

Designing a Strategist Training Model at National Iranian Oil Company Based on a Mixed Approach

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ABSTRACT

The aim of the current research is to explore a strategist developing model based on a mixed method for National Iranian Oil Company. This study is an exploratory and applied research, and it methodologically uses mixed methods. In the qualitative part, which is based on a data theory approach, the required data were gathered by means of semi-structured interviews. The participants involved in the study were 24 industrial and academic experts. After collecting the data, they were encoded, and necessary measurements were then taken to determine dimensions, main categories, subcategories, and relevant concepts related to our coding system. Having gained a coded table which was pivot and selective, finally, the goodness of the fit of the paradigmatic research model was developed (n=320). Quantitative analyses were performed by means of SPSS 24 and Lisrel 9.30 software. The qualitative findings of this study included 11 main categories, 24 subcategories, and 98 concepts. The concepts which were related to development strategists included causative factors (individual factors, organizational factors, and discourses); the category of central strategic thinking (conceptual and organizational thinking, foresight, and philosophical attitudes); obstructive factors (both inter organizational and intra organizational factors); contextual factors (cultural context, psychological factors, and organizational independence); strategies to identify the talents, to attract them, and to retain them; the outcomes of the establishment of monitoring system; strategic thinking; and the process of developing experts in our oil company. Our findings resulted in discovering a pattern to develop experts in oil industry.

1. Introduction

Among the industrial organizations which see their success as a combination of management science and art, the oil industry has a special place. The strategic look at human resource management says: "Employees are the organizations' distinction and excellence factor." Because of this, human management has been considered as a fundamental principle in the world's oil and gas organizations [1]. The continuing diversity of this industry, coupled with the vast amount of active manpower which is combined with everyday progress and technological developments, has made it a good model for flourishing management and strategic knowledge [2].

A look at management patterns in the world's largest oil and

gas companies suggests the use of several general criteria in the field of human resources in these organizations. According to Christophe de Margerie, CEO of Total, some of these patterns such as audacity, pragmatism, mental and intellectual challenges, and creativity, which are the mainstream focused strategies of Total managers, have been institutionalized in the company and helped the company's adventure in the world's oil and gas industry to continue. Today, the prestigious oil and gas brands in the world have pulled the world economy by exploiting elite manpower through efficient management and have changed the direction of transnational political discourse in favor of their respective governments [3].

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Meanwhile, Iran's National Oil Company, in its bid to compete with the world's oil giants and rival oil companies in the region in the 2025 horizons, has considered its strategic perspective as reducing country's energy intensity to less than 0.3, maintaining its position as the second producers of OPEC capacity, gaining world's second place of natural gas production capacity, obtaining the first place in the region in refinery capacity, achieving the first place in the region in terms of the value of producing petrochemical materials, and acquiring the first position of oil and gas technology in the region (adapted from the Ministry of Petroleum official website). Certainly, Iran's massive and strategic oil industry, which holds the country's economic pulse, needs to strengthen the scientific, managerial, and strategic human resources in the headquarters and its subsidiaries in order to realize this vision.

Searching for scientific and management resources shows that the identification and development of talents required by organizations has a so long history that, in early 1977, McKenzie and partners suggested the term "war of talent" [4] to describe challenges the employers are faced with finding highly skilled candidates. They believed that few managers would be prepared to play a leading role in organizations. Thus, companies around the world find themselves in competition with others to achieve high talents. Hence, businesses need to be able to identify talented individuals, provide them with the necessary training, and maintain and retain valuable employees for the long term [5]. Therefore, strategic thinking is considered to be one of the two main capabilities of leaders with prominent performance [6]. It is believed that the strategy is an intellectual process based on logic, analysis, and thinking, and it is bound to the vision and perspective designed by the organization's leaders. Strategic thinking necessitates going beyond the managers' minds of everyday operations and aiming to focus on long-term strategic intent and purpose of the business [7].

On the importance training strategic managers in the country, the Chairman of the Islamic Consultative Assembly also emphasized the necessity of establishing a center for training strategic executives and distinguished strategic and executive decisions and practices while speaking among academic lecturers of ACECR [8].

In Mintzberg's view, strategic reinforcement also leads to compiling better strategies. He believes that managers with strategic thinking capabilities are able to persuade other employees to find innovative ways to succeed. They see the organization as it should be, not as it is. Accordingly, strategic thinking can be considered as a prelude to the future designation of the organization [9].

Among the top ten skills of understanding meanings, social intelligence, modern and adaptive thinking, intercultural competence, computing thinking, modern media literacy, multi-disciplinarity, design thinking, intellectual load management (the ability to filter and prioritize content in order to maximize cognitive function of the brain), and virtual collaborative effort, introduced by the Research Institute of University of Phoenix as the necessary skills of workforce in 2020, it can safely be stated that more than 8

skills are the potentialities of training a strategist [10].

