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Presenting a Knowledge-Based Multi-Level Model for the Evaluation of Human Resource Management in the Automotive Industry

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ABSTRACT

This research aimed to provide a model for evaluating human resources management in the automotive industry. This applied research was conducted with an exploratory and mixed nature (qualitative-quantitative) using the seven-step hybrid method of Sandelowski and Barroso (2007). Furthermore, to enrich the collected data, the opinions of experts in the automotive industry were used in the framework of focus groups. In the end, the importance and priority of each of the extracted dimensions, criteria, and concepts were determined using the multi-criteria decision-making approach and the hierarchical AHP method. The designed model included 3 main dimensions and 12 criteria coded as: Human resources leadership, The role of human resources manager, Strategic management of human resources and its design in the organization, Information, and knowledge system of human resources, Risk management in the field of human resources, Supply and adaptation, Development of human resources, Use of human resources, Maintenance of human resources and results, Results of human resources perception, Functional results of human resources, Organizational results are affected by the field of human resources. Furthermore, the reliability was calculated using the Kappa index. One of the advantages of this model is the emphasis on creating vertical and horizontal coordination and balance between human resources processes by examining and establishing the relationship between drivers, systems, and results simultaneously. ©authors

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1. Introduction

Managers may start and execute things in good faith, but their realization is often very difficult. The main purpose of Human Resource Management (HRM) is to manage the Gap Between Rhetoric and Reality to ensure that the concepts become continuous and effective activities (Saedi et al, 2018). To do this, members of the HRM Unit must keep in mind that it is relatively easy to achieve new and innovative policies and procedures, the main challenge is to use knowledge and information in this field (Armstrong, 2021: 103).

Komm et al. (2021) in their research entitled "How can human resources (HR) help build an organization for the future", refer to the increase in organizational capability through modified staff performance and agility of the work teams. In order to optimize the use of knowledge capital in organizations, a field of management called knowledge management has been created to improve knowledge processes and link the organization's strategy and HR in providing the proper knowledge to maintain the advantage of organizational competition (Safian et al, 2018).

Prominent organizations develop employee strategies and programs that support the organization's general strategies (Taghizadeh Herat, 2021: 54).

HRM has lost its way and needs to determine a new path. To this end, HRM and the organization need to approach their views (Rajabi Farjad et al, 2017). The process of approaching thinking and building intellectual communication is not an easy process and mechanism (Shams Zare, 2017). HR activities are an important component of strategy in large organizations (Vulpen, 2021).

The broader question is how can human resources explicitly support the business of the organization (Atai, 2015). Real leaders develop HR and employee performance management clearly and redefine them in line with organizational strategies and goals (Baier et al., 2021).

The new and up-to-date report in 2021 on the top 10 challenges in the field of human

resources management is third in the third place after the management of human resource processes after leadership change management (Ahammad et al, 2020).

In this way, knowledge means a complex flow of structured HRM (Rahimi et al, 2015), values, existing information, and expert insights that provide a framework for evaluation and the death of new experiences and information. This practice can be called the discovery of HR knowledge (Ulrich et al, 2018). This knowledge is a collection of information and experiences that allow the individual to respond to new situations due to the result of past data and operations (Andish et al, 2018).

Regarding the importance of evaluating HRM performance as propulsion and decision-makers in other large and complex industries such as the automotive industry and the special status of the industry in the country's industrial development, the public's close relationship with the automotive industry in various fields of Transportation, the importance of cars in citizens' lives in terms of access to social welfare and its essential role in promoting public life and public welfare in society, the cultural and social role of this industry in society (Shirkund, 2021), angles of need to step This study shows (Lawler et al, 2020).

This study focuses on systematic reviews based on the knowledge of HRM evaluation knowledge and subsequently designing and validating the multifunctional model of evaluation in the strategic and extensive automotive industry with a look at global companies.

This model is based on facilitating and creating organizational information needed to build awareness and understanding of organizational activities and can provide benefits such as reducing costs, improving workflows, increasing market share and sales, and creating innovation.

Given this, the research question can be asked: If the automotive industry wants to step into systematic and extensive HRM, what is the appropriate model for evaluating the area, and what are its dimensions and components?

2. Literature Review

Bamdad Sufi et al. (2021) in the study of the Strategic Evaluation Model of the Human Resource Management System in Holdings, explored the increasing extent of the structure of holdings, or specialized maternal companies in Iran. These companies have obliged to properly evaluate their subsidiary human resources management system, given the importance of human capital in the value creation of companies. Accordingly, the purpose of their research is to provide a model for the strategic evaluation of the human resource management system in specialized parent companies.

