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## Presenting a model of alignment of organization strategies with human resource strategies

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### Abstract

Since one of the main dimensions of any organization in terms of survival and development is strategy, so the main purpose of this study is to provide a model of alignment of organizational strategies and human resource strategies for this purpose, both qualitative and quantitative methods have been used. The quality section has two sections. In the first part, the quality method of articles from 2014 to 2020 related to the subject were reviewed and evaluated, and the main criteria of strategy, organizational strategy, human resources strategy, strategic alignment and organizational structure were identified. The second part of the qualitative method was based on interviews with experts until the theoretical saturation in the field of the present study was done and coding and analysis was done using MAXQDA software. The main criteria identified based on interviews with experts include organizational communication, employee empowerment, employee attitude evaluation, organizational strategies, human resource strategies, organizational development, social capital, intra-organizational factors, external organizational factors, organizational responsibility and goal setting. It is based on environmental factors that the highest percentage of frequency is related to organizational development and is equal to 20.94% and the lowest value is related to improving the ability of employees equal to 2.6%. In quantitative evaluation, F.DEMATEL, F.AHP and DEA methods have been used. Using F.DEMATEL method, effective and efficient dimensions were identified that the effective factors include organizational communication, employee attitude evaluation, organizational strategies, organizational development, social capital, external environmental factors and organizational responsibility and effective factors include improving employee ability, resource strategies Human, internal factors and goal setting are based on environmental conditions. Then, using F.AHP, the identified variables were prioritized. The first rank among the sub-criteria belongs to the factor of exposure to critical factors with a normal weight of 0.785, and the first rank among the main criteria includes social capital with a normal weight of 0.134. The results obtained from DEA show that exposure to critical factors has the highest efficiency score with a maximum score equal to 1, and finally, based on the results, practical suggestions are presented.

**Keywords:** strategy; strategic alignment; the strategy of human resources; organization strategy; multi-criteria decision-making.

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## **1. Introduction**

In terms of strategy, people with more power can have more effect and influence on the organization. Therefore, strategic actions are always ongoing (Buzik et al., 2018). Strategy as activities to create an organization to achieve its goals (Bowen et al., 2017) that requires organizational support and this support is based on organizational culture plays an important role in explaining and implementing organizational strategies (Olson et al., 2019). The strategic management and considering the strategy based on the internal and external conditions of the organization leads to optimal results and outcomes (Dave and Chen, 2018). One of the most important strategic dimensions in human resources is the promotion of individual skills (Fiurosawa and Brewster, 2019). For organizations, the strategic approaches related to human resource management are considered as a tool to achieve advantage, profit, benefit and competition that should be consistent with strategies related to organizational performance (Zuhair et al., 2016). On the other hand, the human resource management system in any organization, due to the dynamics and continuous environmental changes cannot be a static phenomenon. The strategic human resource management can help organizations towards competitive advantages (Abtahi and Mousavi, 2009).

Human resource strategies determine what the organization intends to apply about the various aspects of policies and human resource management practices. Human resource strategies provide the basis for the strategic plans and enable the organization to measure progress and evaluate returns according to objectives (Musa Khani and Mojarad, 2013). Because in the strategic planning process, time and uncertainty play an important role. Obviously, the future is less predictable, but the important point is that organizations can prepare themselves to face it, which will create a competitive advantage for them (Radfar, 2012). Since managers who want their decisions to be implemented correctly and successfully, have faced almost the same problem (Rahmani et al., 2012), therefore, increasing organizational knowledge is based on employee empowerment, which affects organizational performance (Minbava, 2013) and can lead to increased social accountability (Apadhaia et al., 2018). So, every organization must recognize and understand the importance of developing the knowledge, skills and abilities of its employees. In this situation, human resource strategy plays a key role in increasing the competitive advantage of the organization. Today, the strategic position of human resources is important not only because of its role in the implementation of organizational strategies, but also because they can become a sustainable source of competitive advantage. The most basic role of strategic human resource management is macro-planning with a strategic vision and at the level of human resources (Akhavan and Pezeshkian, 2011).

Based on the framework of strategic human resource management, organizations can make the best use of opportunities and situations. The strategic human resource management builds the possibility of the necessary alignment between the various activities of the organization, the creation of appropriate opportunities and the prevention of potential threats. the strategic integration is an undeniable necessity for creating a balance between human resource strategy and organizational strategy.

The purpose of creating strategic coordination is the homogeneity between the goals of human resource management and the goals of the organization. This study can be led to identify the interact of the different strategies of organization and the human resource strategies in an integrated model and so will determine the contribution of each of these elements and the effect of their mutual coordination on the success and performance of organizations. From a practical point of view, this research by identification the different types of human resources strategy and its subsystems could help to provide a suitable model for their coordination in organizations. In addition, efficient and effective use of human resources system and its coordination with other organization strategies can ensure the performance improvement.

Finally, it is necessary to provide a model of alignment of organizational strategies and human resource strategies.

In this research, first the theoretical framework of research then the methodology is presented. According to the proposed matters, the methodology of this research studies the research subject using two qualitative and quantitative methods. In the qualitative part, first, the articles of recent years have been qualitatively evaluated, then the research model is presented after interviewing with experts and reaching the theoretical saturation using the qualitative analysis. According to this model, the effective and impressible factors as well as the multi-criteria decision making were analyzed with data envelopment analysis. Finally, discussion and conclusion with suggestions are presented.

## **2. Theoretical framework of research**

### **2.1. Organization strategy**

One of the main challenges of strategic management is implementing the strategies (Farokhi et al., 2018). For this reason the futuristic organizations are not simply astounded, and this characteristic has provided their superiority over the competitors (Ramzani et al., 2017). The strategy is a plan and perspective of future objectives in a general term, and an existence codes and tracks this strategy to reach its objectives. However, strategy formulation is the same as one of the major managerial responsibilities in the management science which is the basis for the crucial decision making of managers to survive the organization and its excellence (Godini, 2019). In this regard, the organization strategies are determined in a way that organization interests are in alignment with personal interests (Ramos et al., 2019). In this regard, one of the most significant disadvantages of the implementation models of organizational strategic plans is their generalizability. On the other hand, the varieties of the effective factors on the strategy implementation and complication of the relationships between these factors have made the design of comprehensive models not to have an acceptable efficiency. Therefore, it is essential to design implementation models of strategy by considering the specific approaches such as the combined approach (Pirali et al., 2019), because the human capitals result in performance development and influence the organization performance directly (Dachner et al., 2019). Consequently, employees' activity and behavior are perceived regarding the organization strategies (Meyers, 2019) which are based on economic and environmental performance (Amrutha and Geetha, 2019). Today, the challenges of human resources change the strategies (Cheng and Hackett, 2019). Thus, psychological approaches must be included in the perception and protection of employees (Degbey et al., 2020).

### **2.2. The strategy of human resources**

In the real world scenarios, workers have different efficiencies in performing each of their skills such as improving by learning (Hosseinian and Baradaran, 2020). As the mission and vision of an organization are determined based on proper performance (Wan, 2018), human resources are considered as the most valuable factor of production, the best capital of each organization, the main reproductive resource of competitive advantage, the main capacities, and added-value. If organizations want to be aligned with the world evolutions, they should promote the organization strategies by a comprehensive and strategic attitude toward human resources. In addition, the strategic management process of human resources believes in this regard that organizations have to monitor the domestic and foreign events and procedures permanently to adapt their organization and employees with changes timely if necessary (Nuri and Aghighi, 2019). The procedures and strategies of human resources support the organization strategies and promote the capacity to respond to domestic and foreign environmental questions and

opportunities. Therefore, the orientation of all types of management can encompass different approaches to the strategies of human resources (Ali et al., 2018). Thus, the strategies of human resources should have enough efficiency in both horizontal and vertical structures and make essential opportunities to promote the employees' abilities (Han et al., 2019), because the human force has the main role in the accomplishment of the organizational goals (Aviso et al., 2019) and create the tangible and intangible values in the organization (Miles and Cleaf, 2016). Human resources should have the key and strategic role to design and execute the evolution strategies and organizational transfer. The part of human resources can identify and analyze the relevant issues to the employees and signifies the related issues to the employees which has an important role in the success of organization strategy (Afkhani Ardakani and Mohammadi Ardakani, 2018). This is because people show varied behaviors (Nieves and Quintana, 2016) which leads to the relationships between the organization and an individual (Goldschmidt et al., 2019). Hence, organizations can promote the knowledge skills of employees which are based on the management plans of human resources (Lee and Cheng, 2018). Therefore, the strategies of success in an organization are evaluated based on the employees' performance (Johnson et al., 2020). One of the most important aspects for human resources is knowledge and identifying of human errors in the human resource strategies (Astria et al., 2014).

