

A close-up photograph of a microscope's objective lens and stage. The lens is in sharp focus, showing technical markings. The background is blurred, showing the rest of the microscope and a small green leaf on the stage. A red diagonal stripe is visible in the upper left corner.

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**DEVELOPING A COMPREHENSIVE MODEL OF ORGANIZATIONAL EFFECTIVENESS
REGARDING THE DIMENSIONS AND COMPONENTS OF KNOWLEDGE-BASED
DECISION MAKING IN IRANIAN TAX ADMINISTRATION**

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Abstract

This aim of the present study was introducing a comprehensive model of organizational effectiveness regarding the dimensions and components of knowledge-based decision making in Iranian tax administration. This study was mixed and applied in terms of design and purpose, respectively. This article included three sections. The first section addressed the background and the theoretical foundation related to the knowledge-based decision-making dimensions and components. The second section addressed the qualitative study using the grounded method. Finally, in the third section, the quantitative approach and modeling were considered based on a partial least squares approach. The statistical population of the article in the qualitative section included experts and elites of Iranian tax administration. Managers and specialists who had the required information for this article, using targeted sampling method, were selected to reach the theoretical saturation level; thus, finally, 50 people were interviewed. Triangulation and control methods were used to confirm the transcripts of the interviews as well as the interviewees to confirm and enhance the validity. The statistical population in the quantitative section included the general director, and the deputies, the directors of the staff, the directors of the Province of Tehran, the provincial governors, and deputy of provincial director, the elite experts, the executive experts, and senior experts of Iranian tax administration, which were totally 295 individuals.

Keywords

Decision making components – Knowledge – Based decision-making

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Introduction

Facing uncertain and unpredictable business environments, organizations have always tried to focus on the development of knowledge management systems that provide the basis for sustainability and future competitiveness¹. Knowledge management can be defined as the discovery and management of different levels of knowledge of individuals, groups, and organizations to improve organizational performance². Most of previous approaches in knowledge management have focused on frameworks to highlight knowledge management effectively and coherently³, with putting emphasis on the relationship between business processes and implementation⁴ and achieving competitive advantage, in which knowledge extraction is considered as a basic step⁵. Although decisions are not based on individuals, necessarily and individually in organizational systems, they depend on experts working in specific fields. Decisions are supported by a larger knowledge basis with more experience and from a variety of perspectives due to their nature throughout the organization⁶. The real challenge is that we should take control and develop the knowledge or work interpretation and the integration of both the company's internal and external environment.

Organizations are required to be small, agile, and responsible for changing environments. Organizations have to react to small decisions very quickly even when the unintended consequences of rapid decisions flare in a nanosecond and keep leaders focused only on a centralized conflict of war. In situations in which the uncertainty and complexity of work hinder the characteristics and instructions and organizational routing, groups of people are formed to solve the problem with prerequisite knowledge and expertise. The most important part of the application of knowledge research focuses on directional and organizational routing mechanisms, but there is not enough research on the mechanism of automated work groups in the application of knowledge for decision-making by high-level application management. Effective knowledge management, which is based on knowledge, should be able to nominally support the core management of business and decision-making and strategic design. Issues related to decision-making in complex dynamic environments are also examined by others. For example, it has been investigated by Sturman⁷, whose important finding was that human performance in complex systems was partially weak comparing to benchmark standards. The focus of the research was following the Knowledge-Based Decision Making (KBDM) approach for applying in business issues. Business management issues are identified by dynamic complexity, tacit knowledge factors, and the effects of feedback on time, and non-

¹ A. H. Gold; A. Malhotra & A. H. Segars, "Knowledge management: An organizational capabilities perspective", *Journal of management information systems*, Vol: 18 num (2001): 185-214.

² T. H. Davenport & L. Prusak, *Working knowledge: How organizations manage what they know*. Harvard Business Press. 1998.

³ A. H. Gold; A. Malhotra & A. H. Segars, "Knowledge management..."

⁴ T. H. Davenport & L. Prusak, *Working knowledge: How organizations...*

⁵ D. N. Ford & J. D. Sterman, "Expert knowledge elicitation to improve formal and mental models", *System Dynamics Review: The Journal of the System Dynamics Society*, Vol: 14 num 4 (1998): 309-340.