Sadeghi Zeidanlou and Seyed Esfahani (2020) in their article, assessing the Model of Excellence for the Development and Ability of Human Resources (Case Study: Shams Abad Power Production Power Plant), aimed at developing and empowering Shams Abad scattered power plant staff by designating criteria and subordinates by experts. The field has been done for the growth and excellence of this organization, prioritizing using a fuzzy model analysis of model network analysis.

Ishaghiyeh Firouzabadi et al. (2019) in the design of the model of evaluating the factors affecting human resource excellence in the ceramic tile company have stated that in today's world, human resources are considered to be the most important asset of the organization, which can change. And it provided the evolution of other organizational factors and basic results. The purpose of this study is to evaluate the factors affecting the excellence of human resources in Dorsa Ceram Meybod.

James (2022) analyzed the challenges of implementing Industry 4.0 in the Indian automotive industry in the article "Analysis of Human Resource Management Challenges in Industry 4.0 in the Indian Automotive Industry. Industry 4.0 is a new concept in the manufacturing sector that increases productivity in the automotive industry. However, there are many challenges to

implementing it in the Indian automotive industry. This article identifies and analyzes the challenges of HRM related to the implementation of industry 4.0 in the Indian automotive industry and analyzes them using a hybrid method. Caporal et al. (2022) have stated in an article entitled The Effect of Environmental Quality Factors on the Industrial Performance of Old Workers, which has been increasing in recent decades. According to Eurostat data (2020) about the employment rate, the ratio of older workers, 50 years and above, has reached 20 % in all European countries. Increasing workforce age creates important challenges in industrial structures. The consequence of labor aging appears to be a decline in workers' performance due to reduced general physical and mental abilities.

Mousa & Otman (2020) in an article entitled The Impact of Green HRM Methods on Sustainable Performance in Health Care Organizations: A conceptual framework, state in the past few years, organizations have been pressured to adopt environmentally friendly business practices, Where the identification of green practices is vital. Despite the fact that green human resource management has been the focus of researchers, studies on green methods have remained limited and have not yet worked in the field of developing countries.

However, various research has been conducted on the importance of evaluating human resource performance in the automotive industry; However, a study that evaluated the importance and weight of each component and concept in the mechanism and, given the existing and influential conditions of this industry, has been less observed in recent years. In this regard, the researcher seeks to develop an appropriate model of human resource management evaluation in the automotive industry.

3. Method

Given that a mixed approach was used in this study, we first collected the models in the field of human resource evaluation. Then, with the help of a comprehensive

study of the research literature, we designed the comprehensive assessment model.

The following can be completed and converted to a model dedicated to the Human Resources Management Group by holding and benefiting from expert opinions in the focused group meetings. Finally, this process ends after the modeling and

reliability of the model, as well as the decision-making tool, and the model can be used in a practical way.

Meta-synthesis can in turn convert different qualitative studies to comprehensive knowledge (Bergdah, 2019: 1).

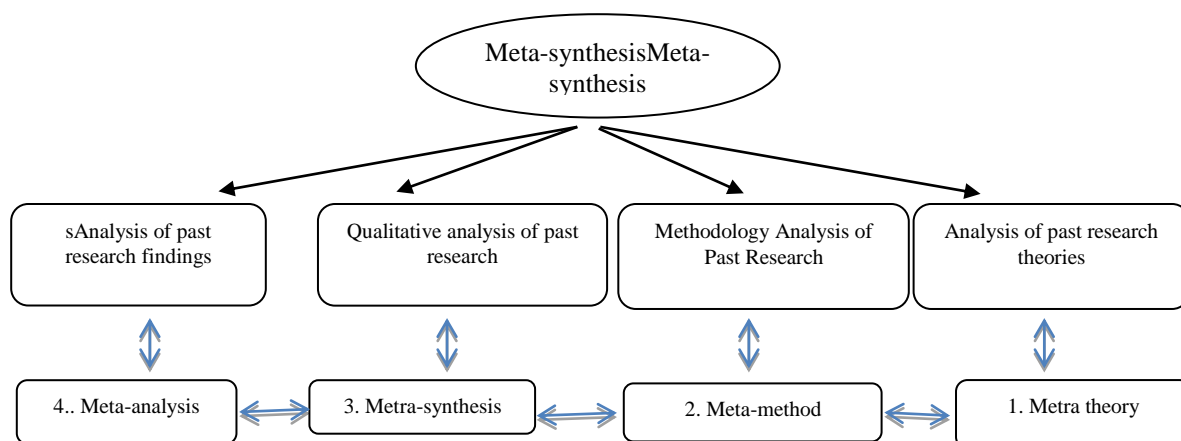


Figure 1. Meta Study components (Khanifer, 2018: 497)

Meta Study, if it is done in a qualitative manner and on the concepts used in past studies, is known as Meta-synthesis (Zimmer, 2006).