Considering the importance of developing a strategist at the global and national levels, as well as for the petroleum industry, this study is important in a number of ways. First, there is no coherent study on strategic thinking as the most basic aspect needed to be investigated for training strategist. Often, regular studies have focused on the causal relationships between components using qualitative or rather quantitative methods; however, in the qualitative part, the present research considers the various dimensions of this phenomenon from different perspectives of scientific sources and from the viewpoints of oil industry experts and academics in the field of strategy in order to gain a better understanding and to integrate the desired structure; secondly, most works have studied the role and importance of strategic thinking on the development of strategic goals, while, in addition to studying the role and importance of the constituent components of this structure, the present research focuses on developing the components in the form of an educational model; thirdly, in the qualitative section, the approach of this research is based on data-based theory; to design the pattern of training strategists based on this theory, a set of fundamental effective conditions and factors as well as external and inter-organizational factors involved with the development of the strategists is systematically examined, and the results are verified by the interviewers in the quantitative section; finally, the most significant feature of this research is its inter-disciplinarity and particular attention paid to the structure of the strategy as a complex process of thinking from the point of view of psychology. In this context, using theoretical and research foundations in cognitive schools, educational psychology, learning psychology, personality psychology, and strategic management, a comprehensive educational model for training strategists with a logical combination of the studied dimensions was designed to train leaders, managers, and the experts of the organizations, thereby training the strategist team.

Therefore, considering the progressive developmental plans awaiting the oil industry, the high level of strategic decisions, and the lack of strategic personnel in the position of policy making and decision making, the purpose of the present study is to design the proper pattern of training strategists for the Iran's National Oil Company; its secondary objectives are as follows: identifying the dimensions (main categories), causal conditions, intermediary factors (promoter and preventive), and strategies; specifying the effective implications of training strategists in the National Oil Company; and identifying the most important components involved in the central issue, i.e. strategic thinking, using a mixed research method.

2. Theoretical Fundamentals and Background

By the mid-1980's, the ineffectiveness of the strategic

management process has led many professionals to focus on the need for strategic thinking. In the 1990's, the strategy paradigm evolved with the advent of strategic thinking to help and facilitate strategic planning and strategic management [11]. The evolution of the research paradigm from strategic planning in strategic management reflects the economic, technological, and social changes started in mid-1950's, peaked especially in 1984 with higher levels of instability in the environment, and faced the strategy process in organizations with new needs [12].

2.1. Strategic Thinking: Definitions, Concepts, and Models

There is no consensus on the strategic thinking among the experts in this field. Particularly in our country, this has become the tale of darkness, and everybody has suggested a framework based on its own understanding. Mintzberg, one of the leading thinkers in the field of strategic management, explicitly emphasizes that strategic thinking is not merely an alternative to what is under the umbrella of strategic management. It is a "special way of thinking" with specific features, distinct from other methods. Explaining the difference between strategic planning and thinking, he argues that strategic planning is a kind of systematic arrangement of schedules based on predetermined strategies. On the other hand, strategic thinking is a combination of two processes of "applying insight" and "innovation," which ultimately leads to the company's grand/macro vision. He believes that conventional approaches to strategic planning often ignore strategic thinking and reduce overall strategic planning to a set of successive and predetermined phases and steps [13].

Several definitions are provided for strategic thinking, and despite the enormous extent of these definitions, some common concepts are trackable in all of them. From Mintzberg's point of view, strategic thinking is a mental process that, through creativity and intuition, creates an integrated view of the business [13]. Garrat considers the strategic thinking as a process that enables senior executives to think of beyond daily management crises and processes so as to adopt a different attitude from the organization and its changing environment [14]. Abraham also believes that strategic thinking is to identify trusted strategies or business models leading to value creation for the customer [15]. Porter sees strategic thinking as the process of formulating and analyzing assumptions about the future; assumptions that underlie the mission, goals, and strategy of the organization [16]. This process covers a wide range of issues and may therefore become inefficient and time-consuming if not structurally implemented [17]. Strategic thinking responds to increasing needs of an organization adopting an environment that has the five following characteristics: uncertainty, ambiguity, increasing competition, chaos, and speed [18].

Strategic Thinking from the Perspective of Strategy Schools

Many theorists of various philosophical trends have spoken about strategic thinking. Table 1 summarizes the views of schools

influenced by the two prescriptive and descriptive approaches to the phenomenon of strategic thinking.

3. Methodology

The present research is categorized as applied research by purpose, as a mixed-method research methodologically, as an exploration plan, and as a tool compilation model by the strategy of collecting and analyzing data. In fact, the researcher aims to discover an optimal model for nurturing a strategist at the National Oil Company; thus we first collected qualitative data, and we then quantitated the data; ultimately we sought to align the results.

