at this stage, the inverse triangle fuzzy number is calculated using the equation below:

$$\text{if } \tilde{F} = (l, m, u) \text{ then } \tilde{F}^{-1} = \left(\frac{1}{u}, \frac{1}{m}, \frac{1}{l}\right) \qquad (5)$$

- **Sixth step:** defuzzification was carried out using the surface center method, which is calculated, as follows:

$$DF_{ij} = \frac{[(u_{ij} - l_{ij}) + (m_{ij} - l_{ij})]}{3} + l_{ij} \qquad (6)$$

3.3. Result Analysis

After a literature review, a list of factors affecting the success of economy-based entrepreneurship with the oil approach in the oil Industry was prepared based on the results. A list containing 37 factors was provided to the experts after assessment and elimination of overlapped and repetitive indices. The list of factors was distributed among 26 entrepreneurship experts in the baking industry in the form of a questionnaire. The eliminated secondary factors obtained based on the results of the first round are shown in Table 4.

Table 4. Eliminated indices based on screening

Main factors	Eliminated secondary factors	Definite value
Institutional factors	Level of government involvement	0.526
Economic factors	Ability to reduce shipping costs	0.587
	Research and development costs in oil	0.622
	Ability to reduce information costs in the field of oil	0.667
Environmental factors	Possibility to enter the industry	0.667
Technological factors (technology)	Startup capability of doing business in the field of oil	0.647
Factors of the opportunity identification process	Communication and network management capabilities for exploiting ideas based on oil opportunities in the oil industry system	0.660
	Ability to finance and invest venture capital to exploit ideas based on oil opportunities in the oil industry system	0.657

At the end of the first round, eight indices were eliminated and two indices (freedom of banks to innovate in the oil field and access of banks to fin-techs based on oil) were added. Therefore, the Fuzzy Delphi Analysis continued in the second round for 31 remaining indices. At this stage, the remaining indices were assessed based on the opinions of experts. The eliminated secondary factors obtained based on the results of the second round are shown in Table 5.

Table 5. Indicators removed based on screening

Main factors	Eliminated secondary factors	Definite value
Economic factors	Value added or expected profit	0.58
Environmental factors	Size of market status based on oil	0.55
	Industry profit margin	0.53
	Social networking opportunities and threats in the oil area	0.58
Organizational factors	Existence of oil marketing and customer needs expert team	0.59
Factors of the opportunity identification process	Risk Management Ability to exploit ideas based on oil opportunities in the oil industry system	0.59

Fuzzy Delphi analysis continued in the third round for the remaining 23 indices based on the results of the second round. At this stage, the remaining indices were evaluated based on the opinions of 26 experts. However, no index was added or eliminated in the third round, which can be sign for the end of the Delphi Method. In general, one approach for the end of the Delphi process is to compare the mean scores of the two rounds of questions. The survey process is stopped when the difference between the two stages is extremely lower than the threshold (0.2).

Table 6. Distance between the second and third rounds

Main factors	Secondary factors	The second round	The third round	Difference	Result
Institutional factors	Adopting supportive laws and regulations in the field of oil	0.702	0.747	0.045	Confirmed
	Banks freedom to innovate in the field of oil	0.715	0.716	0.001	Confirmed
	Government financial support for entrepreneurship development in the field of oil	0.708	0.713	0.005	Confirmed
	Policy making and implementation of tax incentives in the field of oil	0.708	0.707	0.002	Confirmed
	Explaining intellectual properties policy and terms	0.74	0.728	0.012	Confirmed
Economic factors	Possibility of developing a new product or service	0.715	0.731	0.017	Confirmed
	Market growth ability	0.798	0.71	0.088	Confirmed
	Possibility to increase potential earnings	0.737	0.784	0.047	Confirmed
Environmental factors	Level of competitiveness	0.728	0.707	0.021	Confirmed
	Ease of access to domestic and foreign markets	0.712	0.741	0.029	Confirmed
	Possibility of business sustainability	0.756	0.728	0.028	Confirmed
Organizational factors	Existence of human resources specialized in oil	0.715	0.719	0.004	Confirmed
	Managers' risk taking	0.747	0.713	0.034	Confirmed
	Existence of expert and financial advisory teams in the field of oil	0.603	0.71	0.107	Confirmed
	Managers' market knowledge of oil	0.718	0.778	0.06	Confirmed
	The benefits of accepting e-commerce in the oil area	0.724	0.722	0.002	Confirmed
Technological factors (technology)	Creation and development of powerful IT infrastructure	0.776	0.759	0.016	Confirmed
	Banks' access to fin-tech based on oil	0.76	0.71	0.05	Confirmed
	Access to new technologies in the field of oil	0.731	0.722	0.009	Confirmed