### **2.3. The alignment of human resources and organization strategy**

The studies show that many organizations have a strategy and do not act it. The main reason is not having essential consistency in various parts and employees to perceive the organization strategy mutually (Darvish et al., 2012). The strategies and policies of human resources management influence the organization performance in the future (Chen and Voon, 2016) because the strategic human resources manage the giant comprehensive and key problems (Panda et al., 2002), and develop the organization performance directly (Dachner et al., 2019). Since the strategies of human resources determine the type of management and leadership based on the organization structure (Gill et al., 2018), social accountability is the most principal executive policies of an organization (Martinez et al., 2017, P.55). Hence, employees' perception of the organization strategies (Meyers, 2019) facilitates the organization's social accountability (Do et al., 2019). According to the environmental changes in today's world, the changes in organization strategies change the strategies of human resources (Herrman and Guenther, 2017) that the proposed cases are completely based on the employees' perceptions and are one of the important factors in psychological contracts (Kutaula et al., 2019). This issue influences the organization health (Yousef et al., 2019) and play a significant role in the strategies of human resources and the aligned perceptions, because it executes the strategies and policies of human resources and influences the organization performance in the future (Chen and Voon, 2016). In this regard, identification of the negative resultants in the economy, society, and environmental aspects is based on determining the strategies (Stahl et al., 2019). Therefore, the organizational capacities are determined based on the organization strategy and the environment capacities (Ford and Kennedy, 2015). Since the performance of human resources differentiates an organization from another one, the organizations growth is related to the human resources and finally leads to the economic growth of the organization (Haneda and Tto, 2017). Therefore, coordination and alignment between organization and strategies of human resources are considered essential.

**Table 1. According to the proposed cases, some literature is presented in this part**

Researchers	Year	Comparing the research results to the approach of this research
Olson et al.	2018	The results of this research show that companies in which the commercial strategies and their marketing are aligned have better performance than companies without alignment. Therefore, the strategies' alignment adapts with the approach of this research.
Ra'yatpishch et al.	2018	Multi-criteria decision making was used in their research as well as this research.
Azizi Safigh et al.	2019	The results of this research showed that the organization strategies should mention the issues of education, employees' development, and organization improvement to raise people and groups effectively. In this research, the relevant aspects of the strategies of human resources were evaluated to align with the strategies of the organization.
Kavianfar	2019	The results of this research showed the significant relationship between the strategies of human resources and business strategies which adapt with the approach of this research about the alignment with the organization strategies and strategies of human resources that business strategies were evaluated only in the research of Kavianfar, and this research evaluates the organization strategies.
Pirali et al.	2019	The results of this research showed that streaming the policy in the organization veins is a process in which all ingredient parts of a total are combined to reach a mutual goal that adapts with the approach of this research based on the alignment of organization strategies and human resources strategies.
Rezghi and Hadi	2019	Multi-criteria decision making was used in their research as well as this research.
Mirzaei et al.	2019	Data envelopment analysis method was used in their research as well as this research.
Khoshandam	2019	Data envelopment analysis method was used in their research as well as this research.
Musawir et al.	2020	The results of this research show that attention to the theoretical bases and empowerment promotion of employees execute the strategy that adapts with the approach of human resources strategy along with the organization strategy execution, and finally with alignment.

As it was observed in the comparison table of previous researches with the approach of the present research, it was found that so far no research has been done qualitatively and then quantitatively (from the point of view of experts in this field) to identify the factors and then evaluate each of them. The results can be practical according to the current situation and fundamental changes in environmental conditions in terms of economic, social and environmental (telework and in person) and the evaluation of this issue from the perspective of experts in various private and public organizations as well as People who have expertise in the present subject can bring practical results.

### 3. Methodology and data analysis

The methodology of this research is qualitative and quantitative, and the relevant concepts can be extracted inductively from the qualitative data using the grounded data method and can be used significantly in data-based theories development. Therefore, first, several articles of recent years have been evaluated and the main relevant criteria to the research subject were identified using the qualitative data analysis method and MaxQDA software. Next, the theoretical saturation was obtained after the interview with the relevant experts to the private and governmental organizations about the research subject. Then, the criteria and sub-criteria obtained from the qualitative section were evaluated and ranked using a paired quantitative questionnaire. For this purpose, the multi-criteria decision method (F.AHP) was used and to evaluate the performance score of the DEA Used.

### 3.1. Statistical population and sampling method

The statistical population of this research is the first qualitative part includes the articles of recent years related to this research. The statistical population in the second qualitative part and the quantitative part of this research includes the relevant experts to the research subject. Experts have characteristics of a master's degree and at least 5 years of experience in the strategies of human resources and organization strategy who were selected by a judgmental sampling method.

**Table 2. the summary of the data collection method and the studied population**

Research steps	Statistical population	data collection method	Method of analysis
Meta Synthesis	The related articles to the research from 2014-2020 (65 articles that have a topic corresponding to the research variables)	Systematic study and qualitative content analysis to the theoretical saturation	Content analysis of articles and coding using MAXQDA software
Interview Technique	Experts of organization strategy and human resources (5 persons)	Interview with experts	Coding using MAXQDA software
Quantitative evaluation of the model obtained from the qualitative part	Experts of organization strategy and human resources (7 persons)	Paired comparison questionnaire	Combination of fuzzy DEMATEL, F.AHP, and data envelopment analysis

### 3.2. Data validation method

In this study, to confirm the validity and acceptability of the data, two methods were used including: review method by participants and review method by non-participant experts. After receiving corrective comments, the necessary editing was done and the final model was presented. Also, the variables examined in the articles are categorized in Table 3.

**Table 3. Variables examined in articles**

Research Name	Cods in MAXQDA	Year	Studied Variables
Berry	8	2020	Innovation, Organizational Strategy, Empowerment, Organizational Integration, Organizational Design, Training, Organizational Purposes
Kadman et al.	1	2020	Co-operational Strategy
Johnson et al.	64	2020	Successful Implementation of Strategy, Human Resources Development
Krishna Ganapavarapo & Yadav	43	2020	Human Resources Strategy, Staff Motivation
Panda et al.	11	2020	Human Resources Strategy, Human Resources Challenge, Organization Agility
Rodrigues et al.	41	2020	Organization Value, Organization Performance, Organization Strategy, Organization Capacity
Wan et al.	9	2020	Research and Development, SWOT Employment
Kataoka et al.	6	2019	Training, Integrated Planning, Human Resources Strategies, Skills Development
Levin & Levin	7	2019	Organizational Knowledge, Research
Meinin et al.	5	2019	SWOT Employment, Strategic Classification
Muhlbacher & Bobel	10	2019	Organization Environment Conditions, Understood Value of Strategy, Successful Implementation.
PirAli et al.	19	2019	Organization Strategy, Organization Upgrade
Kargar & Ghadami	28	2019	Strategic Dimensions, Innovation Strategy