4. Sample Population and Sampling Method

The research community in the qualitative sector includes well-qualified studies like senior and middle-management executives in the oil company, major oil policymakers, academic researchers, and experienced academics in the field of strategic management; among them, 24 persons (after interviewing 24 persons, we could not find any new concept) were selected as a sample of research in the qualitative section through a targeted and chain method, and qualitative data were selected using deep semi-structured interviews. In the quantitative part, a sample of 320 employees of the oil company was selected using the available method, and they responded to the tools derived from the qualitative section.

5. Research Tools

In the qualitative section, the data gathering tool was profound, and semi-structured interviews were compiled based on theoretical and empirical foundations; the interview included 20 questions. In the quantitative part, the data were collected using the strategist training model questionnaire, which was derived from the qualitative research section (based on the data-based theory). The psychometric properties of this tool were also examined. First, content validity was considered and modified (to cover all the aspects of the concept) by 5 university academics (2 dominant academics on the strategic issues, 2 academics familiar with the oil company, and one testing expert). Furthermore, the validity of the tool structure was verified by confirmatory factor analysis and the quality of the fitting indices obtained. Moreover, Gattman's Lambda 2 coefficient was more than 0.74 for all the agents, indicating the reliability of the tool.

6. Data Collection and Analysis Method

After obtaining the necessary permissions to formulate the semi-

Table 1- The viewpoints of strategic schools on the strategic thinking (Shariat et al., 2018(Ph.D. Thesis))

Approach	School		Components and Features	Strategist's Significant Feature
Prescriptive	Design	Selznick (1957) Newman (1965) Andrew (1965)	Compatibility and adaptation; competitive advantage; SWOT adjustment; making perspective; informal and simple; critical; measured	Design ability; intellectual order; idea architecture
	Planning	Ansoff (1965)	Planning; budgeting; scheduling; scenario making; short term and long-term objectives	Ability to plan and budget; setting different scenarios; long-term and short-term targeting
	Positioning	Porter (1985, 1980) Sun Tzu's (1990)	Planning; staff analysis; economic and competitive programs	Ability to plan based on staff analyses; economic and competitive planning; mastery of project management
	Cognitive	Simon (1947-1957) March and Simon, (1958)	Map; framework; concept; design; perception: interpretation; limited rationality; mental processes: direct intuition and experience	Self-taught; strong visual and intuitive perception; processing, organizing, and interpreting information; creative and abstract
	Learning	Lindblom (1959) RM.Cyert (1973) G Hammel and CK Prahalad (1985) Quinn (1980)	Unexpected strategy; making meaning entrepreneurship; risky action; heroism; informality	Flexible; having eclectic thinking; complex and unpredictable; dynamic; learner; entrepreneur; ability to face unexpected strategies; flexible and decentralized leadership
	Entrepreneurship	Schumpeter (1950) Cole (1959)	Discovering latent opportunities; fundamental opportunism; dominate and intuitive leadership; competitive environment; quantifiable and organized; idealizer; innovative and computing; enhancer; over-optimist; relying on your own attraction and self-power; great need for success; mental processes: intuition, experience, reason, diagnosis, and insight	Ability to formulate perspectives and flexible perspective; ability to use all subjective skills (objectivity, experience, reason, diagnosis, insight, prospective, retrospective, high-expectation, descending, lateral thinking, transcendence, and window-foresight)
Descriptive	Environmental	Hannan and Freeman (1977)	Feature: defined competitive environment; machinery and submissive; gradual evolution; adaptive; hidden opportunity	Ability to understand competitive environment; flexible; discovering hidden opportunities; adopt a strategy
	Power	Allison (1971) J Pfeffer (1976) Astley "Macro Power" (1984)	Fighting; looking for the best thing; bargaining; conflict; coalition; stakeholders; political game; collective strategy; networking and alliance	The ability to recognize the resources of micro and macro power; understanding the influential internal and external groups and alliances; skill of negotiation techniques; dialogue in conflict resolution; coalition of influential groups; dominating on political games
	Cultural	Rhenman and Norrmann (1977)	Integration of values, beliefs, beliefs, and myths; pragmatism; passivity, missionary, and machinery; reinforcement of stability	Ability to create a unique collective vision; formation of strategy in the collective process; symbolic; ideological; coherent and normative; formulation of integrated values, beliefs, and principals
	Integrated	Chandler (1962) McGill Group (1970) Mintzberg-Milles (1978)	Integration and combination; change and transformation instead of adaptation; attention to the lifecycle	Creating an exceptional perspective; ability to see the problem from different angles; paradigmatic rotation; mental subtlety; thoughtful and pragmatic; intuitive insight and high analysis power

structured questions of the interview, the researcher deliberately referred to one of the elites and experts in the field and conducted an in-depth interview with him. After completing the interview, she went to the next qualified person to interview based on the first interviewee's opinion. After completing and implementing 24 interviews, the data were saturated and the interviews stopped; the investigator then coded the interviews. Then, based on codes and according to the data-based theory, the foundation of dimensions and components and the aspects of research phenomenon, which was the optimal strategy for training strategists in the oil company, were extracted, and the questions about the preferred tool were gathered for quantitative data accordingly. This questionnaire was

completed by 320 persons, and the collected data were analyzed in two parts of qualitative (coding) and quantitative (descriptive section, including tables and graphs by Microsoft Excel 2013 software and the inferential part, including factor analysis and structural equation modeling by SPSS-24 and Lisrel 9.30).

