

## Investigating the Small Business Model in the Oil Industry Case study: MINI COTC Petrorefinery

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### Abstract

Small and medium enterprises are recognized as essential components of national development in developed and developing countries. Oil is one of the main sources of energy and a key raw material for many industries. The development of small and medium enterprises as one of the engines of the modern economy plays an important role in improving job opportunities, increasing exports and strengthening technological innovations. In Iran, the field of oil industry and petrorefinery is one of the main pillars that has a high impact on the development of the country. But there is a significant theoretical gap in the field of studying and presenting factors affecting the creation of small and medium-sized companies in Iran's oil industry. Based on this, in this research, the effective factors in the design of the model of small and medium companies in Iran's oil industry and the field of small petrorefineries are identified and a model for these businesses is presented. The current research is of applied type and the necessary data has been collected using the opinions of experts in this industry and related to it. The results show that factors such as government support, financing, smart planning, environmental factors, access, etc. lead to business growth in Iran's oil and petroleum industry.

### Keywords:

Business Model, Small and Medium Businesses, Iran's Oil Industry, COTC Petrorefinery

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## 1. Introduction

Small and medium enterprises around the world play an important role in terms of social, economic and environmental aspects (Wu, 2017). Related jobs can be an important source of diversity and flexibility in the industry. Industry diversification helps mitigate the impact of economic downturns and reduce the risk of supply chain disruptions. This is especially important in the oil industry, which is prone to price fluctuations and supply chain disruptions (Mishra and Modi, 2019). Consequently, addressing business models in the oil industry is essential to promote innovation, economic growth and diversification. Resource-rich countries like Iran put a lot of emphasis on competition in the oil and gas industry because this industry is essential in creating jobs and stimulating economic growth. The need for low capital, high efficiency and flexibility of small and medium industries show the economic justification of these industries more than ever (Bakhrasad, 2012). In Iran, using this ability to expand business is a good way to increase the maximum economic profit and prevent crude oil sales and helps the country's oil and gas value chain (Amiri Maqsood et al., 2014).

Appiah et al.'s (2020) study on small and medium-sized enterprises (SMEs) operating in the oil and gas industry sector shows that less stringent regulations in these industries are positively related to investment intention. Also, the threat from new entrants, competition, the power of suppliers and buyers is effective on the investment of small and medium businesses. The expectations of SME managers from the oil and gas business include high income, job opportunities, infrastructure improvement and service expansion. The findings of this study indicate that in order to achieve the maximum participation of small and

medium businesses in the field of oil and gas, it is necessary to integrate strategies between the macro environmental factors, the power and influence of the industry, and the internal stakeholders. Heim et al.'s 2013 study confirms the strategic alignment of SMEs with NOCs (National Oil Companies) and IOCs (International Oil and Gas Companies). Mokussem et al. (2018) in the study of the expansion of small and medium manufacturing businesses based on the effect of performance and innovation in technology, showed that innovation in technology includes business skills, technological infrastructure and product organizational culture and atmosphere, sales efficiency and efficiency. The innovation of manufacturing companies has a positive effect. Moradi et al. (2017), believe that small and medium businesses can be an important source of diversity and flexibility in the industry. Industry diversification can help mitigate the impact of economic downturns and reduce the risk of supply chain disruptions. This is especially important in the oil industry, which is prone to price fluctuations and supply chain disruptions (Mishra and Moody, 2019). The growth of small business enterprises is influenced by internal factors and environmental factors of the business that are out of control. External factors include legal frameworks, access to external financial resources, and human resource capacity, and internal factors include entrepreneurial characteristics, managerial capacity, marketing skills, and technological capacity (Benzazoua et al., 2015: 224). In the research conducted by Cassia and Colombelli (2010), the factors affecting the development of small and medium businesses, leadership, risk-taking status and investment with the purpose of growth were stated (Cassia and Colombelli, 2010). In other researches, it was shown that organizational structure (formality, concentration and separation), business strategy (concentration strategy and cost leadership strategy), supply structure

(supplier power and lack of technological integration) and government policies (fiscal) of tax incentives, customs and export) are among the factors that are related to the growth of small and medium businesses. (Latfi et al., 2014: 442).