⁶ A. Škraba; M. Kljajić & R. Leskovar, "Group exploration of system dynamics models—is there a place for a feedback loop in the decision process?", *System dynamics review*, Vol: 19 num 3 (2003): 243-263.

⁷ J. D. Sterman, "Misperceptions of feedback in dynamic decision making", *Organizational behavior and human decision processes*, Vol: 43 num 3 (1989): 301-335 y J. D. Sterman, "Learning in and about complex systems", *System Dynamics Review*, Vol: 10 num 2-3 (1994): 291-330.

structuralism. Knowledge-based decision-making starts with defining management issues that are inherent to functional areas. This function enables us to structure the target problem by integrating the little knowledge between the functional areas. Structured problems that are conceptualized during the integration knowledge model finally are transmitted to a simulation model. The simulation approach facilitates business decision-making based on the verification model.

Each science and management strategy needs measurement criteria and decision-making methods. Decision-making knowledge refers to a rational, reliable, and uniform framework that facilitates decision-making in a resource. Decision-making knowledge is not considered as a set of strict guidelines, rather it is a system for identifying, guiding, analyzing and improving decision-making. For example, the knowledge of decision making on financial issues uses the famous DuPont model, which was designed in the early 20th century. Unlike prior profit-based models, this model distributes financial resources across different parts of the company using accounting tools. In addition to increasing the profitability of different units of the company, this method increases the return on the capital of a company without having a major change in its profitability. Experience has proven that allocating funds to sectors which have the highest return on capital (and not necessarily the highest rate of return), is the best way to achieve financial success. For marketing in the 20th century, the customer segmentation approach has distracted the focus of companies from customers with the highest purchasing power to the customers with the greatest impact on the firm's competitive ability. These two issues play the role of "educational perspectives" for other areas of management⁸. Decision-making knowledge does not only consider the benchmark because of a decision but surveys the decision-making process and the outcome of that decision. Therefore, decision-making knowledge will not only lead to better decisions in the organization or company, but also will provide managers with more comprehensive measurement criteria. One of the main activities is managing the decision-making process. Decision-making is concerned with identifying issues, determining alternatives to problem solving, choosing them, and implementing a chosen solution. In modern management literature, each of the traditional tasks of managers such as planning, organizing, controlling etc. is a type of decision-making. The decision-making process is a function of important factors such as the subject of the decision, the decision maker, the time of decision-making and, most importantly, the complexity of the variables involved in decision-making. In recent years, organizational analysts have been increasingly attracted to the organizational effectiveness. Most researchers have studied organizational effectiveness in different kinds of organizations and have developed various patterns and theories. However, this concept has been somehow overlooked, especially in developing countries. Since the concept of organizational effectiveness was a predominant dependent variable in organizational studies and was the most important discussion related to organizational successes, it has gradually lost its desirability and has been largely replaced by focusing on the features of the final unit such as the rate of participation, profitability, financial ratio, error rate or customer loyalty. In recent books, organizational effectiveness is defined explicitly as a structure or behavior and is a vital variable in research. The prior researches confirmed that organizations are trying to discover a number of factors to get ahead of each other in today's developed world in order to increase their efficiency and effectiveness even in seconds. In this regard, we have firstly identified the dimensions and components of knowledge-based decision making in Iranian tax administration, and then a comprehensive

⁸ Peker, S.; Kocyigit, A. & Eren, P. E. "LRFMP model for customer segmentation in the grocery retail industry: a case study". *Marketing Intelligence & Planning*, Vol: 35 num 4 (2017): 544-559.

organizational effectiveness pattern have been presented with respect to these dimensions.