Research Name	Cods in MAXQDA	Year	Studied Variables
Kazemi	42	2019	Strategic human resources, Innovation
Kavianfar	36	2019	Human Resources Strategy Coordination & Business
Noori & Aghighi	37	2019	Human Resources Strategy, Organization Culture
Afkhamai Ardakani and Mohammadi Ardakani	44	2018	Human Resources Strategy, Strategic Reference Points
Razavi & Talebpoor	62	2018	Innovation, Human Resources Development
Saliani & Vosooghi	27	2018	Organization Capacity Analyzing, The Strategy of Performance and Control
Goodini	17	2018	Organization Strategy Alignment, Human Resources Strategy Alignment, Commercial Strategy
Banyai et al.	63	2018	Human Resources Structure, Human Resources Strategy, Staff Upgrade
Olson et al.	34	2018	Human Resources Strategy, Business Strategy, Organizational Performance
Peychey et al.	13	2018	Communications, Organizational Integrity, Organizational Structure
Wright et al.	65	2018	Human Resources Strategy, Challenges Evaluation, Research and Development
Anand & Gray	40	2017	Performance Evaluation, Organizational Researches
Kianto et al.	12	2017	Organizational Knowledge, Innovation, Intellectual Capital, Training
Ning	14	2017	The Control of Strategies, Performance Evaluation
Ahmadi et al.	52	2017	Human Resources Strategy Alignment, Strategic Reference Points
Ahmadi et al.	60	2017	Human Resources Strategy
Piri Ataei	18	2017	Organization Strategy Alignment, Human Resources Strategy Alignment, Organizational Function
Hallaji	55	2017	Human Resources Strategy, Fatherhood Strategy
Danaee far et al.	25	2017	The Challenges of Human Resources
Zabihi khargh et al.	59	2017	Human Resources Strategy
Seyed Naghavi et al.	61	2017	Strategic Alignment, Human Resources Alignment, Strategic Reference Points
Abbasi et al.	53	2017	Human Resources Strategy, Business Strategy, Organizational Structure
Gholami	47	2017	Human Resources Strategy, SWOT
Ghods et al.	49	2017	Human Resources Strategic Planning, Organizational Function
Ghadimi et al.	26	2017	Organizational Structure, Strategic Planning
Mirzaee et al.	33	2017	Strategy, Knowledge Management
Hosseini et al.	46	2016	Human Resources Strategy, Human Resources Efficiency
Dehghan Baghi et al.	21	2016	Organization Strategy, SWOT Function
Sarlak & Nooriaee	24	2016	Organization Disruptive Currents
Taherian & Rajae poor	48	2016	Human Resources Empowerment Strategies
Mortazavi et al.	30	2016	Innovation, Organizational Function, Organizational Strategy, Competition Advantage
Mirkamali et al.	51	2016	Human Resources Excellence, Strategic Reference Points
Nasehi far & Mohammadkhani	54	2016	Human Resources Strategy
Allui & Sahni	4	2016	Human Resources Strategies, Training, Organizational Culture, Meritocracy, Organizational Performance, Human Resources Strategic Alignment, Research and Development, Selection
Shakerian et al.	3	2016	SWOT Employment, Business Strategy, Organizational Purposes, Human Resources Strategy
Ford & Mc Coll-Kennedy	35	2015	Organizational Strategy, Value Creation, SWOT Employment
Aghazadeh et al.	29	2015	Strategy Formulation, Process Design
Khasheiee & Aslani Afrashteh	58	2015	Strategy Formulation, Strategic Planning
Zare zadeh et al.	22	2015	Strategy Road Map, Organizational Performance
Soofi Abadi et al.	20	2015	Organization Success, Organizational Strategy
Fazeli	38	2015	Human Resources Strategy, Strategy, Strategic Coordination
Hossein poor et al.	45	2015	Organizational Strategy, Strategic Reference Points, Performance Evaluation

Research Name	Cods in MAXQDA	Year	Studied Variables
Danaee fard & Mohammadi Khozoghi	57	2014	The Competition of Strategies, Organization Strategy, The Alignment of Strategies
Darvish et al.	50	2014	The Culture and The Change, The Human Resources Competence
Dalvi Esfahani et al.	31	2014	Strategy Alignment, Organizational Performance
Divandari et al.	56	2014	Human Resources Strategy Alignment, Organization Strategy Alignment, Commercial Strategy
Ali Goodarzi	16	2014	Human Resources Strategy
Fayyazi & A'rabi	23	2014	Human Resources Strategy Alignment, Performance Improvement, Strategic Coordination, Organization Strategy, Human Resources Strategy
Mahmood Kalayeh	15	2014	Human Resources Strategy, Human Resources Challenges Evaluation, Cultural Development
Monavvarian et al.	32	2014	Knowledge Sharing, Effective Strategies, Challenges Evaluation
Yeganeh Dahrab	39	2014	Strategic Alignment, Human Resources Strategy Alignment, Organization Strategy Alignment, Organizational Performance
Kalkan et al.	2	2014	Intellectual Capital, Organizational Performance, Organizational Support, Innovation, Organizational Strategy

The data analysis method was performed using MAXQDA 10 software and with the Grounded approach (open, axial and selective coding) and for this purpose, articles related to the research topic were analyzed.

**Table 4. Qualitative evaluation summary of articles**

Categories	Component	Cods of Papers
Strategy	The Strategy Road Map	22,26,28,29,38,44,45,57,52,55,61
	The Use of SWOT	47,27,3,5,9,41,35,21,24
	Value Creation	10,41,35,19
	Strategies Control	14,17
Strategic Alignment	Human Resource Strategic Alignment	4,17,18,36,39,42,56,47,60,61
	Organization Strategy Alignment	11,17,18,31,36,39,56
	Strategic Alignment	23,38,57,61
	Successful Implementation	10,20,64
	integrated planning	6,26
Social Responsibility	Social Responsibility	16,39
	Organizational Strategy	33,2,8,41,35,21,23,29,30,32,45,57,58
Organization Strategy	Business Strategy	3,34,56,53,60
	Organizational Culture	4,15,23,37,50,53
	Organizational Knowledge	7,12,32,33
	The Organizational Objectives	3,8
Human Resource Strategy	Human Resource Strategy	3,4,36,11,65,43,34,15,16,23,37,38,44,46,52,53,54,55,59
	Human Resource development	6,8,64,63,19,48,62
	Human Resource Challenges Assessment	11,65,15,25,32
	Meritocracy	4,50,51
	Human Resource Strategic Planning	49,58
	Intellectual Capital	2,12
Organizational Structure	Communications	13,43
	Organizational Performance	39,45,49,31,30,27,23,2,4,14,40,41,34,17,18,22
	Innovation	2,8,12,28,30,42,62
	and development Research	4,7,9,13,65,40
	the Organizational structure Designing	8,13,63,26,53
Training	Training	4,6,8,12
	Organization Integration	8,13

Then, three coding steps were used to formulate a coherent, systematic, and detailed theories were:

### Step 1: Open Coding

The open coding step is decomposing the collected collection into the smallest possible conceptual components. This type of coding helps to create a set of first-hand concepts that are abstract as well as rooted in raw data. Then, by constantly comparing the codes in terms of similarity and differences in concepts, the main and side categories were formed and then the characteristics and dimensions of each of them were determined. In this research, the main categories are presented in Table 4.

**Table 5. Qualitative evaluation summary of articles**

Categories	Codes Weight	Component	Frequency
Strategy	26	The Strategy Road Map	42.3
		The Use of SWOT	34.6
		Value Creation	15.4
		Strategies Control	7.7
Strategic Alignment	29	Human Resource Strategic Alignment	34.5
		Organization Strategy Alignment	24.1
		Strategic Alignment	17.2
		Successful Implementation	10.3
		integrated planning	6.9
		Social Responsibility	6.9
Organization Strategy	30	Organizational Strategy	43.3
		Business Strategy	16.7
		Organizational Culture	20.0
		Organizational Knowledge	13.3
		The Organizational Objectives	6.7
Human Resource Strategy	42	Human Resource Strategy	47.6
		Human Resource development	19.0
		Human Resource Challenges Assessment	11.9
		Meritocracy	7.1
		Human Resource Strategic Planning	4.8
		Intellectual Capital	4.8
		Communications	4.8
Organizational Structure	41	Organizational Performance	41.5
		Innovation	17.1
		and development Research	14.6
		the Organizational Designing structure	12.2
		Training	9.8
		Organization Integration	4.9

### Step 2: Axial coding

In this step, called axial coding, researchers select one of the categories as the axial category and explore it as the axial phenomenon in the center of the process and determine the relationship of the other categories to it. As shown in the table above.

### Step 3: Selective Coding

The other selective coding takes the findings of the previous coding steps, selects the axial category, systematically relates it to other categories, proves those relationships, and completes the categories which need further improvement and development. The result of this step was the main category that related to the other categories, explained them, and was in fact the refined result of the original code. The qualitative diagram obtained from the present study is as follows. In Figure 1, the qualitative figure of the main categories in articles has been shown.

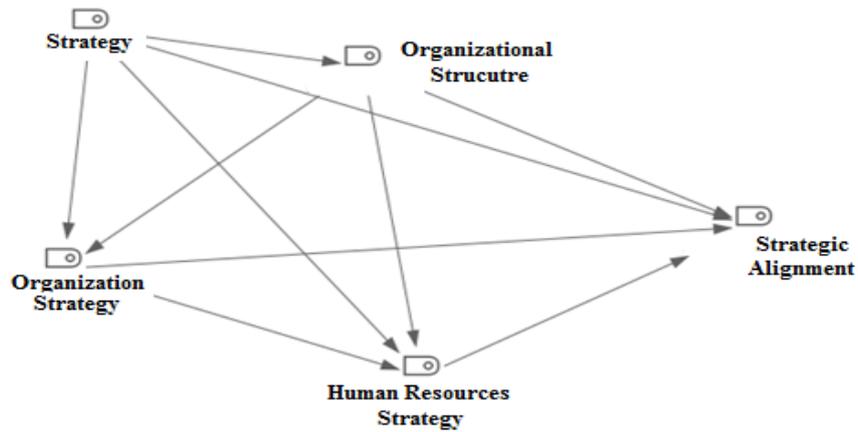


Figure 1. Qualitative diagram of the main categories

It was indicated in this part after the qualitative evaluation about the alignment of human resources strategy and organizational strategy that the main strategy categories, human resources strategy, organization strategy, and strategic alignment have been obtained.