Considering the importance of the oil and petrorefinery industry in Iran's economy and its key role in economic development and growth, the necessity of developing and improving small and medium businesses in this industry is felt more than ever. These businesses can play an important role in creating employment, developing technology and increasing productivity in the oil and petrorefinery industry. In this context, the development of new and efficient business models that help these businesses to face the existing challenges and at the same time continue their growth and development is of great importance. This issue is especially important in the case of the small optimized petrorefinery or Mini COTC, which is a new and revolutionary innovation in the oil industry. Despite the importance and key position mentioned, the theoretical foundations of small and medium businesses in the oil industry suffer from the lack of business development models based on the indicators and distinctive features of this sector. Based on this, in this research, the effective factors in the design of the model of small and medium companies in Iran's oil industry and the field of small petrorefineries are identified and a model for these businesses is presented. Case study is Mini COTC petrorefinery of Iran.

## **2. Theoretical foundations of research**

In this section, the conceptual definitions of the terms used in this research are stated.

### **2.1. Small and medium industries**

In many countries, SMEs are defined by the number of employees. A company with 10 to 50 employees is considered a small company and a company with 50 to 250 employees is considered a medium company (Purnima Rao et al., 2023). In terms of revenue, a company with an annual revenue of less than one million dollars is considered a small company, and a company with an annual revenue between one million and five million dollars is considered a medium-sized company (Jadhav et al., 2023). In terms of sales volume, a company whose sales volume is less than one million units is a small company, but a company with a sales volume between one million and five million units is considered a medium-sized company (Audretsch et al., 2023).

Business is an activity that includes production, purchase of goods and services for the purpose of sale and with the aim of making profit (Berati et al., 2012). Small and medium enterprises (SME) are recognized as essential components of national development in developed and developing countries (Lai and Arifin, 2011). This sub-sector of the world economy has been significantly associated with increasing employment, poverty alleviation, equitable distribution of resources, redistribution of income, technical and technological innovation, development of entrepreneurial skills, uniform industrial and economic dispersion, and overall improvement of the living standards of the people of an economic region. Although small and medium businesses are considered as real and acceptable drivers of economic development, there are also problems and challenges. Some of the prominent problems identified in this type of business are: poor infrastructure facilities, budgetary and financial challenges, insufficient managerial and entrepreneurial skills, limited capacity for research and development as well as innovation, limited demand for products and services. They are numerous tax burdens and the actions of the

majority of government officials and agents (Onugu, 2005).

In general, the development of the economy of any country largely depends on the success of small and medium enterprises of that country. (Nasehi Far, Vahid et al. 2009). Small and medium businesses are always exposed to various internal and environmental threats. The Achilles heel of these companies can be seen as their inability and lack of attention to production, absorption and management of knowledge. Therefore, improving the capabilities of small and medium enterprises in knowledge management is the most important goal and the main indicator of the evaluation of policies supporting small and medium enterprises. There is no doubt that the efficiency of small and medium enterprises is very important for the economic development of most developing countries. For this reason, these companies have always enjoyed the strong support of their government. Providing financial and banking services to small and medium businesses is also very valuable from an economic point of view, considering the importance of this sector in all countries. Especially in low-income countries, banks can play an essential role in this field.

## **2.2. Small and medium businesses in the oil industry**

Small and medium-sized companies are of particular importance in the oil industry because they have the possibility to create multiple jobs, achieve results quickly, influence the surrounding communities, import substitution and export expansion. The ever-increasing growth resulting from the launch of new oil projects in terms of the volume and product variety of these industries has provided a suitable platform for the development of downstream industries as a consumer of oil products and a complement to the value chain of the oil industry (Rostami et al., 2020). Downstream industries are all activities related to refining and refining in refinery

facilities to produce petroleum products and use them for production and transportation, storage, distribution, domestic sales, export and import of petroleum products and petrochemical products (Falsafion and Vali, 2014).

The oil and gas value chain consisting of large, medium and small enterprises and production and service companies in the economy of every country is considered an ecosystem, which needs to identify and eliminate the deficiencies of this ecosystem. Surely, this ecosystem will consist of public and private sectors in line with policy making and designing effective mechanisms in order to facilitate and speed things up (Rostami et al., 2020). The added value chain in the oil industry is complete when it is provided to society in the form of a final product.