The purpose of applying the Meta-synthesis in this study is to conceptual development to achieve a comprehensive

model through the combination of existing models in the field of human resource evaluation. Numerous methods have been suggested to perform the seven-stage Sandelowski & Barroso pattern (Salehnejad et al., 2018: 9).

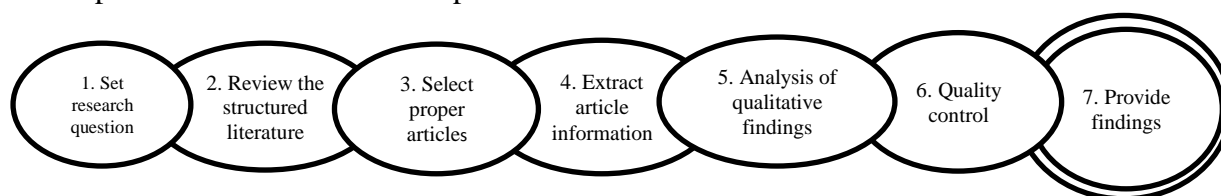


Figure 2. The steps of conducting the seven -stage research method (Sandluski & Barrows, 2007)

The full steps of the research are detailed in the research findings.

4. Research Findings

Step One: Focus of the Research Question

The first step in answering the research question focused on "what". The purpose of this study was to design and validate a Multi-Level Model of Assessing Human Resource Management in Automotive Industry which is show in Table 2.

Table 2. Set the Research Question

Parameters	Adjust the question
What	Design and validation of Multi -Level Model Assessment of Automotive Industry Management
Who	In this study, several databases, search engine and main site selected models were examined as in Table 4.
When	All HRM evaluation models are from 2000 onwards.
How	In this study, the method of document analysis was based on secondary data analysis.

Step Two: The systematic review of texts

Different search engine designs, journals, conferences, and search engines have been examined, and no specific time limit has been considered to accept texts.

At this point, the systematic search focuses on articles and texts published in various journals and internet sites. Search for internal evaluation models has been carried out from 2001 to

2020 and external evaluation models from 1990 to 2020.

After making sure that the models needed to identify the research resources, the search for the appropriate texts based on keywords begins. The keywords used in this study are visible to search for texts in Table 2.

Throughout the study, the definitions of the words are searched for and are continuously evaluated in a given time frame.

Table 3. List of keywords

Searched keywords
Human Resource Assessment
Human Resource Appraisal
Measuring Human Resource
Human Resource Excellence
Human Resource Excellence Models
Organization (Business) Excellence Models
Human Resource Standard
Human Resource Performance
Human Resource Maturity Model
Human Resource Competency Model
Human Resource Awards

Step Three: Search and select appropriate texts

Table 4 shows the various databases and search engines used in this study.

Table 4. The sources searched in this study

Source	Searched sources
Search Engine	Google -Yahoo
Database	Civilica - Deloitte - Emerald - Hr excellence - Valamis – Magiran - Performancemagazine - Science Direct - Shrm - Springer - Origin group.
Main website	People Capability Maturity Model(PCMM) Excellence through People (ETP) NSAI

Step Four: extracting the results of the sources

At first, the researcher based on the Critical Appraisal Skills Program (CASP) and a survey of research experts, examined the title and content of the found models. Several texts and models that did not fit into the question and purpose of the research were omitted (Salehnejad et al., 2018: 86).

This is one of the methods of ensuring the validity and reliability of qualitative research. It is especially used to ensure the validity and reliability of the meta-synthesis research.

In this research, after the investigation, only 8 models have been identified that align with the evaluation of human resources, and a summary of this process can be seen in Table 5.

The applicability of the models and the evaluation of the HRM based on them in the implementation to avoid the choice of a purely theoretical model is another limitation that has been done in the screening and the third stage. The frequency and records of the implementation of evaluation by these models were considered in the concept of the validity of the model and its applicability in organizations as another screen in the final selection of the model.