### 3.3. Analysis of the obtained qualitative part by experts' interview

This part is formed after the deep interview with the experts about the strategy and human resources. In the first step, the researcher coded the interviews descriptively. In this step, first, the interviews performed respectively and then were analyzed by the researcher. After adjusting each interview, the written texts were inserted in Max QDA software and analyzed descriptively that are shown later. Table (6) shows the experts interviewed and the experts who responded to the questionnaire.

Table 6. Experts interviewed

Job Position	Cods in MAXQDA
Head of Integrated Office of Iran Khodro Company	Q1
Main member of the board of directors of Bank Mellat Investment Company	Q2
Manager of water and sewage projects in the south of Tehran	Q3
Faculty of Islamic Azad University and Human Resources Strategy Advisor	Q4
Faculty of Allameh Tabatabai University	Q5

Table 7. Experts who answered the questionnaire

Job Position	Cods in MAXQDA
Faculty of Islamic Azad University	P1
The main member of determining the country's public relations strategy	P2
President of the University of Applied Sciences	P3
Faculty of Islamic Azad University	P4
Managing Director of Petroleum Products	P5
Strategy Management Expert of Iran Khodro Company	P6
University lecturer and human resources recruitment consultant	P7

#### 3.3.1. Open coding

Review and revision method of the non-participated experts in the research was used in this part to confirm the validity of data. Then it was edited, and the final model was presented after getting the corrective ideas. The main variables were obtained based on the open coding. Open coding is possible for the minimum conceptual component. Then, open coding was performed

based on the determined characteristics as follows. Finally, 191 codes were achieved including 11 main variables and 43 components.

**Table 8. Summary of expert opinion based on qualitative evaluation**

Main criteria	Sub-criteria	Experts' cods
Organizational communications	Coordination of interactions within the organization	Q1. Q3. Q4
	Development of communications between managers	Q1. Q3. Q4
	Extra-organizational communications	Q1. Q3
	Intra-organizational communications	Q1. Q3
Promoting the employees' abilities	Empowerment	Q1. Q5
	Learning development	Q3. Q5
	Teamwork development	Q3
Evaluating the employees' attitudes	Attitude toward objectives	Q1. Q3
	Leaders' attitudes	Q3. Q5
Organization strategies	Evaluating the organization processes	Q1. Q3. Q4. Q5
	Organization futurism	Q3. Q4. Q5
	Knowledge management	Q3. Q4. Q5
	Making flexible strategies	Q1. Q3. Q4. Q5
	Identifying the key factors for success	Q3
Strategies of human resources	Attention to the employees motivations	Q1. Q2. Q3. Q5
	Employees' participation	Q2. Q3. Q4
	Planning	Q2. Q3. Q4
	Performance evaluation	Q1. Q3
	Managerial approaches	Q1. Q3
Organizational development	Specialization	Q1. Q2. Q3. Q4. Q5
	Training based on organization strategies	Q1. Q2. Q3. Q4. Q5
	Organizational culture	Q1. Q3. Q5
	Organizational development strategy	Q1. Q3
	Structural factors	Q1. Q2. Q5
	Employees' creativity	Q3
	Organizational competence	Q3. Q5
Social capital	Organizational productivity	Q1. Q3
	Organizational agility	Q3
	Employees' satisfaction	Q3
Intra-organizational factors	Facing critical factors	Q2
	Organizational policies	Q3. Q4. Q5
Extra-organizational and environmental factors	Environmental (social, economic) factors	Q2. Q3. Q4. Q5
	Competitors	Q2. Q3. Q5
	Laws	Q2. Q3
	Monitoring of relevant systems	Q2
	Needs of society	Q5
Organizational responsibility	Employees' commitment	Q1. Q2. Q3. Q4. Q5
	Social responsibility of organization	Q3
	Making social interest	Q3
Targeting based on the environmental conditions	Valuation	Q3. Q5
	Organizational objectives	Q1. Q2. Q3. Q5
	Evaluating the environmental changes	Q4
	Selection strategy	Q2. Q3. Q5

### 3.3.2. Axial coding

The obtained axial coding from the experts' interview is shown as follows:

**Table 9. research variable**

Main variables	Components	Frequency %
Organizational communications (8.9)	Coordination of interactions within the organization	41.2
	Development of communications between managers	23.5
	Extra-organizational communications	17.6
	Intra-organizational communications	17.6
Promoting the employees' abilities (2.6)	Empowerment	40.0
	Learning development	40.0
	Teamwork development	20.0
Evaluating the employees' attitudes (3.1)	Attitude toward objectives	50.0
	Leaders' attitudes	50.0
Organization strategies (13.08)	Evaluating the organization processes	24.0
	Organization futurism	24.0
	Knowledge management	20.0
	Making flexible strategies	20.0
	Identifying the key factors for success	12.0
Strategies of human resources (14.65)	Attention to the employees motivations	32.1
	Employees' participation	25.0
	Planning	21.4
	Performance evaluation	10.7
	Managerial approaches	10.7
Organizational development (20.94)	Specialization	27.5
	Training based on organization strategies	27.5
	Organizational culture	17.5
	Organizational development strategy	15.0
	Structural factors	10.0
	Employees' creativity	2.5
	Organizational competence	42.9
Social capital (3.66)	Organizational productivity	28.6
	Organizational agility	14.3
	Employees' satisfaction	14.3
Intra-organizational factors (3.1)	Facing critical factors	50.0
	Organizational policies	50.0
Extra-organizational and environmental factors (9.94)	Environmental (social, economic) factors	47.4
	Competitors	26.3
	Laws	10.5
	Monitoring of relevant systems	10.5
	Needs of society	5.3
Organizational responsibility (6.28)	Employees' commitment	58.3
	Social responsibility of organization	25.0
	Making social interest	16.7
Targeting based on the environmental conditions (13.61)	Valuation	38.5
	Organizational objectives	30.8
	Evaluating the environmental changes	15.4
	Selection strategy	15.4

### 3.3.3. Selective coding

This part is resulted actually by the relationship between the main categories with others. The obtained qualitative figure by the experts' interview is as follows in this research: Figure 2 shows the qualitative figure of the main categories.

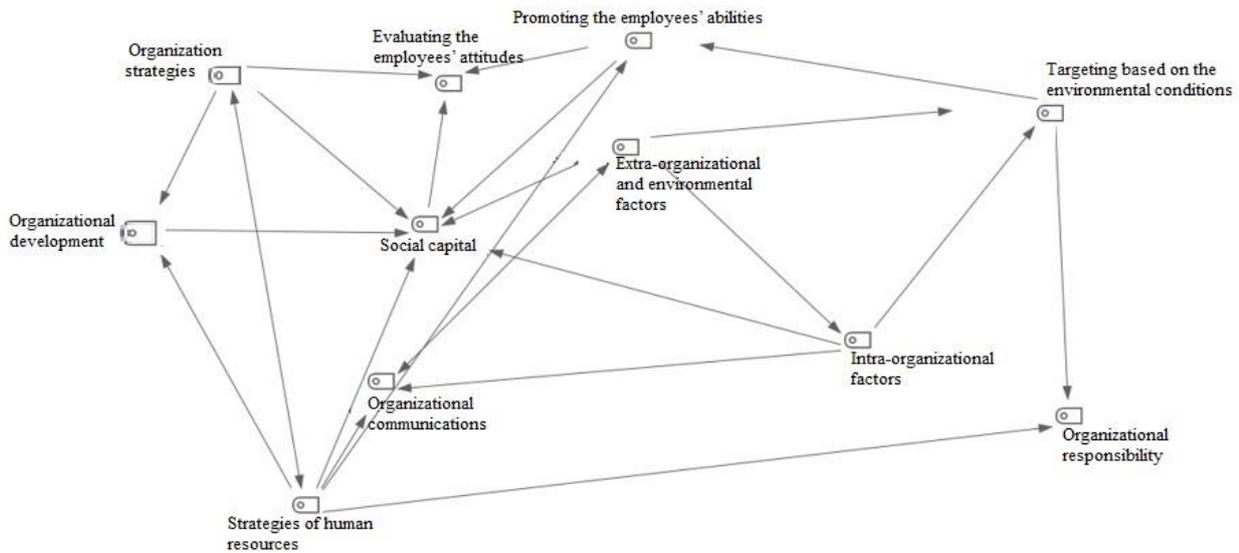


Figure 2. qualitative model of research

The obtained predicted qualitative model shows that the strategies of human resources has relationship with the variables of organizational responsibility, organizational communications, promoting the employees' abilities, organizational development, and organization strategies and can influence on these factors. On the other hand, the organization strategies have a relationship with evaluating the employees' abilities, social capital, organizational development, and strategies of human resources and can influence them. In addition, the variable of organizational development influences on the social capital of organization, and organizational communications form based on the intra and extra-organizational factors which are social capital and targeting based on the environmental conditions. On the other hand, targeting is related to the aspects of organizational responsibility and promoting employees' abilities. Finally, promoting employees' abilities is related to the variables of evaluating employees' attitudes and social capital of organization. What clear in the obtained model is that causal conditions include organizational responsibility and targeting based on the environmental conditions, contextual factors include the extra-organizational environmental factors and intra-organizational factors. Intervening factors include social capital of organization and organizational communications. Finally, strategies include promoting the employees' abilities and evaluating employees' attitudes. Moreover, consequences include organizational development, organization strategies, and strategies of human resources that are shown in the following figure 3.