## **2.3. Petrorefinery**

Petrorefinery is a combination of refining and petrochemical complexes, which is built with the aim of increasing productivity, reducing product costs, improving efficiency, increasing profitability and improving energy consumption. In the current situation, the construction and operation of oil refineries are less economically profitable compared to petrorefineries. In order to increase profitability, productivity and reduce costs, the integration of refineries and petrochemical complexes is proposed as an effective solution. The integration of petrochemical and refinery leads to synergy between refinery and petrochemical and competitive and strategic advantages. It also optimizes petrochemical and refinery products, increases cash margin and reduces the impact of feed and product price fluctuations. Security of feed supply and optimal use of energy are other advantages. Petrorefineries, as the turning point of the oil industry, play an important role in the development of businesses and society's economy. These units not only convert crude oil into salable products, but

also facilitate the employment and entrepreneurship of different sectors of the society in various industries and provide the prosperity of small and medium businesses. Petrorefineries, as one of the main foundations of the industry, have a wide impact on job creation at the national and global level. These impacts include the creation of direct and indirect jobs, skills development, and investment in energy-related infrastructure (2022, International Labor Organization (ILO)). Due to their

smaller size, mini refineries have lower construction and operating costs than larger refineries. These units have high flexibility in producing different products and can quickly respond to changes in demand and market. A petrorefinery with a capacity of less than 20,000 barrels is considered a mini petrorefinery. With the specialization of industries, it is possible to use the capacity of mini petro in the fields for specialized grades of petrochemical products

### 3. Presentation of the Proposed Method

The present research method is descriptive. The present study has investigated the small business in petro-refineries to arrive at a model related to small business in Iran's oil industry. Small and medium-sized business means small optimized oil refinery or Mini

COTC. Localization of the model has been done through quantitative and qualitative methods, and finally, the proposed model has been tested using statistical method. This research is practical in terms of purpose. The necessary information and data are collected in two library and field methods. The tools of data collection in this research will be interviews with experts and questionnaires. Steps of research are shown in Figure 1.