Main factors	Secondary factors	The second round	The third round	Difference	Result
Factors of the opportunity identification process	Ability to identify and evaluate technological opportunities	0.724	0.722	0.002	Confirmed
	Market development capability for innovative products and services	0.702	0.744	0.042	Confirmed
	Idea manufacturing and idea engineering abilities	0.724	0.728	0.004	Confirmed
	Ability to redesign business model	0.728	0.731	0.004	Confirmed

The results presented in Table 6 showed that all differences were lower than 0.2, which confirmed the end of the Delphi rounds. The experts considered 23 out of 37 as important. Therefore, the main factors were ranked using the Fuzzy hierarchical method. In addition, the fuzzy analytic hierarchy process (FAHP) method was applied to rank the entrepreneurship opportunities. The main and secondary factors are shown in Table 7. In addition, the hierarchical pattern of model criteria and sub-criteria is illustrated in Figure (1) using AHP technique.
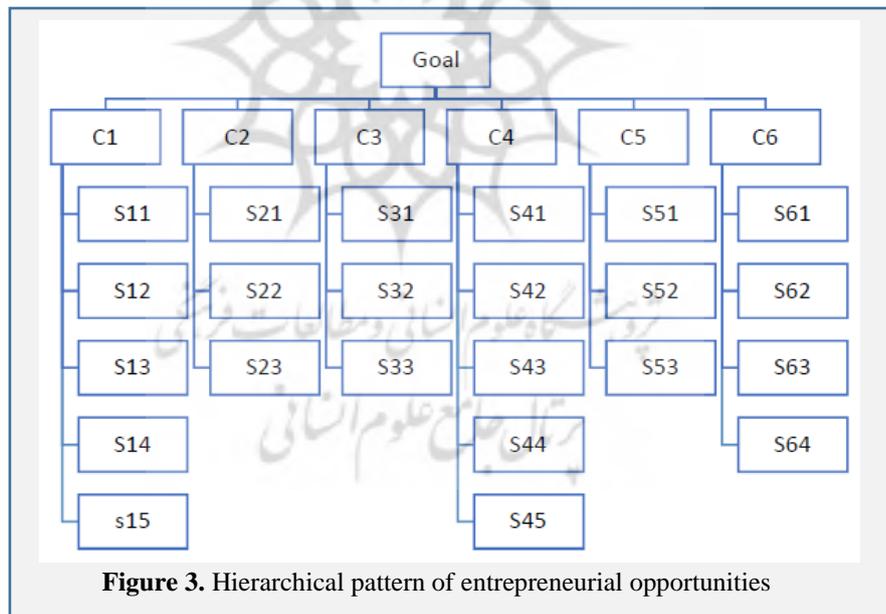
Figure 3. Hierarchical pattern of entrepreneurial opportunities

The main and secondary factors affecting the success of economy-based entrepreneurship with the oil approach in the oil Industry were evaluated by Fuzzy Hierarchical Analysis, the results of which are shown in Table 7.

Table 7. Results for ranking the main factors

Main factors	Defuzzification level	Weight	Rank
Economic	0.253	0.244	1
Institutional	0.217	0.208	2

Environmental	0.197	0.189	3
Organizational	0.153	0.147	4
Technological	0.107	0.103	5
Opportunity identification process	0.113	0.109	6

The ranking of key criteria has shown that economic factors are most important, followed by union, environmental, organizational, process of opportunity identification and technological factors. The incompatibility rate of 0.062 was obtained for this stage, which was lower than 0.1 and the comparisons made could be trusted. After that, the sub-criteria related to each criterion were compared in pairs using the Fuzzy Hierarchical Analysis. The last stage involved the final prioritization of all secondary factors, and the summary of results of the hierarchical analysis is shown in Table 8.