7. Findings

The data of the present study were analyzed in two qualitative and quantitative sections. First, the findings of the qualitative data are presented; Table 3 shows the pivotal and selective coding outcomes of a strategy for training strategists in the National Oil

Table 2- Common elements forming the strategic thinking structure (Shariat et al., 2018 (Ph.D. Thesis))

Row	Strategic Thinking Elements	Theorists- Researchers	Constituent Elements
1	Making Perspectives / Having Attitudes	Liedtka (1998), Bonn (2005), Harbor (1991), Mintzberg (1995), Garrat (1995), Moores (1996), R Kaufman, H Oakley-Browne & Watkins (2003), O'Shannassy (2003), Palmatier (2008)	Illustrating long-term future; creating shared vision; thinking and illustrating; determining valuable goals; determining the purpose and desired organizational future
2	Systematic Thinking	Liedtka (1998), Bonn (2005), Goldman (2005), Clark (2012), Kauffman, Oakley Brown, Watkins (2003), Michael C. Jackson (2003)	Holistic thinking; combined thinking; cycle thinking; hypothesis; thinking over time; paying attention to the whole chain of value creation and understanding the interactions between its components; process thinking
3	Smart Opportunity-Seeking	Liedtka (2005), Goldman (2005), Garrat (1995), Olson (1999), Sahay (2008), Abraham (2005)	Attention to the environment; searching for external and internal environmental references; focusing on emerging strategies; on-time thinking; intelligent environmental elements; smart use of opportunities; awareness of industry and competitors
4	Thinking over Time / Time Horizons of Decisions	Liedtka (1998), Chords & the British (2006), Altier (1990), O'Shannassy (2002)	Ability to select and apply appropriate patterns of organization's history; communicating between past, present, and future; identifying repetitive patterns in events
6	Creative and Entrepreneurial Thinking	Bonn (2005), Hammel & Prahalad (1994), Ohmae (1978), Mintzberg (1994), Morrissey (1996), Heracleous (1998), Gratz & Fiona (2002), Abraham (2005), Antonik (2003), Sauter (2003), Hitt, M. A., Ireland, R. D., & Hoskisson (2003)	Creativity; exploration; understanding discontinuities; intuitive thinking; composition; divergent thinking; structure breakout; practical; finding different solutions; contemplative thinking
7	Conceptual Thinking	Goldman & Kissy (2005), Goldman (2005)	Inductive thinking; lateral thinking; illustration (simulation ability)
8	Futurism	Goldman (2005), Lawrence (1919), Gratz and Fiona (2002), A Sahay (2008), Abraham (2005)	Prediction; dreaming; illustration; scenario making; foresight
9	Intuitive Thinking	Mintzberg (1994), Liedtka (1998-2005), A Sahay (2008), Kutschera, Ryan (2009), Zahra, S.A. & O'Neill (2012), Gratz (2002)	Intuitive ability; specialist intuition: the ability to identify old patterns based on experience and entrepreneurial intuitions
10	Producing Thinking (Philosophical Attitude)	Soltani (2009), Renee (2010)	Critical thinking; the ability to question; producing thought; philosophical skepticism (lack of dogma)

Table 3- Pivotal and selective coding table, - designing strategist training model at National Iranian Oil Company