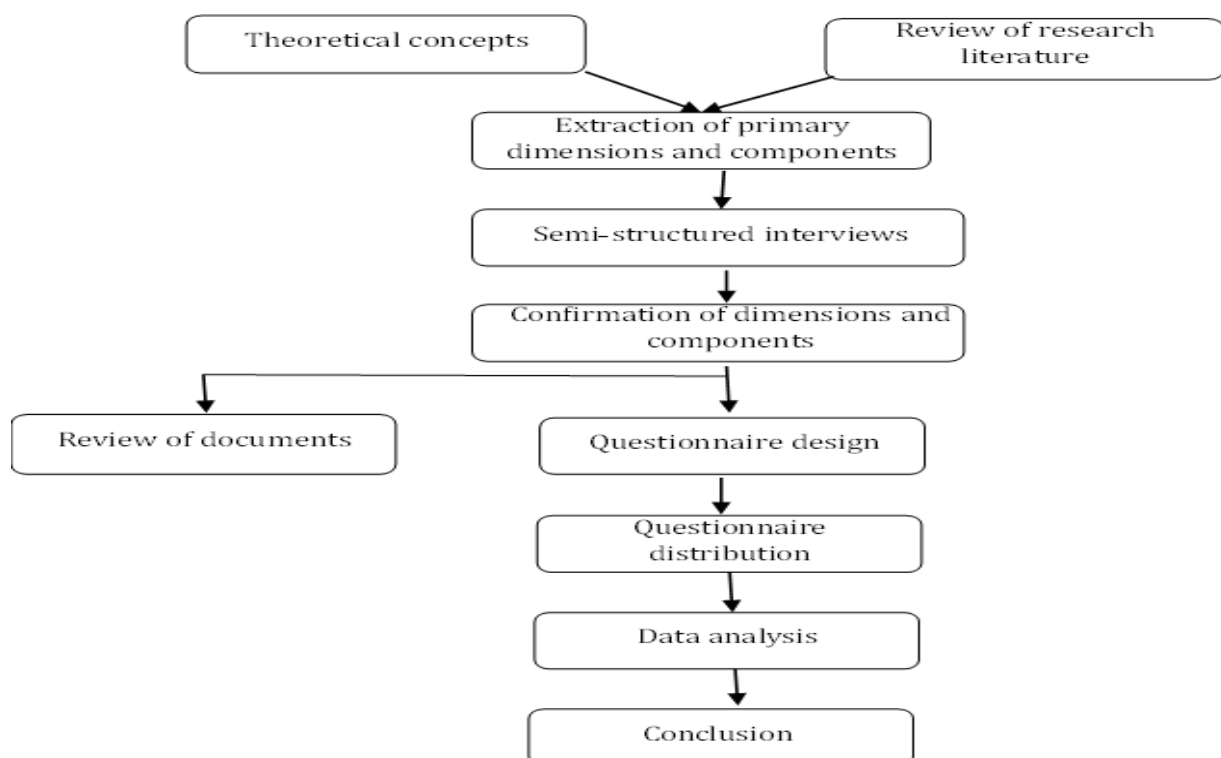


Figure 1. Research implementation steps

In the field research department, in order to collect information, questionnaires are distributed among the senior officials of the oil industry. Information has been collected from employees and specialists of 37 refineries, petrochemicals, oil and gas companies in different regions of Iran. The statistical population is the human force working in Iran's oil industry, which was obtained by using the unlimited population formula of 384 people. In order to ensure the results and based on the available facilities, a statistical population of 440 person was considered. The participants have the jobs of business development professors with doctoral education and 15 to 25 years of work experience, business finance experts with master's degrees and 15 to 21 years of work experience, and managers of business financing institutions

with master's education and their work experience was 15 to 22 years. The age of the respondents is in the range of 18 years and above, the age group of 18 to 30 years with 8% is the lowest and 41 to 51 years with 33% are the most people. 63% of the respondents are men and 37% are women. Based on education, 43.75% of the respondents studied at the bachelor's level, 35.41% at the advanced diploma level, and 20.84% at the master and doctoral level. This research was conducted between 1398 and 1402. This research has presented a small business model in Iran's oil industry, which is a small optimized petrorefinery or Mini COTC. In other words, it is in the subject area of management and branch of small and medium business management.

Table 1. Frequency distribution of respondents

Frequency percent	Frequency	Specification	No
8	35	18 to 30 years	Age
20	88	31 to 40 years ۳۱ تا ۴۰ سال	
33	144	41 to 51 years	
31	135	51 to 60 years	
9	38	61 years and more	
37	161	Woman	Gender
63	279	Man	

۳۵,۴۱	۱۵۷	Advanced Diploma	Education	۳
۴۳,۷۵	۱۹۴	Bachelor		
۲۰,۸۴	۹۵	Master and PHD		

In the qualitative part of this research, interviews have been used as a tool to collect the necessary information for conceptualizing and developing a conceptual framework in the field of small businesses in the oil industry. These interviews have been collected and analyzed based on the purpose of the research and on the feedback received during the process. First, it started with the demographic study in the framework of the intended goals in the research and the identification of experts in the field of regional entrepreneurship policy, selection questions and open-ended interviews, and then specialized questions were asked. Based on Cavalli's model (1996), the process of conducting interviews in this research was done in seven stages by determining the topic, designing interview questions, interview situation, implementation, analysis, verification and reporting. Validation was done in different stages of the qualitative method. The research topic was initially confirmed by several experienced trainers. In the compilation stage, the interview questions were approved by the experts. Content analysis was used to analyze the qualitative data of the research. This method is used for a set of texts used in an interview or group discussion. And in that, the data is scrutinized to identify common themes,

ideas, and semantic patterns that appear repeatedly.

A semi-structured interview is an interview in which the interview questions are predetermined and all respondents are asked the same questions. According to the data collected in the form of interviews, which has reached theoretical saturation with the process of continuous adaptation, after defining the interview questions for which a quantitative scale is defined, it is possible to code the collected interviews. In Table 2, the checklist related to the results of interview content analysis using open, central and selective coding is provided. In open coding, concepts from interviews and documents are classified based on their relevance to similar topics. The findings showed that at this stage of the coding process of the collected data, the final classification and grouping of all the main concepts and codes in 11 categories has been done. Based on concepts and categories, the core coding part is done. The purpose of axial coding is to establish relationships between the generated categories (in the open coding phase). Selective coding is the process of selecting the main category, systematically relating it to other categories, checking the validity of these connections, and finalizing the categories that need further refinement and development.