Methodology

This study was mixed and applied in terms of design and purpose, respectively. The research has been carried out in three sections. The first section considered the background and the theoretical foundation related to the knowledge-based decision-making dimensions and components, the second section considered the qualitative study using the grounded method. Finally, in the third section, the quantitative approach and modeling were considered based on a partial least squares approach. Managers and specialists, who had the required information for this article, using targeted sampling method, were selected to reach the theoretical saturation level; finally, 50 people were interviewed. Triangulation and control methods were used to confirm the transcripts of the interviews as well as the interviewees in order to confirm and increase the validity. The statistical population in the quantitative section included the general director, and the deputies, the directors of the staff, the directors of the Province of Tehran, the provincial governors, and deputy of provincial director, the elite experts, the executive experts, and senior experts of Iranian tax administration were totally 295 people. A sample size of 167 people was estimated using a cluster sampling method and adopting Cochran table. A structured questionnaire was designed based on the results of the grounded theory and its integration with parts of the variables in the review of the theoretical background of the subject to collect the data for this section. The face and content validity of the research tool was confirmed by the guidance and counseling of the supervisors and counselors on several occasions, and the necessary modifications were approved. In addition, its reliability was estimated using Cronbach's alpha 0.7. In this approach, confirmatory factor analysis, path analysis, and bootstrapping were performed. This part of the study was modeled based on structural equations based on the partial least squares approach using Smart-PLS software.

Research findings

Understanding and describing the status of dimensions and components of knowledge-based decision-making and the status of the organizational effectiveness of tax administration

In order to achieve the goal of recognizing and describing the status of dimensions and components of knowledge-based decision-making and the status of the organizational effectiveness of tax affairs, the research methodology of grounded theory was chosen. The emergence and occurrence of the existing concepts and theories in the natural phenomenon have been its intrinsic qualities.

The variables of the organizational effectiveness of the tax administration of the country and the components of knowledge-based decision making. A part of the grounded theory was done to study the organizational effectiveness of tax administration. As it was mentioned, after the interviews, sentences and concepts related to the research were extracted and the result of this part was the review of the components of the effectiveness of the organization of tax administration of the country and reaching 98 concepts that were arranged in the form of tables. This phase of data analysis has been referred to as open coding in the grounded theory. After reviewing the concepts extracted from the tables and removing the similar items, the result was a table of 70 concepts.

The aforementioned issues were also similar in relation to knowledge-based decision-making components, which were extracted after the interviews, sentences, and concepts related to the research. The result of the study of knowledge-based decision-making components was 35 concepts that were set in the form of tables. The result was a table of 24 concepts after reviewing the concepts extracted from the tables and removing the same items. In the next step, pivotal encryption was done, based on which the classification of concepts should be done. Thus, related concepts were placed in a subclass based on their similarities, despite the differences between the concepts of different subclasses from which, classes were created by establishing relationships between them.

This process is one of the most complex parts of the study, which has frequently been compared and subdivided into subclasses by forming numerous tables. Finally, it was decided to design a pivotal encryption process in the form of tables, which included organizational effectiveness and knowledge-based decision-making in Table 1. In these Tables that included the broad classes, subclasses, and related concepts, it has been tried to bring the components of organizational effectiveness and knowledge-based decision making into a fully categorized form.

Broad class	Subclasses	Items
Functional factor	Partnership Maximum votes	In the organization, different opinions are respected.
		All employees are involved in important organization decisions.
		Employees' comments are implemented.
	Thinking and analysis	The organizational decision-makers are familiar with the methods and steps of rational thinking.
		The organizational decisions are based on rational thinking.
		The organizational decision-makers are able to understand and analyze the organization's circumstances.
	Decision making	The decisions are made in the rational and intellectual organization.
		The organizational decisions are made based on social characteristics.
		Cultural factors are involved in the decisions of the organization.
Decisions are based on the personality and behavioral characteristics of managers.		
Behavioral factor	Expert knowledge	The organization respects the professional knowledge of its employees.
		The organizational decisions are made by experts.
	Understanding the issue	The organizational decision-makers are fully aware of organizational issues.
		The organizational decision makers know all kinds of problem-solving methods.
		The organizational decision makers are familiar with the process of solving the problem.
	The culture of work	The organizational managers and employees try hard to make the organization more successful.
In the organization, innovation is welcomed in all areas.		