Table 8. The Ultimate Priority of Entrepreneurial Opportunities

Main factor	Weight	Secondary factors	Primary weight	Final weight	Rank
Economic factors	0.244	Possibility of developing a new product or service	0.357	0.0870	3
		Market growth ability	0.422	0.1028	1
		Possibility to increase potential earnings	0.221	0.0538	6
Institutional factors	0.208	Adopting supportive laws and regulations in the field of Oil	0.243	0.0505	7
		Banks freedom to innovate in the field of Oil	0.159	0.0332	14
		Government financial support for entrepreneurship development in the field of Oil	0.263	0.0549	5
		Policy making and implementation of tax incentives in the field of Oil	0.195	0.0405	13
		Explaining intellectual properties policy and terms	0.140	0.0292	16
Environmental factors	0.189	Level of competitiveness	0.291	0.0550	4
		Ease of access to domestic and foreign markets	0.467	0.0884	2
		Possibility of business sustainability	0.242	0.0457	9
Organizational factors	0.147	Existence of human resources specialized in Oil	0.279	0.0411	11
		Managers' risk taking	0.277	0.0409	12
		Existence of expert and financial advisory teams in the field of Oil	0.181	0.0267	19
		Managers' market knowledge of Oil	0.141	0.0208	20
		The benefits of accepting e-commerce in the Oil area	0.121	0.0179	21
Factors of the opportunity identification process	0.109	Ability to identify and evaluate technological opportunities	0.428	0.0467	8
		Market development capability for innovative products and services	0.259	0.0282	17
		Idea manufacturing and idea engineering abilities	0.163	0.0178	22
		Ability to redesign business model	0.150	0.0164	23
Technological factors (technology)	0.103	Creation and development of powerful IT infrastructure	0.415	0.0426	10
		Banks' access to fin-tech based on Oil	0.271	0.0278	18
		Access to new technologies in the field of Oil	0.314	0.0322	15

4.Conclusion

This study aimed to identify and rank the factors affecting the success of economy-based entrepreneurship with the oil approach in the oil Industry. After the evaluation of the research background, some indices were extracted as the main factors. A method ought to be presented for the assessment and confirmation of the accuracy of the indices by using experts' opinions. After the evaluation of relevant articles, the Fuzzy Delphi method was selected for obtaining the experts' opinions. The Fuzzy Delphi method is one of the best techniques in surveys, where there are high uncertainty and a low number of experts, due to the integration of experts' opinions and allocation of suitable Fuzzy numbers. Therefore, three rounds of surveys were carried out in the present research, which led to the extraction of six main and 23 secondary factors.

Afterwards, the weight of each of the main and secondary factors was determined so that more important indices could be taken into account in the following decision-making processes. Based on the literature review, the main factors were classified into six dimensions of the union, economic, environmental, organizational, technological and process of opportunity identification factors and were weighted. The economic factor with the weight of 0.24 was recognized as the most important factor, followed by the union (0.20), environmental (0.18), organizational (0.14), and process of opportunity identification (0.109) factors, respectively. However, the lowest weight was allocated to the dimension of technological factors (0.103). The results of this study primarily indicated the importance of entrepreneurial orientation in the country's oil industry system. Therefore, it is suggested that an entrepreneurial charter be developed and issued to banks by the central bank to expand entrepreneurship and the tendency toward this issue. The central bank must provide the necessary infrastructures for implementation of the charter and carry out the necessary monitoring.

In addition, with regard to the importance of innovation in the use of opportunities and overcoming the challenges of competitors, the risk-taking of banks' managers must increase in order to respond to the diverse needs of customers and properly exploit the environmental opportunities. Conflict is a deterrent to the development of entrepreneurship in the country's oil industry system, elimination of which requires encouraging employees' involvement in work issues to exchange opinions properly, developing the goals and

benefits of working units in line with the general goals of the organization, and opening a space for dialogue. This issue can facilitate the tendency of entrepreneurship in banks. Moreover, the application of official and non-official mechanisms for conflict resolution and improving the level of communication, trust, cooperation, and collaborations play an important role in the increase of tendency to entrepreneurship. Banks must establish their reward system based on market factors such as new accounts, number of customers, and the level of customers' satisfaction. Moreover, attempts must be made to replace traditional structures with non-official and decentralized structures to increase the tendency to entrepreneurship, thereby be able to quickly and properly respond to customers' needs. In this respect, our findings are in line with the results obtained by Szirmai et al. (2011), Sobel et al. (2017), Erbano and Aparico (2016), Ramezanpour Nargesi et al. (2015), and Bahrinejad et al. (2018). Therefore, it is suggested that regulations and laws be modified and communication and information exchange barriers be minimized to increase the tendency to entrepreneurship in oil. By doing so, experts will have more freedom to act by applying organic and dynamic structures.

One of the major drawbacks in the present study was a lack of a domestic study in line with the goal. In addition, library studies were primarily focused to identify factors. Therefore, it is recommended that qualitative studies be carried out in the future. The topic can be developed by offering research proposals. The barriers and problems of entrepreneurship and their effect on the tendency to entrepreneurship in the oil industry system of the country can also be evaluated. In addition, it is suggested that the compatibility of the human resources management system with oil industry entrepreneurship or compatibility of organizational structure proportional to oil industry entrepreneurship be assessed.

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