Table 2. Coding of interview content analysis results

Source	open coding (index)	Axial coding (mechanism)	Selective coding (next)
interview	Modifying administrative procedures and regulations and removing cumbersome regulations to simplify and facilitate the business creation process	Government support	Initial model
interview	The government's attention to business for better business development		
interview	Government support to reduce financial worries		
interview	Support regulations for creating new business		
interview	fair division of value	Access to resources and markets	
interview	Quick and easy access to the market and facilitating presence in the target markets		
interview	The role of the market in timely and optimal supply of resources	Cooperation and partnership	
interview	Creating value for cooperation parties		
interview	Simplifying cooperation methods		
interview	Being transparent of cooperation		
interview	Design of a cooperation agreement		
interview	Regional cooperation and expansion of interactions		
interview	Employee participation		
interview	Managers participation		
interview	Participation of strategic units		
interview	Participation of stakeholder	Rules and policies	
interview	Administrative bureaucracy		
interview	Existence of back-breaking sanctions		



interview	Special rules and regulations	Smart planning
interview	Business use of innovative production procedures and methods	
interview	Selection of corporate experts and mentors	
interview	The degree of alignment and compatibility of laws and regulations related to business development, to reduce the costs of creating new businesses and establish healthy competition.	
Interviews and authoritative papers	Facility supports and credit guarantee	Financing factors
Interviews and authoritative papers	Absence of foreign investment	
Interviews and authoritative papers	Currency transfer problems	
Interviews and authoritative papers	Capacity building for marketing mix	
Interviews and authoritative papers	Policies and support programs	Supporting and persuasive factors
Interviews and authoritative papers	Creating a persuasive and encouraging atmosphere	
Interviews and authoritative papers	Making new equipment and technologies available	

Interviews and authoritative papers		
Interviews and authoritative papers	Development of a comprehensive plan for the development of SMEs	
Interviews and authoritative papers	Comprehensive improvement of infrastructure, facilitating.	
Interviews and authoritative papers	Training of individual, group and management skills	
Interviews and authoritative papers	access to information	
Interviews and authoritative papers	Establishment of consultant service centers	Educational and skill factors
Interviews and authoritative papers	Strengthening threat capability by relying on internal talents	
Interviews and authoritative papers	Using skilled, specialized and experienced human resources	
Interviews and authoritative papers	General attitude towards business	Environmental factors

Interviews and authoritative papers	The level of diversity of economic activities and social activities	Individual factors
Interviews and authoritative papers	Existing competitors	
Interviews and authoritative papers	Access to suppliers and customers or new markets	
Interviews and authoritative papers	.. Knowledge of bankruptcy regulations and laws	
Interviews and authoritative papers	Entrepreneurial skills	
Interviews and authoritative papers	Individual records	
Interviews and authoritative papers	Individual characteristics	
Interviews and authoritative papers	wish for success	
Interviews and authoritative papers	risk taking	

Interviews and authoritative papers	independence	
Interviews and authoritative papers	Creativity	

Therefore, the conceptual model of the research can be considered according to Figure 2.

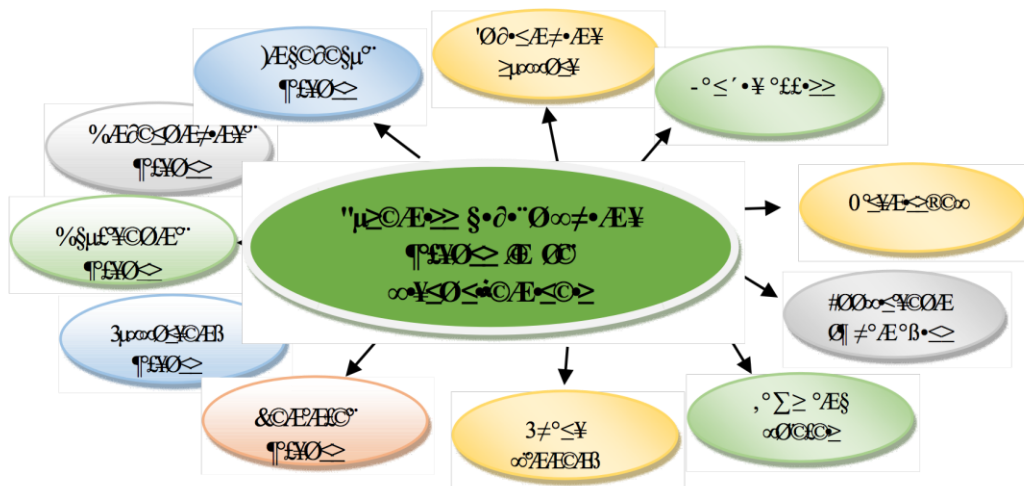


Figure 2: Conceptual model of the research

At the quantitative level, the data collection method is field and survey method. In this section, a questionnaire tool is used. After reviewing the literature and background of the subject and analyzing the interviews conducted with experts, the main categories were extracted. Content validity index and relative content validity coefficient were confirmed by presenting to experts. The data collected from the questionnaires have been prepared and analyzed first with

descriptive statistics and then using Excel and SmartPLS software.