Attitude factor	and innovation	Various scientific and technological innovations are used in the organization.
	Future orienting	The organization has a long-term plan to achieve its objectives.
		The organization continuously provides conditions for achieving objectives.
		The organization proceeds along the plans and goals.
	Organizational culture	Organizational objectives, perspectives and missions are obvious.
		The organization has a logical and scientific structure.
Employees accept and believe in the laws and regulations of the organization.		
Efficiency	Achieving the objectives	The level of purposeful goals
		The level of goals rationality
		Search for explained goals
		The quality of the executive process of affairs
		Stability and maintaining the organization in line with goals and missions
	Organizational resources	The ability to attract resources to maintain the effectiveness of the organization's goals
		Absorbing the essential resources
		Focusing on resources to create the desired output
		Executive and functional monitoring and control
	Internal processes	Coordination and efficiency of the internal environment
		Operating without interruption
		The specific connection between input and output
		Internal sustainability of activities
		Interaction with stakeholders
	Compatibility	Contextual
Coordination		
Participation in decision making		
Support		
Job satisfaction		
Performance evaluation		
Structural		Organizational structure
		Transparency of tasks
		Organization supportive atmosphere
		Interaction and communication with management
		Using contextual strategies
Necessarily		Favorable physical environment
		Official rules and procedures
		Providing the employee with the necessary knowledge and expertise
		The structure of communications
		The type and complexity of the tasks
Procedural		The way of making decisions
		Rewarding system
		Information system
		Organizational layout and queue configuration
		Conflict management
		Correct use of resources
		Process of interactions
		The delegation of authority and responsibility
	Consensus on the goal	

Flexibility	Technology	The innovation of new products and services
		Identifying new operational opportunities
		Coordinating efforts to improve and enhance the various parts of the organization
		Predicting potential opportunities
		Adapting goals and objectives with current organization changes
	Organizational structure	Extending labor force and organizational capacity
		Creating communication and information channels for the acquisition and use of information
		Training human resources
		Success in negotiations
		Planning to avoid crime in an organization and supported network
	Innovative culture	Emphasis on development and training
		Role management and dominant norms
		Growth quantity
		Targeting and planning
		Emphasis on human resource value
		Emphasis on information and communication management
		Emphasis on managerial skills
		Consensus and sequence of innovative goals
	Operational, strategic and structural flexibility	The level of flexibility and readiness of the organization
		The quantity and quality of labor force and operational and organizational capacity
		The transparency of the operational program
		The quality of the information required by the staff
		The ability to control and maintain the organization's stability
		The level of knowledge and experience of employees
	The ability to process information	Appropriate organization response to the change
		The permanent increase in the operational capability of the staff of the organization
Identifying the goals of the organization by employees and moving toward the goal		
Large amounts of organization outputs by high-quality services		
Completing uniformly the organization's operational process in a clear and orderly way		
Attitude factor	the culture of work and innovation	All of the managers and employees of the organization thrive to make the organization more successful.
		In the organization, innovation is welcomed in all areas.
		Various scientific and technological innovations are used in the organization.
	Future orienting	The organization has a long-term plan to achieve its goals.
		The organization continuously provides conditions for achieving goals.
		The organization moves toward the goals.
	Organizational culture	Objectives, perspectives, and missions of the organization are clear.
		The organization has a logical and scientific structure
		Employees accept and believe in the laws and regulations of the organization.

Table 1

Broad classes and subclasses derived from concept analysis (pivotal encoding):
Knowledge-based decision-making

As shown in encoding tables, there are three broad categories of organizational effectiveness including 1) productivity, 2) adaptability, and 3) flexibility. In knowledge-based decision-making section, three broad categories were identified: 1) functional factor, 2) behavioral factor, and 3) attitudinal factor.

Evaluating the effect of functional, behavioral and attitudinal factors on knowledge-based decisions

Partial least squares approach was used to investigate the importance and impact of functional, behavioral and attitudinal factors. Given this approach, measurement and structural models were evaluated for assessing the reliability and validity of the research variables. Convergent validity and denotative validity were used to evaluate the external model. The internal model (structural model) was evaluated for measuring the relationships between endogenous and exogenous structures. Finally, the bootstrapping technique and t-value were used to determine the meaningfulness of effects.