Dimensions	Pivotal Issue	Sub-category Issue	Concepts
Fundamental Factors	1- Cultural Context	A) Organizational Culture	Consistency; integrity of values; mission; and collective beliefs
		B) Organizational Ethics	Accountability; expertise; perseverance and strength (stability in seeking goals); and self-esteem
	2- Learning Context	A) Organizational Learning	Sensitive to self and others learning; continuous learner; and three-ring learning
		3- Psychological Factors	A) Cognitive Context
4- Organizational Independence	B) Active Thinking		Involving aim and working eagerly; changing the problem to discover it; the ability to turn fast thoughts (agility of mind); and analytic acumen (a combination of rational analysis; intuition; and lateral thinking)
		A) The independence of the Oil Company	Management from within and the establishment of specific regulations for oil industry
		B) Reducing Apoliticism	Establishment of legal structures; non-compliance with political changes in the country; and the prevention of deterrent laws
	1- Personal Factors	A) Intrinsic Characteristics	Intelligence (general and specialized); creativity; intuitive vision; broad scope of thinking; and verbal ability (rhetoric)
B) Personality Traits		Welcoming; emotional maturity; task-oriented; constructive adaptability (flexibility); pioneering; and perfectionism (arthropodism)	
C) Behavioral Features		Thinker and practical; effective communication; continuous learning and learner; challenging; paradigm breakdown; and risk-taking	
2- Organizational Factors	D) Personal Skills		The power of analysis; decision-making power; problem-solving skills; negotiation and bargaining skills; effective communication skills (social insight); time management skill; and extensive studies (inter-disciplinary knowledge)
		A) Organizational Facilities	Organizational structure; motivational and compensation systems; laws and regulations; standard systems; management support; and financial resources
	3- Making Discourse	A) Sensitization	Introducing eligible people in different ways; raising awareness at different levels; creating feelings of need; and creating mental capacities
		B) Making Meaning	Emphasizing the importance of developing a strategist to create added value; designing the model of training a strategist as an honor for the oil company; and institutionalizing a culture of strategist training
		Strategies	A) Talent Identification
B) Absorption and Maintenance	Improvement of structure; facilitation of absorption process; and modern absorption methods		
Pivotal Category	Strategic Thinking	A) System Vision	Holistic thinking; hybrid thinking; hypothesis-oriented (scientific thinking); thinking over time; and thinking of wheels
		B) Conceptual Thinking	Illustration (simulation ability); inductive thinking; and lateral thinking
		(C) Futurism	Prediction and prophecy; imagination and dreaming; forethoughtfulness; making scenarios; and making perspective
Interfering Factors	Environmental Factors	D) Philosophical Attitude	Deductive thinking; the ability to question; philosophical skepticism (unproductive); thought generation; and critical thinking
		A) Inter-organizational	Structural barriers; management barriers; educational barriers; and cultural barriers
Consequences	Development of Strategic Goals of the Organization	B) Intra-organizational	Social barriers; political barriers; and economic barriers
		Training Strategist	Contributing to the development of strategic thinking; creativity and innovation; helping to compile and develop conscious; creative; and futuristic strategies
		(A) Establishment of a Monitoring System	Maintaining managers' alertness; preventing parallel and tangible decisions; integrity of strategic objectives and plans; and creating competitive advantage in all areas

Company.

To better understand the results, Table 3 depicts a schematic representation of the extracted model.

According to Table 3 and Figure 1, the results of the research show 11 main categories, 24 sub-categories, and 98 concepts (at first, we found about 421 primary codes) presented as a paradigmatic model covering causal conditions (personal factors, organizational factors, and discourse), the pivotal issue of strategic thinking (systemic vision, conceptual thinking, futurism, and philosophical attitude), internal and external environmental intervening factors, background factors (cultural context, learning context, psychological factors, and organizational independence),

strategies for talent identification, absorption, and maintenance, and the consequences of training strategist, including the development of strategic thinking, providing the content for designing and establishing a watching system at the National Iranian Oil Company, and relations among various aspects of it.

In the qualitative section, 52 and 46 percent of the participants were men and women respectively; 2 percent did not respond to gender questions. The mean age in this study was 41.17 ± 3.65 and 40.96 ± 5.65 for men and women respectively. Table 4 shows the descriptive data of each of the components.

As it is obvious, in the questionnaire, the highest mean belongs to talent management with a standard deviation of 9.49, and the

Table 4- Descriptive statistics of the questionnaires

Factor	Number	Minimum	Maximum	Mean	Standard Deviation (SD)
Personal	320	12	30	24.35	2.98
Organizational	320	17	35	27.85	3.51
Making Discourse	320	23	40	33.38	3.54
Cultural Context	320	8	15	12.51	1.66
Learning Context	320	24	40	33.24	3.89
Psychological	320	8	20	16.28	2.28
Environmental (inter-organizational)	320	4	15	11.46	2.48
Environmental (intra-organizational)	320	15	52	23.87	4.22
Talent Management	320	48	90	74.38	9.49
Strategic Thinking	320	19	35	30.00	3.30
Development of Strategic Objectives	320	5	25	19.23	2.86
Organizational Independence	320	15	25	21.39	2.13
Inherent Features	320	16	30	24.48	3.00
personal Characteristics	320	14	25	21.17	2.42
Behavioral Features	320	21	77	31.35	3.75
Individual Skills	320	12	30	24.35	3.00
Organizational Facilities	320	8	20	16.10	2.32
Creating sensibility	320	6	15	11.74	2.00
Making Meaning	320	10	20	16.52	2.14
Organizational Culture	320	12	20	16.84	2.00
Professional Ethics	320	8	1	12.51	1.66
Organizational Learning	320	16	30	24.65	3.19
Cognitive Context	320	11	20	17.04	2.23
Active Thinking	320	2	10	7.73	1.41
Independence of the Company	320	3	15	11.50	2.00
Apoliticism	320	6	15	12.52	1.85
Talent Identification	320	6	40	11.35	3.50
Absorption and Maintenance	320	10	25	21.00	3.06
System Vision	320	6	15	12.45	1.85
Conceptual Thinking	320	11	25	19.77	3.31
Philosophical Attitude	320	11	20	17.19	2.07
Monitoring System	320	8	15	12.78	1.84
Strategic Thinking	320	11	25	21.18	3.14

lowest mean belongs to active thinking with a standard deviation of 1.41.