Figure 3. The paradigm model of alignment between organization strategy and strategies of human resources

### 3.4. Research model

The final model of research is adopted from this research that was prepared and confirmed based on research literature and the obtained results from the experts' interview. Since the relationships between criteria should be determined to solve the model by fuzzy AHP method, the powerful fuzzy DEMATEL method was used in this research to identify the relationships and their effectiveness. Later, fuzzy DEMATEL method is studied.

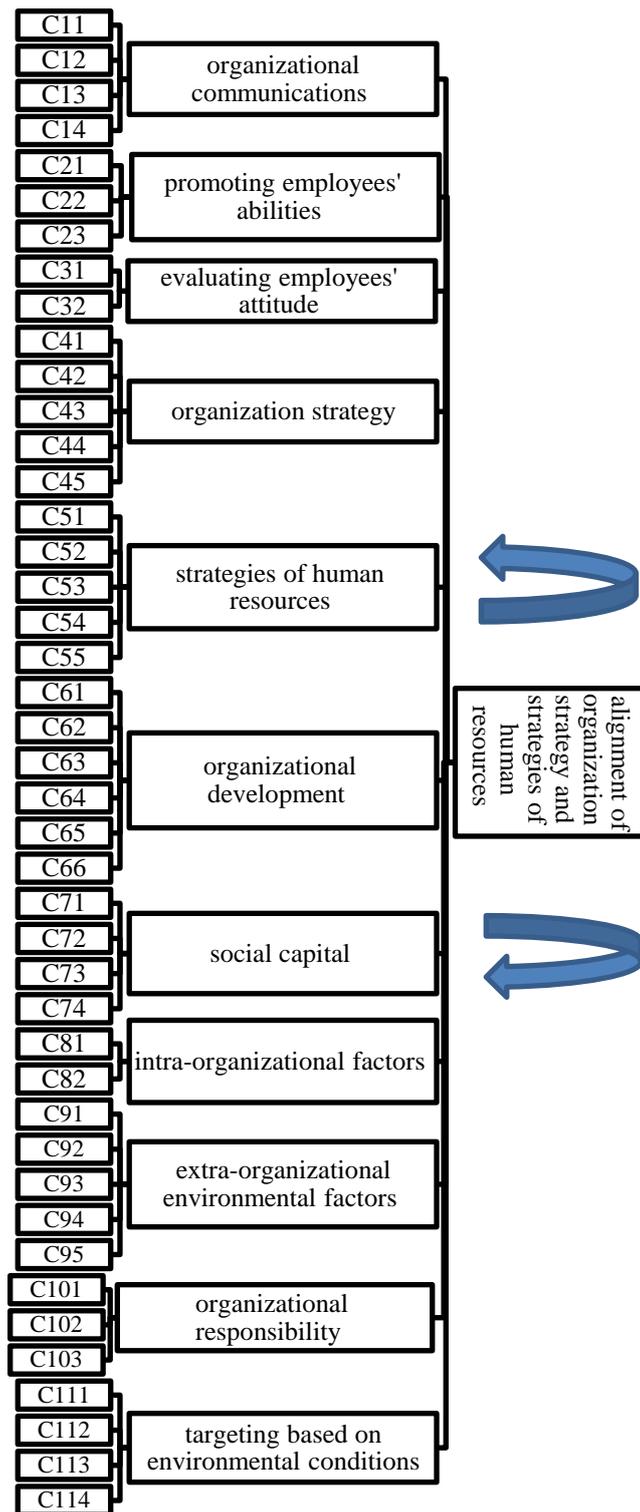


Figure 4. Research model

### 3.4.1. F.DEMATEL

Fuzzy DEMATEL is used to identify the effective and influential factors, which is used to examine the internal relationships between criteria and using the opinion of experts, the effect of one criterion on another criterion and to measure the intensity of the effect of the criterion

on each other. It is determined based on verbal variables and is performed based on the following process:

The arithmetic mean is used based on formula (1) to consider the ideas of all experts.

$$Z = \frac{x^1+x^2+x^3+\dots+x^p}{p} \tag{1}$$

Then, fuzzy normalized matrixes are obtained by formula (2):

$$\tilde{X} = K \cdot \tilde{A}$$

$$k = \min \left[ \frac{1}{\max_{1 \leq i \leq n} \sum_{j=1}^n \tilde{A}_{ij}}, \frac{1}{\max_{1 \leq i \leq n} \sum_{i=1}^n \tilde{A}_{ij}} \right] \quad i, j = 1, 2 \dots n \tag{2}$$

Other calculations for the criteria and sub-criteria were obtained similar to solved ones. Total fuzzy relationships matrix is obtained based on formula (3).

$$T = \lim_{k \rightarrow +\infty} (H^1 + H^2 + \dots + H^k) = H_i \times (I - H_i)^{-1} \tag{3}$$

$$T = \lim_{k \rightarrow +\infty} (H^1 + H^2 + \dots + H^k) = H_i \times (I - H_i)^{-1}$$

In this formula, I is identity matrix

$$(\tilde{D}_i)_{n \times 1} = \left[ \sum_{j=1}^n T_{ij} \right]_{n \times 1} \tag{4}$$

$$(\tilde{R}_i)_{1 \times n} = \left[ \sum_{i=1}^n T_{ij} \right]_{1 \times n} \tag{5}$$

In which,  $\tilde{D}$  (effectiveness) and  $\tilde{R}$  (impactability) are  $n \times 1$  and  $1 \times n$  matrices, respectively. In the next step, the importance of indexes ( $D_i + \tilde{R}_i$ ) and the relationship between criteria or their pure effectiveness and impactability is indicated by  $(\tilde{D}_i - \tilde{R}_i)$ . If  $(\tilde{D}_i - \tilde{R}_i) > 0$ , the relevant criteria is effective (causal) and if  $(\tilde{D}_i - \tilde{R}_i) < 0$ , the relevant criteria is impactable (caused).

**Table 10. Values of  $\tilde{D}$ ,  $\tilde{R}$ ,  $\tilde{D} + \tilde{R}$ , and  $\tilde{D} - \tilde{R}$  for the main criteria**

Main criteria	$\tilde{D}$	$\tilde{R}$	$\tilde{D} - \tilde{R}$	$\tilde{D} + \tilde{R}$
Organizational responsibility	-2.63	-6.03	3.39	-8.66
targeting based on environmental conditions	-3.18	0.86	-4.04	-2.32
extra-organizational environmental factors	-3.02	-3.11	0.08	-6.13
intra-organizational factors	-3.09	-5.68	2.58	-8.77
social capital	-2.74	0.57	-3.31	-2.17
organizational communications	-2.38	-3.81	1.42	-6.19
promoting employees' abilities	-2.59	-6.05	3.45	-8.64
evaluating employees' attitude	-2.67	1.02	-3.69	-1.65
strategies of human resources	-2.75	-3.01	0.25	-5.76
Organization strategy	-2.56	-5.73	3.16	-8.29
Organizational development	-2.70	0.64	-3.34	-2.06

It was indicated based on the obtained results that the effective factors include the organizational communications, evaluating the employees' attitude, organization strategy, organizational development, social capital, extra-organizational environmental factors, and organizational responsibility. In addition, the impactable factors include promoting the employees' abilities, strategies of human resources, intra-organizational factors, and targeting based on the environmental conditions.