Assessing convergent and denotative validity

The reflective model was designed in Smart-PLS software to assess this model and its validity and reliability. In this model, the effect of functional, behavioral and attitudinal factors on knowledge-based decision-making was evaluated. Partial least squares algorithm was used to estimate the indices of this stage. After using the model, the results for convergent validity, including the composite reliability, average variance extracted (AVE) and factor load of the structures, were evaluated and compared Figure 1.

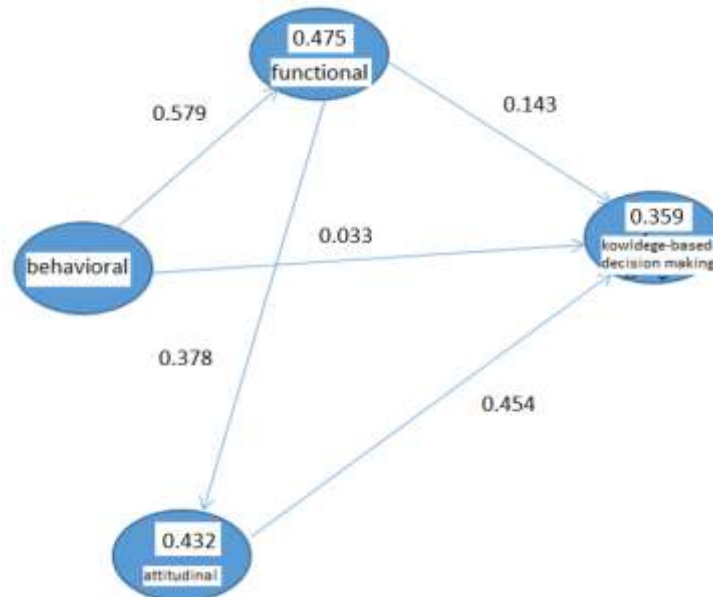


Figure 1
Factor loads and path coefficients in the knowledge-based decision-making reflective model

The structures in the model showed acceptable values of the parameters based on the obtained results Table 2. Where the factor loads were higher than 0.5, the AVE values were also higher than 0.5, and the combined values were higher than 0.7. According to the studies, if the values of given parameters were acceptable, the structures would have an appropriate convergent validity.

After confirming the convergent validity, it was time to examine the structural separation validity values. Separation validity was evaluated by investigating the correlation matrix presented after using the model. The values on the matrix showed the square root of the AVE, and the other values indicated the degree of correlation between the structures. According to Table 2, the separation validity of the structures was verified because the values of correlation were all smaller than the square root of the AVE.

Variables	Functional	Behavioral	Attitudinal	Knowledge-based decision making
Functional	0.847			
Behavioral	0.664	0.931		
Attitudinal	0.387	0.462	0.748	
Knowledge-based decision making	0.442	0.419	0.553	0.792

Table 2
Separation validity of knowledge-based decision-making structures

Evaluating the effects of knowledge-based decision making structures

Evaluating the effects was carried out by comparing the values of determination coefficients (multiple correlations squared R²) and path coefficients (β). In general, the structures of knowledge-based decision-making account for about 42% of the variance of knowledge-based decision making, which was at a low level. Therefore, the attitudinal factor was the most effective factor. However, for studying the significance of path coefficients, the bootstrapping technique was used, and the results have been shown in Table 3.

Hypothesis	Standard error	T-value	Significance level
Attitudinal -functional	0.157	2.815	0.005
Knowledge-based decision making- functional	0.265	0.579	0.550
Functional –behavioral	0.118	5.583	0.000
Knowledge-based decision making- behavioral	0.278	0.045	0.962
Knowledge-based decision making- attitudinal	0.241	1.761	0.051

Table 3
The path coefficients and t values for financial health

As it is shown in Table 3, the attitudinal factor had only a significant effect (at the level of 10%) on knowledge-based decision making among the other three indices. On the

other hand, the functional factor had a significant effect on the attitudinal factor, which could have a direct impact on knowledge-based decision-making. In addition, behavioral factors had a significant effect on functional factors.

Studying the effect of knowledge-based decision making indicators on organizational effectiveness indicators.