According to Figure 2, all of the standard coefficients were more than 0.3 except for the coefficient of the path of intervention factor to the strategies.

According to Table 5, the model matches the data properly, which means that the collected data supports the developed theoretical model. In the following section, we examine the hypotheses of the model.

- The first hypothesis: causal conditions (individual, organizational, and discourse factors) affect the pivotal issue.
- Second hypothesis: causal conditions (individual, organizational, and discourse factors) influence the strategies through the pivotal issue.
- Third hypothesis: interfering factors (inter-organizational and intra-organizational) affect the strategies.
- Fourth hypothesis: interfering factors (inter-organizational and intra-organizational) impact on outcomes through strategies.
- Fifth hypothesis: the underlying factors (cultural context, learning

context, psychological factors, and organizational independence) influence the strategies.

- Sixth hypothesis: the underlying factors (cultural context, learning context, psychological factors, and organizational independence) affect the outcome through strategies.
- Seventh hypothesis: the pivotal issue (systemic vision, conceptual thinking, philosophical attitude, and futurism) impact on strategies.
- Eighth hypothesis: the pivotal issue (systemic vision, conceptual thinking, philosophical attitude, and futurism) affect the outcome through strategies.
- Ninth hypothesis: strategies (seeking talent, recruitment, and retention) influence outcomes.

According to Tables 6 and 7, and the value of t, all the hypotheses derived from the model are confirmed ($p \leq 0.05$).