The information obtained from the interviews and the main indicators, considering that they were placed in more than 2 categories and each main indicator includes several sub-indicators, so it is necessary to analyze them with multivariate analysis techniques, hence and considering the non-normality. The data collected in the questionnaire, smart pls software was selected for data analysis. The inferential

statistical tests used, the application of each of these tests and the software package used for each of the statistical tests used are

summarized in Table 3.

Table 3. Statistical tests used and their related applications

Software	Application	Used Tests	No
SmartPLS	Checking the normality of the distribution of variables	A Kolmogorov-Smirnov (K-S) sample	1
SmartPLS	Checking the reliability of the questionnaire	Cronbach's alpha coefficients	2
SmartPLS	Checking the validity of the questionnaire	Confirmatory factor analysis (CFA)	3
SmartPLS	A meaningful study of relationships between variables	Correlation test	4

#### 4. Discussion and Results

In order to analyze the internal structure or in other words the validity of the questionnaire and to find the constituent factors of each of the external variables, confirmatory factor analysis (CFA) tool is used. Loadings factor related to each of the constructs were significant at 99% and 95% confidence levels. Therefore, the studied constructs are highly reliable in terms of validity. Research variables in structural

equation modeling are divided into two categories: hidden and obvious. The hidden variables are the main research variables and the obvious variables of the questionnaire questions. All items or questions of the questionnaire have relatively acceptable validity (factor loadings are more than 0.4). The fit indices of the model can be seen in the following table:

Table 4. Modeling of fit indices

Extracted average variance	Composite reliability	rho_A index	Cronbach's alpha	Variable
0,743	0,843	0,806	0,736	Smart planning
0,918	0,978	0,971	0,97	Excellence of the collection
0,718	0,866	0,806	0,796	Government support
0,702	0,876	0,792	0,788	Access to markets and resources

0,081	0,873	0,802	0,822	Other environmental factors
0,606	0,884	0,807	0,829	Educational and skill factors
0,097	0,800	0,812	0,779	Financing factors
0,072	0,869	0,867	0,819	Supporting and persuasive factors
0,089	0,909	0,909	0,880	Individual factors
0,609	0,822	0,723	0,684	Laws and policies
0,640	0,879	0,822	0,817	Cooperation of individuals/units

In addition, with the help loadings factor, it is possible to determine which index or item has a greater contribution to the measurement of its hidden variable. Any item with a higher loadings factor has a greater power or contribution to the measurement of the related latent variable. Table 5 shows the factor load, the main and sub-indexes and the coefficient value compared to the others. The factor load shows the effect of an item (observable variable) on a sub-factor. Secondary

indicators are also influenced by the main indicators. If the factor loading is larger and closer to one, it indicates that the observed variable can better explain the underlying or hidden variable. If the factor loading is less than 0.6, the relationship is considered weak and ignored. Loadings factor greater than 0.6 is desirable. According to the loadings factor in the table below, all items or questions of the questionnaire have relatively acceptable validity.

Table 5. Main and secondary characteristics of the final model

Loading factor	sub-index of the sub-branch from the main one	value of the coefficient compared to the others	main indicator
0.809	Modifying administrative procedures and regulations and removing cumbersome regulations to simplify and facilitate the business creation process	0.114	Government support

Loading factor	sub-index of the sub-branch from the main one	value of the coefficient compared to the others	main indicator
0.799	Support regulations for creating new business		
0.797	The government's attention to business for better business development		
0.738	Government support to reduce financial worries		
0.839	Absence of foreign investment	0.095	Financing factors
0.791	Currency transfer problems		
0.761	Alignment and compliance of laws and regulations related to business development, to reduce the costs of establishing start-up businesses and establish healthy competition		
0.693	Facility supports and credit guarantee		
0.864	Selection of corporate experts and mentors	0.061	Smart planning
0.779	Existence of back-breaking sanctions		
0.759	Business use of innovative production procedures and methods		
0.837	The degree of diversity of economic activities and jobs in the society	0.059	Environmental factors
0.808	Existing competitors		
0.726	Access to suppliers and customers or new markets.		