Table 5. Refinement steps based on CASP

Step 1	Number of models found	18
	Number of rejected models due to title	(7)
Step 2	Filtered models by title	11
	The number of rejected models in terms of content	(1)
Step 3	Filtered models based on content	10
	The number of rejected models in terms of the number of implementations in organizations	(2)
Step 4	Screened models based on the frequency of implementation in organizations	8

After applying the refinement steps according to Table 5, the selected final models were extracted as described in Table 6.

After the screening, the final eligible models were selected for the coding stage and the explanation of the research model

according to Figure 3. Factors affecting trends and events and actions and images that may create distinct futures. Propulsion is a modifier used to refer to any transformative force that causes, influences, and shapes future transformation. These changes can be caused by individuals, institutions, or even circumstances (Ramazani, 2021: 82).

Table 6. External and internal evaluation models of human resource management evaluation

Model No.	Model title	Country	Modified date	
1	People Capability Maturity Model (PCMM) (Curtis, Heffley, and Miller, 2009: 43)	America	First	Last
2	Human resources development model (the official website of Spring Institute) ¹	Singapore	1995	2000
3	Investors in People IIP model (the official website of the IIP model) ²	United Kingdom	1997	2009
4	Excellence through People (ETP) (excellence model through employees website) ³	Ireland	1990	2015
5	The model of the National Petrochemical Company of Iran (the website of the National Petrochemical Company of Iran) ⁴	Iran	2002	2012
6	Model of Iran's Human Resources Empowerment Foundation (Emami, 2008)		2007	2008
7	Iran Human Resources Excellence Award (Iran Human Resources Management Association website) ⁵		2008	2013
8	Model 34000 of human resources, edition 202 (Gholipour, 2022)		2008	2018

Human resource strategies should be aligned with the organization's strategies in terms of the human resources dimension (Brown, 2019: 4) so that strategic fit occurs, and this alignment occurs according to the role of leaders in this field (Armstrong, 2021: 37).

Step Five: Analysis of qualitative data

At this stage, the research focused on the codes emerging from the meta-synthesis process. To perform this step, first, all the criteria in the selected models were collected. Each criterion was considered as a code. Then, the frequency of each of the codes in the models was calculated (Table 7). Then, considering the concept of each of these codes, they were grouped under similar concepts.

¹ <http://www.spring.gov.sg/QualityStandards/be/Documents/APEX.pdf>
² <http://www.investorsinpeople.co.uk/>
³ http://www.excellencethroughpeople.ie/About_Us.asp
⁴ <http://www.nipc.net/>
⁵ <http://www.hrmsociety.ir/>

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Table 7. frequency of each of the codes in the models

Criterion no.	Criterion title	The relevant codes in the studied models	Number of selected models
1	Human resources leadership	HR leadership/management effectiveness/leadership style	2-3-4-5-6-7-8
		Management of ethics, organizational culture and values/ ethical code	6-7-8
		Codes of conduct/conduct of managers	8
		equal opportunities	1-3-4-6-7-8
		social responsibility	7-8
		Codes of conduct/conduct of managers	8
2	The role of the human resources manager	Strategic business planning	2-3-4-7
		Alignment with organizational performance/common understanding	1-6-8
		Expectations of various stakeholders/business partners	6-7-8
		role model leaders	7
		Competitive Advantage	8
		Sustained success	6
3	Strategic management of human resources and its design in the organization	Organizational changes/organizational transformation	6-7
		HR strategic planning/functional strategies/long term goals	2-4-5-6-7-8
		Communication / effective information and coordination / two-way discourse	1-3-4-6-7
		Organizational structure design/human resources organization/supervision area/number of organizational layers	1-4-7-8
		Capability management/organization ability/capacity building	1-4-7-8
4	Human resources information and knowledge system	Partnerships and resources related to human resources	6-8
		Subsystems of human resources	7
		Information and Statistics/Data Mining and Information	2-4-6-8
		Statistical performance management	1
		Measurement system	6-8
		job evaluation	8
		Human resources information system/HRIS	5-6-8
		Demographic reports	8
		Management of knowledge and intellectual capital modeling	4-5
		Information technology/ portal/ application/ HR electronic meetings/ social media/ digital HR	4-6-8
5	HR management risk	Information security	7-8
		Audit and risk of human resources/employer brand risk	6-8
6	Provision of human resources	1-8	1-8
		Human resource planning and supply/ labor supply and demand/ labor force exit process/ management stability rate	1-2-5-6-7-8
		Job analysis and job grading	7-8
		Diversity of employees/diversity index	4-3-8
		Recruitment and employee grading	3-4-5-7-8
7	human recourse development	Competence analysis/competency penetration rate	1-7-8
		Labor market information	7-8
		Learning and development strategy	4
		Learning and training/expert advice/buying training	1-2-3-7
		gamification	8
		Staff training/ human resource development	1-5-6-7
		Integration based on merit	1
		Teaching, learning and knowledge sharing	3-6-7-8
		Empowerment processes/ internal teachers	4-6-7-8
		Providing feedback/IDP individual development program, 360 feedback	1-2-3-4-7-8
		Horizontal promotion/promotion rate	8
		Appointment and evaluation center	1-8
		Performance Measurement	2-4-6
		Performance management/operational plans	1-5-7-8
		Career advancement path	1-2-4-7
		Internship/ orientation training/ socialization	1-2-7
		Key jobs/vital jobs	8
Succession/Talent Repository	2-6-7-8		
Delegation of authority/ growth volunteers	1-7-8		
Coaching and mentoring/learning on the job OJT	1-8		
Effectiveness of training/ return rate of training	7-8		
Learning on the job	8		