**Table 11. Values of  $\bar{D}$ ,  $\bar{R}$ ,  $\bar{D} + \bar{R}$ , and  $\bar{D} - \bar{R}$  for sub-criteria**

Main criteria	Sub-criteria	$\bar{D}$	$\bar{R}$	$\bar{D} - \bar{R}$	$\bar{D} + \bar{R}$
Organizational communications	Coordination of interactions within the organization	-4.014	-6.89	2.87	-10.90
	Development of communications between managers	-4.33	-1.03	-3.30	-5.36
	Extra-organizational communications	-4.25	-4.17	-0.08	-8.42
	Intra-organizational communications	-4.14	-6.62	2.47	-10.76
Promoting the employees' abilities	Empowerment	-4.41	-1.09	-3.32	-5.50
	Learning development	-4.12	-4.45	0.32	-8.57
	Teamwork development	-3.99	-6.82	2.82	-10.81
Evaluating the employees' attitudes	Attitude toward objectives	-4.25	-1.09	-3.16	-5.34
	Leaders' attitudes	-4.32	-4.44	0.11	-8.76
Organization strategies	Evaluating the organization processes	-4.38	-6.89	2.50	-11.27
	Organization futurism	-4.21	-1.03	-3.18	-5.24
	Knowledge management	-3.92	-3.91	-0.01	-7.83
	Making flexible strategies	-4.37	-6.29	1.91	-10.66
	Identifying the key factors for success	-4.15	-1.06	-3.09	-5.21
Strategies of human resources	Attention to the employees motivations	-4.16	-4.05	-0.11	-8.21
	Employees' participation	-4.08	-6/25	2.16	-10.33
	Planning	-3.95	-1.05	-2.90	-5.00
	Performance evaluation	-4.25	-4.14	-0.11	-8.39
	Managerial approaches	-4.37	-6.34	1.96	-10.71
Organizational development	Specialization	-4.05	-1.04	-3.01	-5.092
	Training based on organization strategies	-3.97	-4.11	0.13	-8.08
	Organizational culture	-4.44	-6.67	2.22	-11.11
	Organizational development strategy	-3.87	-1.17	-2.7	-5.04
	Structural factors	-4.36	-4.76	0.39	-9.12
	Employees' creativity	-4.06	-7.01	2.94	-11.07
Social capital	Organizational productivity	-4.35	-4.71	0.35	-9.06
	Organizational agility	-3.75	-7.29	3.53	-11.04
	Employees' satisfaction	-4.25	-1	-3.25	-5.25
Intra-organizational factors	Facing critical factors	-3.94	-4.34	0.39	-8.28
	Organizational policies	-3.84	-6.96	3.11	-10.80
Extra-organizational and environmental factors	Environmental (social, economic) factors	-4.59	-1.03	-3.56	-5.62
	Competitors	-4.00	-4.37	0.36	-8.37
	Laws	-4.03	-6.86	2.82	-10.89
	Monitoring of relevant systems	-3.87	-1.06	-2.81	-4.93
	Needs of society	-4.01	-4.22	0.20	-8.23
Organizational responsibility	Employees' commitment	-3.96	-6.67	2.70	-10.63
	Social responsibility of organization	-4.27	-1.17	-3.10	-5.44
	Making social interest	-4.33	-4.62	0.28	-8.95
Targeting based on the environmental conditions	Valuation	-4.29	-6.95	2.65	-11.24
	Organizational objectives	-3.70	-1.15	-2.55	-4.85
	Evaluating the environmental changes	-4.37	-4.97	0.59	-9.34
	Selection strategy	-4.17	-7.49	3.31	-11.66

According to the results, it was found that in the main criterion of organizational communication, which is one of the effective criteria, the sub-criteria of coordination of interactions within the organization and internal communication are effective and the development of communication between managers and employees as well as external communication are effective. Among the sub-criteria for improving the ability of employees,

only empowerment is effective and the sub-criteria for developing learning and developing teamwork are effective. What was found in the evaluation of employees' attitudes shows that attitudes toward effective goals and the behavior of leaders are effective. Among the strategies of the organization, the sub-criteria of evaluating the processes of the organization and creating flexible strategies are effective, and the sub-criteria of the organization's foresight, knowledge management and identification of key success factors are effective. Among the sub-criteria of human resource strategies, sub-criteria of employee participation and managerial approaches are effective and attention to employee motivation, planning and performance evaluation are effective. Among the sub-criteria of organizational development, the results showed that specialization and organizational development strategy are effective and other sub-criteria are effective. Among the sub-criteria of social capital, the factors of organizational competence and employee satisfaction are effective and organizational productivity and organizational vitality have been identified as effective factors. All sub-criteria of internal factors are effective. Among the sub-criteria of external organizational factors, the sub-criteria of environmental factors and monitoring of relevant devices are effective and other factors are effective as sub-criteria. The criterion of organizational responsibility has influential factors called social responsibility of the organization and the commitment of employees and creating social benefits are effective. Finally, among the targeting sub-criteria based on environmental conditions, only the factor of organizational goals is effective and other factors are effective. In the following, based on all the cases presented in the following diagrams, the relations between the sub-categories are shown between each of the main variables of the research. In this regard, in each of the diagrams, the influential factors have bilateral relations and the influential factors have bilateral relations. And on the other hand each of the factors affecting the influencing factors are marked with a one-sided sign and is described in detail in the previous section.

Figure (5) shows the inter-critical relations based on F.DEMATTEL main criteria:

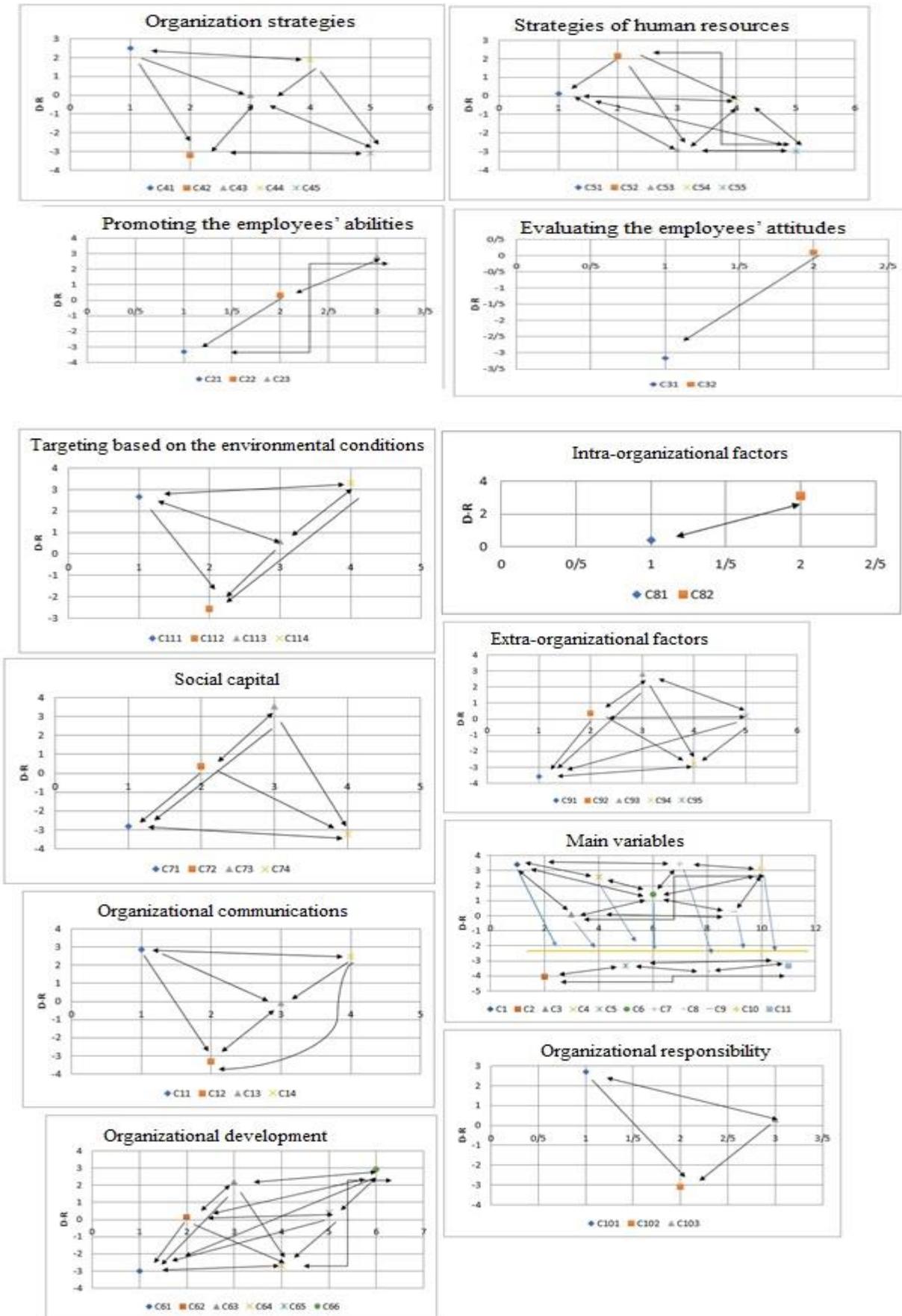


Figure 5. Inter-criteria relationships based F.DEMATEL

The first effective criterion is human resource strategy, which is one of the most important dimensions of the organization and is directly related to the organization and employees. It can be acknowledged that human resources are a key resource for sustainable competitive advantage and one of the key factors for organizational success. Are considered. Human resources can and should play a strategic and key role in the design and implementation of organizational transformation and transfer strategies. The human resources department can play a strategic and key role in the design and implementation of organizational transformation and transfer strategies. The human resources department can help identify and analyze employee issues and identify those employee issues that play a significant role in the success of an organization's strategy. On the other hand, based on the results, it was found that the components of employee attitude evaluation, social capital, organizational development and goal setting based on environmental conditions are effective. Accordingly, it can be said that the criterion of social capital is effective that this criterion is not limited to individuals and is effective and decisive in various dimensions of the organization because in the complex and changing environment that governs society, social capital is a tool. Which helps the organization to survive more in the national and international arenas and to coordinate with these changes. This leads to the organization systematically and with more trust between employees and managers to develop operational conditions and lead to improvement and expansion. In the present study, this criterion has been identified with the dimensions of organizational competence, organizational productivity, organizational vitality and employee satisfaction, and in fact includes dimensions that show the values and trust between individuals, organization and society, which are between The proposed sub-criteria of organizational competence and employee satisfaction are effective and organizational productivity and organizational vitality are effective, which indicates that organizational vitality is due to factors such as effective interactions and optimal performance, which ultimately leads to the development of organizational communication. Becomes.

### **3.4.2. Multi-criteria decision making (F.AHP)**

The criteria weight was obtained using Fuzzy AHP and DEMATEL that Fuzzy AHP was solved in this research based on the matrix of general relationships which show the effectiveness and impact ability of the criteria. After forming the paired comparison matrices, the priority weights of each main branch, sub-branch, and choice were calculated using FAHP. Matrix compatibility should be noticed in the paired comparison matrix.  $A = [a_{ij}]$  matrix is called compatible if  $a_{ik} \times a_{kj} = a_{ij}$ . Lower than 0.1 incompatibility is acceptable in paired comparison matrixes. In cases that paired comparison matrixes are related to the fuzzy numbers, first, the numbers of this matrix should change to the fuzzy numbers, then the incompatibility rate of these matrixes is calculated. Assume that  $\tilde{p}_{ij}$  is a set of priorities of decision-makers about an index than the other indexes. The paired comparison matrix is formed as follows:

$$\tilde{A} = \begin{bmatrix} 1 & \tilde{p}_{12} & \dots & \tilde{p}_{1n} \\ \tilde{p}_{12} & 1 & \dots & \tilde{p}_{2n} \\ \dots & \dots & \dots & \dots \\ \tilde{p}_{n1} & \tilde{p}_{n2} & \dots & 1 \end{bmatrix}$$

In which,  $n$  is the number of related elements in each row. Fuzzy weights of each index in paired comparisons are obtained using Buckley geometric mean method. The geometric mean of fuzzy comparison value of index  $i$  to each branch is obtained by the following formula:

$$\tilde{r}_{ij} = \left(\prod_{j=1}^n \tilde{p}_{ij}\right)^{1/n}, i = 1,2,3, \dots, n \tag{6}$$

Then, fuzzy weight of the  $i$ th branch is shown by a triangular fuzzy number (TFN):

$$\tilde{w}_i = \tilde{r}_i \otimes (\tilde{r}_1 \oplus \tilde{r}_2 \oplus \dots \oplus \tilde{r}_n)^{-1}, (Lw_i, Mw_i, Uw_i) \tag{7}$$

Based on the presented cases in this part, incompatibility rate of the main criteria is shown:

**Table 12. Incompatibility rate of the main criteria**

Component	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
CR	0.021	0.010	0.1	0.012	0.013	0.038	0.031	0.1	0.045	0.00	0.023

Since the incompatibility rate is an index whose value indicates possible discrepancies and incompatibilities in the comparison matrix, according to Mr. Saati, the founder of the AHP method, if the incompatibility rate is less than 0.1, the compatibility of the comparison matrix is approved and acceptable. Are. But if the incompatibility rate is greater than 0.1, it indicates a discrepancy in the evaluations and judgments of experts.

Since the obtained incompatibility rates are lower than 0.1, research questionnaires are compatible, and the fuzzy-making of criteria was obtained in the next step:

**Table 13. Fuzzy table of research criteria**

Code of criteria	U	M	L
C11	0.766	0.502	0.314
C12	0.364	0.224	0.132
C13	0.282	0.156	0.089
C14	0.23	0.116	0.071
C21	0.675	0.477	0.324
C22	0.538	0.356	0.232
C23	0.28	0.165	0.112
C31	0.995	0.721	0.501
C32	0.412	0.178	0.208
C41	0.381	0.271	0.18
C42	0.413	0.255	0.145
C43	0.287	0.181	0.121
C44	0.224	0.144	0.102
C45	0.202	0.148	0.113
C51	0.34	0.243	0.165
C52	0.482	0.31	0.178
C53	0.25	0.167	0.12
C54	0.254	0.155	0.107
C55	0.185	0.122	0.087
C61	0.432	0.252	0.136
C62	0.376	0.211	0.113
C63	0.3	0.162	0.086
C64	0.267	0.148	0.087
C65	0.26	0.129	0.073
C66	0.202	0.094	0.046
C71	0.462	0.348	0.247
C72	0.468	0.307	0.187
C73	0.314	0.19	0.12
C74	0.289	0.153	0.095
C81	0.957	0.787	0.641
C82	0.263	0.212	0.177
C91	0.258	0.215	0.172
C92	0.32	0.252	0.192
C93	0.25	0.202	0.162
C94	0.28	0.204	0.156
C95	0.171	0.124	0.096
C101	0.657	0.458	0.297

Code of criteria	U	M	L
C102	0.415	0.311	0.25
C103	0.316	0.229	0.172
C111	0.545	0.369	0.233
C112	0.439	0.275	0.163
C113	0.367	0.206	0.121
C114	0.29	0.147	0.089

In this part, the weights of criteria and sub-criteria were obtained:

**Table 14. Normal weight, utility index, and rank of criteria**

Main criteria	Sub-criteria	Code	Normal weight	Utility index	Rank in criterion	Total rank
Organizational communications (0.105)	Coordination of interactions within the organization	C11	0.490	0.051	1	3
	Development of communications between managers	C12	0.222	0.023	2	19
	Extra-organizational communications	C13	0.161	0.016	3	31
	Intra-organizational communications	C14	0.126	0.013	4	39
Promoting the employees' abilities (0.212)	Empowerment	C21	0.469	0.099	1	4
	Learning development	C22	0.356	0.075	2	6
	Teamwork development	C23	0.173	0.036	3	28
Evaluating the employees' attitudes (0.095)	Attitude toward objectives	C31	0.714	0.07	1	2
	Leaders' attitudes	C32	0.285	0.027	2	11
Organization strategies (0.067)	Evaluating the organization processes	C41	0.264	0.0176	3	13
	Organization futurism	C42	0.256	0.0171	4	14
	Knowledge management	C43	0.184	0.012	5	27
	Making flexible strategies	C44	0.147	0.009	6	35
	Identifying the key factors for success	C45	0.146	0.0009	7	36
Strategies of human resources (0.054)	Attention to the employees motivations	C51	0.237	0.0127	2	17
	Employees' participation	C52	0.307	0.016	1	9
	Planning	C53	0.169	0.009	3	28
	Performance evaluation	C54	0.161	0.008	4	32
	Managerial approaches	C55	0.124	0.006	5	40
Organizational development (0.072)	Specialization	C61	0.245	0.017	1	16
	Training based on organization strategies	C62	0.208	0.014	2	24
	Organizational culture	C63	0.162	0.011	3	30
	Organizational development strategy	C64	0.148	0.01	4	34
	Structural factors	C65	0.135	0.009	5	37
	Employees' creativity	C66	0.099	0.007	6	41
	Organizational competence	C71	0.336	0.045	1	7
Social capital (0.134)	Organizational productivity	C72	0.303	0.04	2	10
	Organizational agility	C73	0.195	0.026	3	26
	Employees' satisfaction	C74	0.165	0.022	4	29
Intra-organizational factors (0.061)	Facing critical factors	C81	0.785	0.047	1	1
	Organizational policies	C82	0.214	0.013	3	20
Extra-organizational and environmental factors (0.068)	Environmental (social, economic) factors	C91	0.212	0.014	4	21
	Competitors	C92	0.250	0.017	2	15
	Laws	C93	0.201	0.0136	6	25
	Monitoring of relevant systems	C94	0.208	0.014	5	23
	Needs of society	C95	0.127	0.008	7	38
Organizational responsibility (0.060)	Employees' commitment	C101	0.455	0.027	1	4
	Social responsibility of organization	C102	0.313	0.018	2	8
	Making social interest	C103	0.230	0.0138	3	18
Targeting based on the environmental conditions (0.065)	Valuation	C111	0.356	0.023	1	5
	Organizational objectives	C112	0.271	0.0176	2	12
	Evaluating the environmental changes	C113	0.212	0.0137	3	22
	Selection strategy	C114	0.159	0.01	4	33

According to the obtained results, the first rank between the main variables was for the social capital, and valuating got the first rank between the research indexes.