Loading factor	sub-index of the sub-branch from the main one	value of the coefficient compared to the others	main indicator
0.716	General attitude towards business		
0.714	Using skilled, specialized and experienced human resources		
0.852	fair division of value	0.053	Access to markets and resources
0.835	Quick and easy access to the market and facilitating presence in the target markets		
0.827	The role of the market in timely and optimal supply of resources,		
0.829	Characteristics of people involved in the work	0.047	Individual factors
0.823	Knowledge of bankruptcy regulations and laws		
0.781	Individual records		
0.762	risk taking		
0.76	wish for success		
0.718	independence		
0.688	Entrepreneurial skills	0.042	,Educational, skill infrastructural factors
0.87	Comprehensive improvement of infrastructure		
0.815	Establishment of consultant service centers		
0.784	Facilitating access to information		
0.768	Teaching individual, group and management skills		



Loading factor	sub-index of the sub-branch from the main one	value of the coefficient compared to the others	main indicator
0.828	Creating value for cooperation parties	0.018	,Cooperation partnership and coordination
0.808	Being transparent way of cooperation is		
0.774	Simplifying cooperation methods		
0.741	Designing a cooperation agreement		
0.612	Regional cooperation and expansion of interactions		
0.837	Employee participation	0.017	Cooperation of individuals/units
0.8	Participation of strategic units		
0.797	Involvement of managers		
0.776	Participation of stakeholders		
0.856	Bureaucracy	0.014	Laws and policies
0.794	Technology transfer problems		
0.679	Business rules		
0.817	Policies and support programs	0	Supporting and persuasive factors
0.802	Reduction of administrative bureaucracy		
0.752	Making new equipment and technologies available		
0.736	Creating a persuasive and encouraging atmosphere		
0.664	Development of a comprehensive plan for the development of SMEs		

Items with a higher loading factor have a greater effect on their underlying construct. The item "all-round improvement of infrastructure" with a loading factor of 0.87 has the greatest effect on the sub-factor "educational and skill factors". The item "Choosing corporate experts and mentors" with a loading factor of 0.864 has a great effect on the "intelligent planning" sub-

factor. And in the same way, the influence of each item on the corresponding sub-factor can be checked. This information can be useful in analyzing and investigating factors affecting the development of small and medium businesses in the oil and petrorefinery industry. Final model is shown in Figure 3 which corresponds to the output of SmartPLS software.