8	Application of human resources	Suggestion, creativity and innovation	4-6-7-8
		Participation and empowerment, cooperative culture	1-4-5-6-7
		Teams/problem solving teams/capable working groups/inter-unit teams/quality circles	1-4-7-8
		Percentage of women in management grade	8
		Human resources research	5
		Suggestion, creativity and innovation	4-6-7-8
		Participation and empowerment, cooperative culture	1-4-5-6-7
		Teams/problem solving teams/capable working groups/inter-unit teams/quality circles	1-4-7-8
		Labor and employee relations/work discipline/employee complaints	2-4-6-7-8
		Effective communication and coordination/two-way discourse	1-3-4-7
		Compilation of standards and regulations/instructions	1-5-8
		Demand and demands of employees/responsibility	6-7
		9	Maintenance of human resources
Work environment, employer brand	1-4-7-8		
Green human resource management / environmental considerations / 5S grooming system	6-7-8		
Compensation for services, salaries, facilities, welfare benefits, variety of payments/ unification of salaries and benefits	1-5-6-7-8		
Time flexibility rate	8		
Productivity/added value	6-7-8		
Internal and external fairness of payments	7		
Incentives/appreciation and rewards/financial and non-financial incentives/employee benefits	2-4-6-7-8		
Staff family	7		
Pension services	1-3-7-8		
10	The results of the field of human resources	Employee recreation program	8
		Perceptual results/employees' perceptions/attitudes/job satisfaction/organizational commitment/permanence/psychological health/absence of work addiction/work-life balance/overtime/job integration/organizational enthusiasm/organizational support Perceived/organizational identity/absence of anti-citizenship behavior in the organization/organizational citizenship behavior/survey participation rate.	2-6-7-8
11	Functional results of human resource management	Non-financial performance results of human resources / human resources metrics / key performance indicators KPI / performance results of human resources planning and provision / performance results of compensation for human resources services / performance results of human resources development / Functional results of labor relations and employees.	2-5-6-7-8
12	Organizational results	Organizational results	8, 7, 5
		The results of society	8
		Key performance results	8

Focus Group Method

Focus group discussions on a specific topic, at a specific place, and at a specific time create an opportunity for people with a flexible and free situation (Sekaran, 2019: 289).

The results of the interviews of separate focus groups cannot be compared from a quantitative point of view. Because on the one hand, each focus group is handpicked and cannot necessarily be a representative sample of its society; On the other hand, the results obtained from the focus groups are such that by obtaining information from each participant, as much as possible, different explanations or different interpretations are obtained from the participants' viewpoints (Bazargan, 2021: 79).

The statistical population of this research includes university professors, managers, senior evaluators and human resource excellence model evaluators working in the automobile industry, whose concern is to fill the void caused by the lack of a comprehensive human resources evaluation model.

To design a specific model of human resources management, working groups were formed to review, judge, and revise the initial criteria of the model with the presence of representatives of the automotive group, who mostly had more than ten years of experience, had a master's degree or higher and were familiar with the process of evaluating human resources. In these working groups, each of the proposed criteria was examined by the members. After

compiling and compiling the primary hybrid model in the 3 main dimensions of engine, system, and results, the said model was provided to the members of the focus groups

with the following specifications to provide expert opinion, judgment, and adaptation to the existing and practical conditions of the automotive industry.