### 3.4.4. Data Envelopment Analysis

What indicated in this research is the difference in ranking the various methodologies which cannot provide a comprehensive conclusion simply. Therefore, the data envelopment method has been used to evaluate the efficiency of the criteria. In this methodology, each criterion has been considered as an input for all decision-making units (DMU), and a constant value has been considered for all units. In addition, the output of each unit is the relevant sub-criteria of that criterion which was based on the obtained weights from the multi-criteria decision-making technic.

The relevant formula to the data envelopment analysis is as follows:

$$E_r = \max \frac{\sum_{k=1}^t u_k Y_{rk}}{(v_0 + \sum_{j=1}^s v_j X_{rj})} \tag{7}$$

$$\text{s.t} \quad \frac{\sum_{k=1}^t u_k Y_{ik}}{(v_0 + \sum_{j=1}^s v_j X_{ij})} \leq 1 \quad i = 1, 2, \dots, n$$

$$u_k, v_j \geq \varepsilon > 0$$

In which,  $X_{ij}$  and  $Y_{ik}$  are input and output, and  $i = 1, 2, \dots, s$ ,  $k = 1, 2, \dots, t$  and  $\varepsilon$  are non-Archimedean number. Model (7) is a fractional linear planning problem which can be determined by the following linear planning model:

$$E_r = \max \sum_{k=1}^t u_k Y_{rk}$$

$$\text{s.t} \quad v_0 + \sum_{j=1}^s v_j X_{ij} = 1$$

$$\sum_{k=1}^t u_k Y_{ik} - (v_0 + \sum_{j=1}^s v_j X_{ij}) \leq 0, \quad i = 1, 2, \dots, n$$

$$u_k, v_j \geq \varepsilon$$

Based on what were mentioned, ranking based on the obtained efficiency from the data envelopment analysis is as following:

**Table 15. Complete ranking of criteria using the data envelopment analysis**

Main criteria	Sub-criteria	Code	Efficiency score	rank
Organizational communications (0.105)	Coordination of interactions within the organization	C11	0.363	7
	Development of communications between managers	C12	0.164	33
	Extra-organizational communications	C13	0.119	39
	Intra-organizational communications	C14	0.093	42
Promoting the employees' abilities (0.212)	Empowerment	C21	0.172	30
	Learning development	C22	0.130	37
	Teamwork development	C23	0.063	43
Evaluating the employees' attitudes (0.095)	Attitude toward objectives	C31	0.584	3
	Leaders' attitudes	C32	0.233	20
Organization strategies (0.067)	Evaluating the organization processes	C41	0.306	10
	Organization futurism	C42	0.297	12
	Knowledge management	C43	0.213	24
	Making flexible strategies	C44	0.170	31
	Identifying the key factors for success	C45	0.169	32
Strategies of human resources (0.054)	Attention to the employees motivations	C51	0.341	8
	Employees' participation	C52	0.442	4
	Planning	C53	0.243	17
	Performance evaluation	C54	0.232	21
	Managerial approaches	C55	0.178	27

Main criteria	Sub-criteria	Code	Efficiency score	rank
Organizational development (0.072)	Specialization	C61	0.264	15
	Training based on organization strategies	C62	0.224	23
	Organizational culture	C63	0.175	29
	Organizational development strategy	C64	0.160	34
	Structural factors	C65	0.146	35
	Employees' creativity	C66	0.107	40
	Organizational competence	C71	0.195	25
Social capital (0.134)	Organizational productivity	C72	0.176	28
	Organizational agility	C73	0.113	38
	Employees' satisfaction	C74	0.096	41
Intra-organizational factors (0.061)	Facing critical factors	C81	1.000	1
	Organizational policies	C82	0.273	14
Extra-organizational and environmental factors (0.068)	Environmental (social, economic) factors	C91	0.242	18
	Competitors	C92	0.286	13
	Laws	C93	0.230	22
	Monitoring of relevant systems	C94	0.238	19
	Needs of society	C95	0.145	36
Organizational responsibility (0.060)	Employees' commitment	C101	0.589	2
	Social responsibility of organization	C102	0.405	6
	Making social interest	C103	0.298	11
Targeting based on the environmental conditions (0.065)	Valuation	C111	0.426	5
	Organizational objectives	C112	0.324	9
	Evaluating the environmental changes	C113	0.253	16
	Selection strategy	C114	0.190	26

#### 4. Conclusion

The process of strategy execution in an organization is successful when all the organization activities are aligned with it and can promote the alignment of human resources systems and organization strategy. Therefore, alignment leads to synergy. In this regard, the coordination and integration of strategies are essential to align the strategies of human resources and organization strategy, because these two strategies are a supplement and aim at strategic coordination and integration between the organization's objectives. This issue is dependent on various organizational levels personally and in groups, internal and external organizational communications, and their related effects. Its positive effects are increased interests and competitive advantage, reduced caused costs by control, relationships improvements, increased sense of understanding and reduced conflicts, increased sense of commitment, and more responsibility sense of employees, and increased legitimacy and fame of organization based on various identified factors that were referred in this research. Thus, it was indicated based on the prioritization of the main variables based on data analysis that the component of promoting employees' abilities is in the first rank, and social capital, organizational communications, evaluating the employees' attitude, and organizational development are in the second to the fifth rank among the main variables, respectively. In addition, the most important sub-criterion among the others is facing critical factors that are in the first rank, and attitude to the objectives, coordination of interactions within the organization, employees' commitment, and valuating are in the second to the fifth rank, respectively. Furthermore, it was indicated by evaluating the related efficiency to the sub-criteria using the data envelopment analysis that facing the critical factors is in the first rank, and employees' commitment is in the second rank, and attitude toward objectives is in the third rank of efficiency than the other sub-criteria. It can be proposed based on the mentioned factors that promoting the employees; abilities are significantly important among variables about the alignment of organization strategy and strategies of human resources because this matter develops the employees' abilities, facilitates their compatibility and even facing the critical factors, promotes the intra-organizational accountability, facilitates the strategies execution and acceptance process. In addition, it has

high flexibility by changing the strategies. This matter facilitates the alignment process and solves the problems in the critical condition. Therefore, the proposed cases should be based on organizational communications and employees' attitudes toward the organization and organizational objectives. Since the communications have an impotent role in making the attitude in employees either outside the organization, it is essential to evaluate the interactions and values permanently in the organization with an emphasis on the role of employees' commitment to establish the alignment between the most important constitutional aspects of the organization which are organization strategies and strategies of human resources. Some suggestions are based on the proposed matters by which organizations can change in their general strategies while facing the political and economic crises because the views and values of the organization will change. On the other hand, managers should examine the intra and extra-organizational changes permanently to promote performance optimally and protect their competitive advantage. Thus, it is suggested to the organizations to explain the adapted strategies to the existed resources and the realities of the outer environment to make alignment and in another way, the failure in strategy execution changes the employees' attitude and organization fame and status. Therefore, the strategic attitude should be established among employees to make them accept the responsibility at various organizational levels, to prevent the performance based on the personal mentality, and to determine the strategic level of the execution process. Alternatively, it is suggested to promote the employees; attitude to adapt to the strategies changes based on the evolutions in extra-organizational environmental evolution along with alignment between the organization strategy and accountability of organization and adaptation with change. Based on the current situation and continuous environmental changes, the alignment of organizational strategies and human resource strategies should be done continuously in organizations and provide conditions to create predictability and foresight in relation to strategies and the ability of employees to adapt. Increased and continuous training for this process in the organization to be continuously in accordance with environmental conditions.

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