8. Discussion and Conclusion

The purpose of the present research is to design a strategist

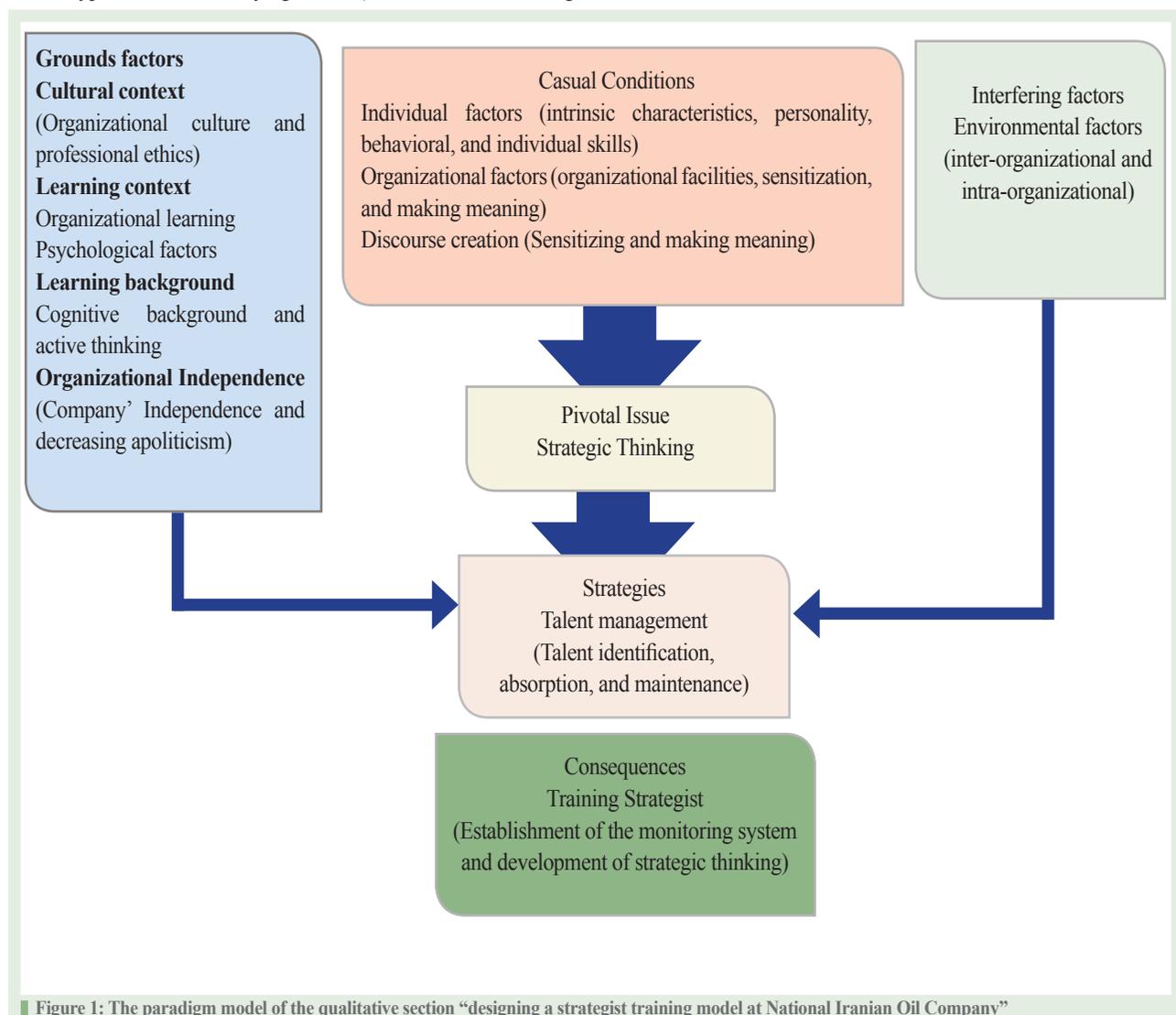


Figure 1: The paradigm model of the qualitative section “designing a strategist training model at National Iranian Oil Company”

training model at National Iranian Oil Company, and its sub-objectives are to identify the dimensions (main categories), causal conditions, intermediary factors (reinforcing and preventive), strategies, and effective implications of training a strategist in the National Iranian Oil Company and to recognize the most important components in the pivotal issue, i.e. strategic thinking.

The results confirm 11 main categories, 24 sub-categories, and 98 concepts, which are presented as a paradigmatic model including causal conditions (individual factors, organizational factors, and making discourse), the pivotal issue of strategic thinking (systemic vision, conceptual thinking, and philosophical attitude), environmental factors (inter-organizational and intra-organizational), underlying factors (cultural context, learning context, psychological factors, and organizational independence),

strategies for seeking the talents, acquisition and absorption, and the consequences of training strategist; the latter consists of the development of strategic thinking, paving the way for the designation and establishment of a monitoring system at the National Iranian Oil Company, and the relationship among its various dimensions.

Based on the research findings, it is revealed that the causal conditions (individual factors, organizational factors, and making discourse) have a positive and significant effect ($B = 0.69$) on the pivotal issue, so the hypothesis is confirmed. In relation to the above components, various works such as those addressed in references [19, 20] have examined the role of different individual factors in fostering strategic thinking, and have proposed the personality traits, cognitive styles, divergent thinking abilities, job-related knowledge, and skills and motivation as the most important personal factors affecting creative thinking; our research results are consistent with their findings. In the case of organizational factors, the findings are also consistent with other findings reported elsewhere [21, 22]

Studying the relationship between variables in the form of the conceptual model shows that the causal conditions (individual factors, organizational factors, and making discourse) have a non-positive and significant effect ($B = 0.33$, $t = 7.8$) on strategies through category A. Additionally, in the discussion of talent management and the effect of causal conditions on it, Dini et al., consistent with our results, reported that knowledge-based qualified human resources are the most important competitive advantage and the rarest source in today's knowledge-based economy [23]. Also, according to Paauwe's work conducted on 33,000 persons from 23 countries, organizations are widely faced with the difficulty of locating right people at key positions [24]. 40% of executives complain about the problem of putting disqualified people in occupational situations because of the lack of suitable labor force

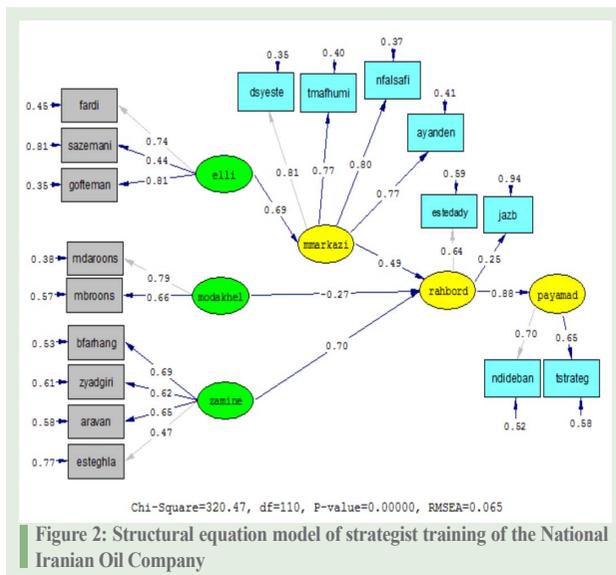


Figure 2: Structural equation model of strategist training of the National Iranian Oil Company

Table 5- Model fit indices Fit Indices

Fit Indices	RMSEA	Chi-square/ degree of freedom (DF)	Standardized Root Mean Re- sidual (SRMR)	Goodness of Fit Index (GFI)	Normed Fit Index (NFI)	Compara- tive Fit Index (CFI)	Incremental Fit Index (IFI)
Desirable Value	≥ 0.1	≥ 3	≥ 0.8	≤ 0.90	≤ 0.90	≤ 0.90	≤ 0.90
Available Value	0.06	2.9	0.05	0.90	0.93	0.92	0.92

Table 6- Model direct relationships

Independent Variable	Related Variable	Path Type	Path Standard Deviation	Significance (t)
Causative Conditions	Pivotal Issue	Direct	0.69	10.29
Factors	Strategies	Direct	-0.27	-2.46
Contextual Factors	Strategies	Direct	0.70	5.02
Pivotal Issue	Strategies	Direct	0.49	5.53
Strategies	Consequences	Direct	0.88	9.56

[25].