Table 8. Information of selected people in focus groups

Row	Gender	Position	Education	Years of Experience	cluster
1	Male	Vice President of Administration and Human Resources	P.H.D	28	Senior Managers
2	Male	CEO of the company	P.H.D	25	
3	Male	Manager of the evaluation center	P.H.D	25	
4	Male	Director of Health, Safety and Health Department	P.H.D	22	Beneficiaries
5	Male	Head of Human Resource Planning Department	MA	20	
6	Male	Head of Human Resources Performance Evaluation Department	MA	18	
7	Female	The expert responsible for evaluating the performance of human resources contractors	P.H.D	16	
8	Female	Head of Human Resources Research and Development Department	P.H.D	21	
9	Male	Automotive human resources manager	MA	21	Facilitator
10	Female	Lecturer at Islamic Azad University	P.H.D	21	
11	Male	Assistant Professor of Human Resources, University of Tehran	P.H.D	18	
12	Male	Member of the academic staff of the Excellence Award of the Industrial Management Organization	P.H.D	30	

Step Six: quality control of the extracted codes

In this research, for descriptive validity, it was tried to identify and collect as many relevant human resource evaluation models as possible. To validate the findings, two methods were used in meta-combination

(Batmani, Babashahi, Akhavan Alavi, Yazdani, Zarei Matin, 2017: 23):

1. Using experts' opinions in confirming and validating research achievements
2. Providing a comprehensive conclusion using new case studies

Table 9. Conversion of codes into concepts by the main researcher and another expert

		Researcher's opinion		
		Yes	No	Total
2 nd Expert's opinion	Yes	A-9	B-0	9
	No	C-2	D-1	3
	Total	11	1	N

In order to measure the reliability of the model designed in this research (Homan, 2017), the first method has been used, and the calculation of the Kappa index is necessary for inference in this regard. (Ahmadi et al., 2017: 87) Finally, according to the number of concepts created that are similar and concepts that are different, the kappa index was calculated. If the Kappa index is between 61 and 81%, it is valid. The Kappa index of 83% in this study, as presented in the following formula, indicated that the generated codes had good reliability.

$$\frac{A+D}{N} = 0/833 = \text{Observed agreements}$$

$$\frac{A+B}{N} \times \frac{A+C}{N} \times \frac{C+D}{N} \times \frac{B+D}{N} = \frac{9}{12} \times \frac{11}{12} \times \frac{3}{12} \times \frac{1}{12} = 0/014$$

$$K = \frac{\text{Observed agreements} - \text{agreements by chance}}{1 - \text{agreements by chance}} = \frac{0.833 - 0.014}{1 - 0.014} = 0/83$$

Introducing the factors of the three-level research model

After extracting and validating the constituent components of the model with the aim of determining the importance and weights of the model at three levels, the dimensions, criteria and sub-criteria of the model were provided to senior human resources evaluators with the aim of pairwise comparisons, and the results of the pairwise comparison questionnaire aimed at calculating compatibility The opinions obtained through Expert choice software were analyzed and the results are presented below.

Table 10. Research criteria and sub-criteria in a hierarchical structure

Dimension	Sub criterion code	criterion	Criterion code
Drives	P1	Human resources leadership	P
	P2	The role of human resources manager	
Systems	S1	Strategic management of human resources and its design in the organization	S
	S2	Human resources information and knowledge system	
	S3	Risk management in the field of human resources	
	S4	Provision and adaptation of human resources	
	S5	Human resource development	
	S6	Application of human resources	
	S7	Maintenance of human resources	
Results	N1	The results of the field of human resources	N
	N2	Functional results of the field of human resources	
	N3	Organizational results affected by human resources	

Pairwise comparison of main criteria (model dimensions)

In this section, the pairwise comparisons of the 3 main dimensions are given in Table 10. The inconsistency rate of this pairwise comparison is equal to 0.007, and since it is less than 0.1, it is an acceptable sign of compatibility.

Table 11. Pairwise comparisons of main criteria

	Drives	Systems	Results
Drives		1.246	0.787
Systems			0.482
Results			Results

We entered the pairwise comparisons of Table 11 in the Expert choice software, which calculates the weights of the criteria as shown in Figure 3.