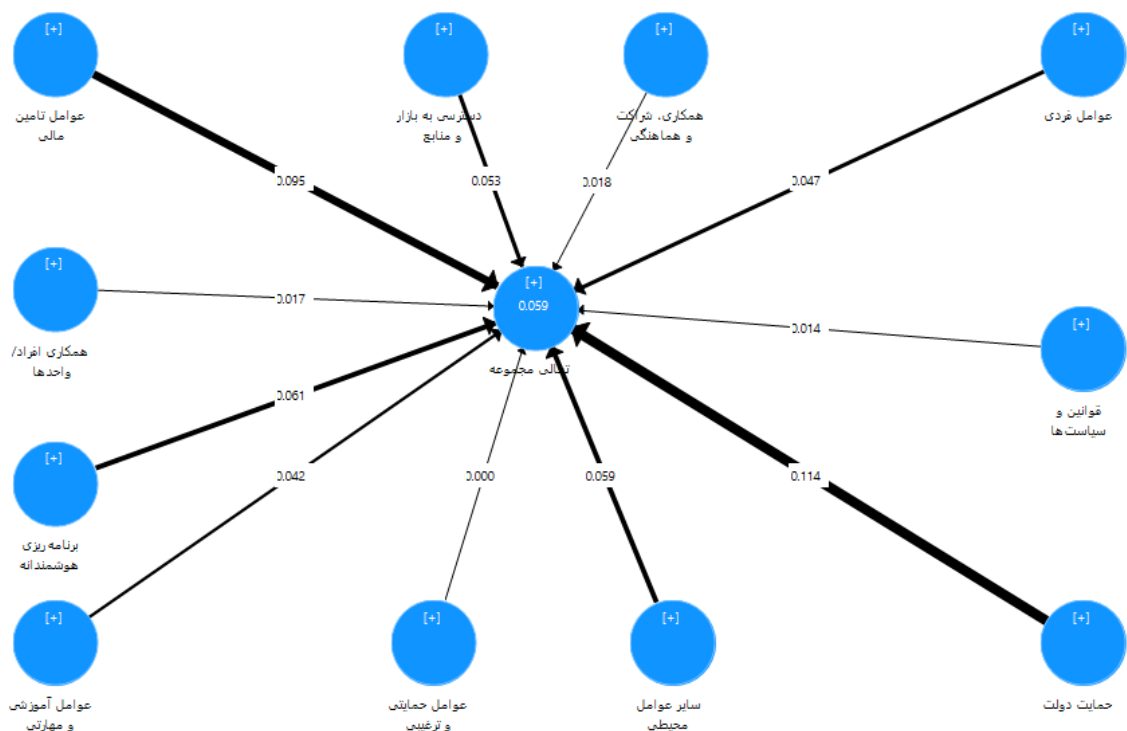


Figure 3. Final model

Based on Figure 3 and Table 5, the variable of government support with a path coefficient of 0.114 is the strongest, and support and persuasive factors, with a path coefficient of zero, are considered the weakest factors in the excellence of a petrochemical complex, and in terms of effective and constituent factors (so-called sub-indicators), in the support of the government, the index of "amending administrative procedures and regulations and removing cumbersome regulations to simplify and facilitate the business creation process" with a factor load of 0.8 is stronger than the others. Also, the variable "selection of corporate experts and

mentors" with a path coefficient of 0.864 has a significant effect on "intelligent planning" and on the other hand, intelligent and calculated planning is one of the important factors in the success and excellence of the petrochemical complex. In the following, the research findings are compared with some related studies. In the research conducted by Aghili et al. (2013), the supportive role of the government in the development of small businesses is emphasized. In the study by Haj Karimi et al. (2018), the importance of environmental factors such as economic diversity and competition in the success of businesses is pointed out. Child et al. (2022) have

investigated the role of infrastructure and education in the development of small businesses. Our findings are consistent with the aforementioned studies.

## 5. Conclusion

The oil and petrorefinery industry is facing many challenges. On the one hand, there is a need for growth and development in this industry, and on the other hand, market fluctuations, product prices, and legal and environmental requirements have created pressure for small and medium businesses in this industry. Existing business models are not enough for this type of business and need to be developed and improved. Another issue that many oil industry business activists are facing is that they can no longer sell their oil products to their customers using the usual methods. Based on this, they seek to earn income and profit through new and innovative ways to sell their products, and in this regard, presenting a small business model in the studied oil industry can help them a lot. Based on this, the current research was conducted with the aim of extracting the local model of small businesses in the oil and petrorefinery industry, and in this regard, the local model of small business model development in the oil industry of Iran with the study sample of the small optimized petro-refinery or Mini COTC and the constituent factors of this model were investigated. The results show the support of the government with a coefficient of 0.114 and the sub-indicators "amending administrative procedures and regulations and removing cumbersome regulations to simplify and facilitate the process of creating a business", "supporting regulations for creating a new business", "Government's attention to business for better business development" and "Government support to reduce financial concerns" are in the first indicator rank, and the difference of the second main indicator, i.e. financing factors (0.095), is insignificant. The results show the importance of the government's role and its

impact on the success of businesses. Therefore, the first task is the responsibility of the government and it should be aimed at reforming administrative procedures, regulations and removing cumbersome regulations, creating jobs and facilitating the process of creating a business, developing protective regulations for creating new businesses, and reducing the financial concerns of businesses. To provide the necessary preparations for the entry of foreign investment, to regulate transparent financial regulations, to increase the diversity of economic activities and businesses, to manage domestic competition and to facilitate access to suppliers and customers. In order to create and strengthen the oil industry, things like the integration of the policy and regulation system of two refining and petrochemical industries as a tool to facilitate bureaucracy and increase cooperation and participation, restructuring of the existing refining and petrochemical complexes are suggested. Considering the global approach of moving towards the establishment of oil refineries, the requirements of new refining and oil refining projects in Iran, including export markets and their upgradeability and specialized working groups to monitor actions at the global level in this field and establish international communication should be considered. For future investigations, it is suggested to consider a larger number of managers, professors, experts, specialists, and experts in the quantitative sector. Another statistical population should be considered in the research and direct observations and comparison of statistics should also be used. It is also better to conduct the research in different times and conditions.

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