The conceptual model recognized that the intermediary factors (inter-organizational and intra-organizational) have a negative and significant effect ($B = -0.27$) on the strategies; therefore, the hypothesis is confirmed. Concerning the negative impact of interfering factors on managing optimized talents in organizations, the results of the study are consistent with other findings [26, 27].

Moreover, according to research findings, it has been determined that interfering factors (inter-organizational and intra-organizational) have a negatively significant effect on outcomes through the strategies ($B = -0.23$). In this regard, the results of Bernthal et al. show that companies with powerful systems of leadership development and talent management experience a high return on capital, and their quality are higher than their competitors' quality [28]. This demonstrates the key role of talent management in the continuous presence of successful leaders and managers in critical organizational positions; usually the coherence between the internal/external factors and the desirable performance of human resource management helps train capable and empowered managers for the organizations' future. Handfield-Jones also showed that there is a direct relationship between the quality of managerial programs of training alternatives, the differentiation of capable people from others, the return of capital, and the attention of stakeholders to the organization [29]. Achieving an effective program in the field of talent management and the recruitment and maintenance of capable people necessitates having explicit and logical rules within the organization and protecting individuals and the organization from the intra-organizational crisis, which may seriously harm the long-term goals of the organization such as training and empowered managers.

Based on the research findings reported earlier, it was found out that the underlying factors (cultural context, learning context, psychological factors, and organizational independence) have a positively significant effect ($B = 0.70$) on the strategies. Furthermore, it was discovered that the underlying factors (cultural context, learning context, psychological factors, and organizational independence) have a significant and negative effect ($B = -0.51$) on outcomes through strategies.

According to the conceptual model, the pivotal issue (systemic vision, conceptual thinking, philosophical attitude, and futurism) affects the strategies. Also, based on the findings of the research

reported earlier, it was found out that the pivotal issue has a positive and significant effect ($B = 0.49$) on the strategies. It was also discovered that the pivotal issue (systemic vision, conceptual thinking, philosophical attitude, and futurism) influenced the outcomes through strategies ($B = 0.43$). The results of the study coincide with the findings reported elsewhere [30]. Talent management selects and educates a group of people with the highest potential and abilities, and it then motivates them to take advantage of their abilities to provide the right organizational posts; talent management also creates an attractive work environment for the talents in order to motivate them and provide them with an opportunity to make progress and render optimal work. Totally, talented people are energetic and dynamic forces whose proper management improves individual performance and consequently organizational performance.

Finally, the analysis of the relations between variables in the form of the conceptual model revealed that strategies (finding talent, absorption, and maintenance) affect the outcomes ($B = 0.88$). Hence, identifying employees' capabilities, assigning them to the right place, and exploiting and developing their abilities optimally along with the timely and appropriate appreciation of the desired functions satisfy the staff and help the organization to achieve its goals [31]. An organization which manages talents effectively, classifies employees, and focuses on the investment in this sector will have high organizational performance and high-potential individuals [32].

Training strategists is an almost new word in human resource management and is considered a new issue for Iranian organizations. While the experience of implementing it exists in successful western organizations and these experiences can help us to implement the scheme, this will require the creation of necessary fields and culture. On the other hand, the important point is localizing this model at the level of organizations (herein, we have emphasized the National Iranian Oil Company).

On the whole, taking into account the effect of causal conditions on the pivotal issue, the impact of causal conditions on strategies through the pivotal issue, the influence of interventional factors on strategies and their impact on outcomes through strategies, the effect of underlying factors on strategies and their impact on outcomes through strategies, the influence of the pivotal issue on strategies and their effect on outcomes through strategies, and the

Table 7- : Model indirect relationships

Independent Variable	Dependent Variable	Effect Type	Intermediate Variable	Path Standard Coefficient	Significance (t) ($p \leq 0.05$)
Causative Conditions	Strategies	Indirect	Pivotal Issue	0.33	7.87
Factors	Consequences	Indirect	Strategies	-0.23	2.38
Factors	Consequences	Indirect	Strategies	0.61	4.44
Pivotal Issue	Consequences	Indirect	Strategies	0.43	4.78

influence of strategies on outcomes, one obviously understands the importance of having a special model for fostering strategists.

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