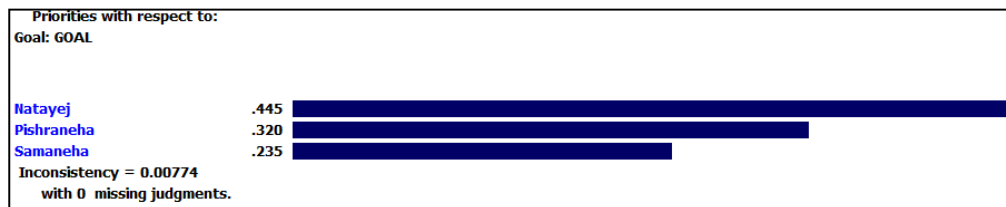


Figure 3. Weights of the main criteria

Table 12. Weight and rank of the main criteria

Criterion	Weight	Code	Rank
Results	0.445	N	1
Drives	0.320	P	2
Systems	0.235	S	3

According to Figure 3, the results with a weight of 0.445 have first place. The criterion of drives with a weight of 0.320 has the second place and the criterion of systems with a weight of 0.235 has the third place. All the steps performed to compare the dimensions were done for the criteria and sub-criteria of the model respectively.

Table 13. Weight and final ranking of sub-criteria

Criterion	Sub Criterion	Criterion weight	Final rank	Sub Criterion final weight	The relative weight of the sub criterion
Drives	Human resources leadership	0.32	1	0.1776	0.555
	The role of human resources manager		4	0.1424	0.445
Systems	Strategic management of human resources and its design in the organization	0.235	7	0.0414	0.176
	Human resources information and knowledge system		11	0.0237	0.101
	Risk management in the field of human resources		12	0.0202	0.086

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	Provision and adaptation of human resources		9	0.0353	0.15
	Human resource development		7	0.0414	0.176
	Application of human resources		10	0.0251	0.107
	Maintenance of human resources		6	0.0482	0.205
Results	The results of the field of human resources	0.445	3	0.1491	0.335
	Functional results of the field of human resources		5	0.1246	0.28
	Organizational results affected by human resources		2	0.1713	0.385

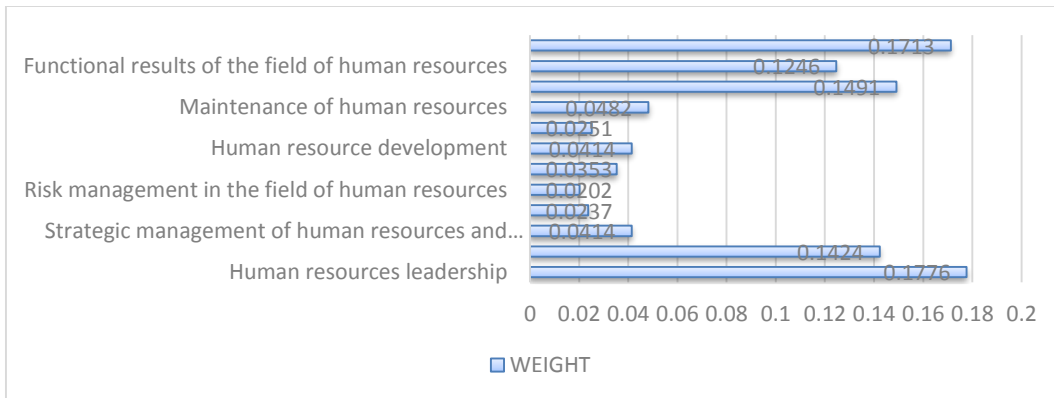


Figure 4. Weight and final priority of sub-criteria

The final evaluation model of human resource management in the automotive industry

A model can be defined as a "selective abstraction of reality". The model does not express the whole reality of a system and the nature of a real phenomenon: rather, it only expresses certain aspects of reality through the choice and art of modeling (Khenifar, 2014: 10) at the end, after considering the

opinions and suggestions presented in the meetings a focused meeting was held in order to develop a special model for the evaluation of human resources management in the automobile industry and its validation and with the aim of answering the main question of the research. The general outline of the mentioned model, dimensions and criteria were compiled as follows.

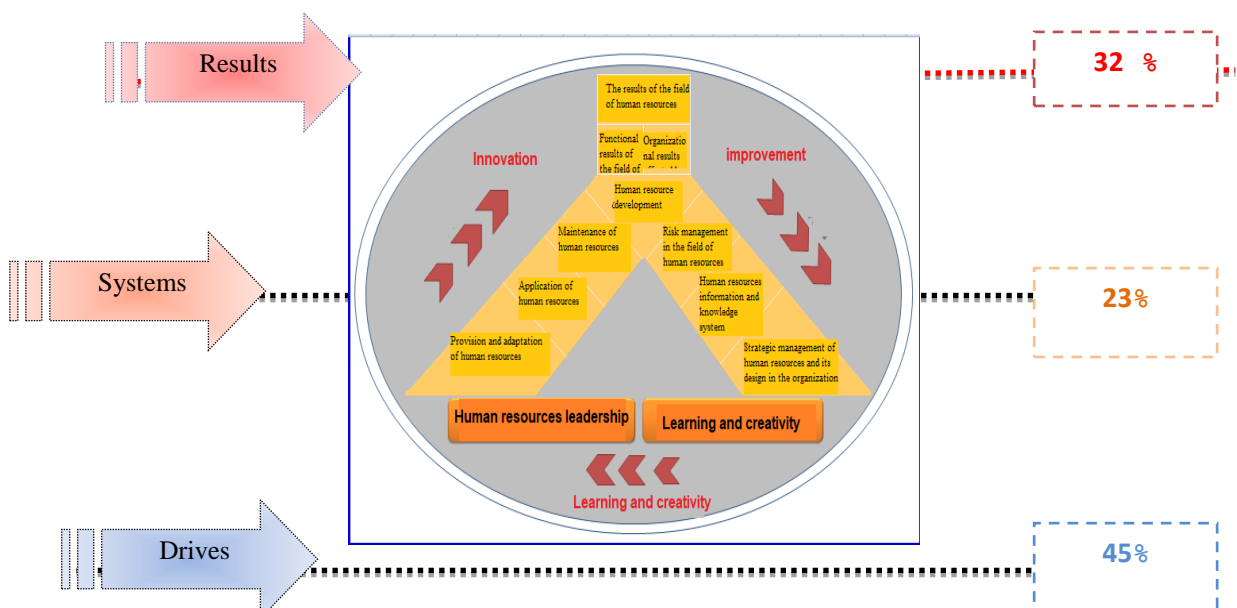


Figure 5. Evaluation model of human resources management of Saipa Automobile Group

5. Discussion

Before being a proposed model, the extracted model is a framework for modeling the multi-level evaluation model of human resources of the companies present in the value chain of Saipa Khodrosazi Group. In the sense that it can create an understanding that the human resource managers of these companies with their background conditions and the ecosystem in which they live have a relatively complete understanding of the processes, the sequence of their execution, and the definition of indicators. One of the advantages of this model is the emphasis on creating vertical and horizontal coordination and balance between human resources processes by examining and establishing the relationship between capabilities and results at the same time. With the help of the meta-synthesis method, the criteria needed to develop the evaluation model of human resource management have been presented, which, in addition to covering the criteria of the previous models, solves their shortcomings by providing new criteria.

6-Conclusion

In the age of knowledge, most organizations have realized that their success is not due to physical assets, but to the experiences and skills of human resources. One of the advantages of this model is the emphasis on creating vertical and horizontal coordination and balance between human resources processes by examining and establishing the relationship between drivers, systems, and results simultaneously. From another point of view, adapting the existing functional situation of the human resources field with a systematic, comprehensive, and adapted model with international models leads to the recognition of strengths and points that can be improved in order to ensure the integration of strategies, approaches, processes, and results of capital management. Humanity is one of the necessities for ensuring the correct role of agents in this field. Having a tool to measure and provide feedback based on knowledge can create mobility, dynamism, and motivation in colleagues in order to improve the processes and results of human capital

management. With the help of the meta-composition method, the criteria needed to develop the evaluation model of human resources management have been presented, which, in addition to covering the criteria of the previous models, solves their shortcomings by providing new criteria.

Due to the specificity of the perspective of planning, implementation, conclusion, and presentation of feedback report in this model and 12 criteria, the results of the present study are consistent with the following researches, for example, Boon, Den Hartog, and Lipak (2019) and Alvani & Ghezeli (2016), Nobakht (2016), Khanifar et al (2013), Khanifar et al (2018), a systematic review of human resources management system and their measurement and concluded that the structure of the human resources system has not been paid enough attention and the elements, systems and the way of cooperation and interactions in a human resources system have not yet been determined. The results of this research in some cases, such as the general dimensions and the way to evaluate the model, were consistent with researchers such as James (2022), Abedi Jafari Amiri (2018), Pejuyan (2014) in the dimensions of systems and results, and in terms of engines, less alignment was seen. The reason for this issue is less attention to the competency of the human resource manager and trustees in the effectiveness of human resources in previous models. Based on the obtained results, the managers of the organization should draw their attention to these important factors instead of just looking at engineering and software in knowledge management; and seek full coordination of human resources through its efficient management with its knowledge management goals.

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