Partial least squares approach was used to investigate the importance and impact of knowledge-based decision-making indicators on organizational effectiveness. Based on this approach, the model of measurement, a structural model for assessing the reliability and validity of the research variables, the relationships between the endogenous and exogenous structures, and the meaningfulness of effects were all evaluated.

Assessing convergent and separation validity

The measurement model and confirming the validity and reliability of the reflective model were designed in Smart-PLS software. In this model, the impact of knowledge-based decision-making indicators on organizational effectiveness indicators was also evaluated in the form of a model. Partial least squares algorithm was used to estimate the indices of this stage. After using the model, the results for convergent validity, including the composite validity, AVE and factor load of the structures, were studied, and compared Figure 2.

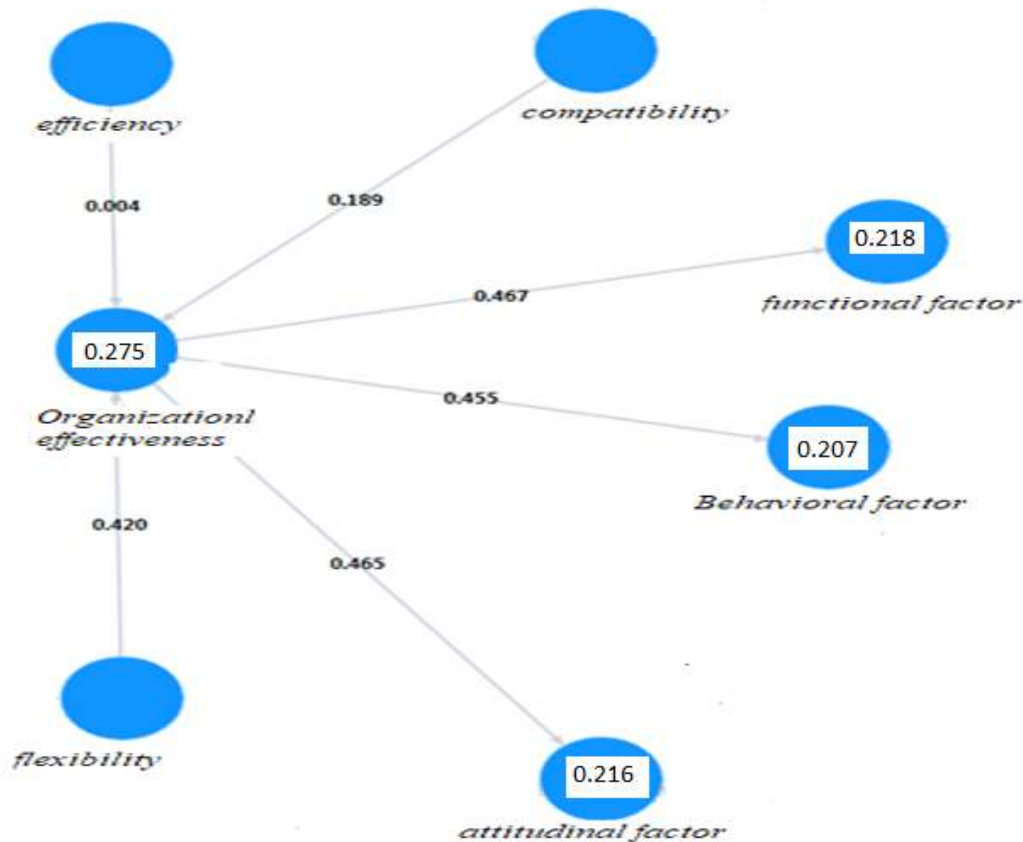


Figure 2
Factor loads and path coefficients in the reflective model

According to the results, the existing structures in the model showed significant values of the parameters Table 4. Thus, the factor loads were higher than 0.5 (Figure 2), the AVE values were higher than 0.5, and the values for composite reliability were higher than 0.7 Table 5. It is believed that if the values of the given parameters be acceptable, the structures would have an appropriate convergent validity.

Variables	AVE	CR
Organizational effectiveness	0.517	0.932
Compatibility	0.642	0.952
Efficiency	0.855	0.921
Flexibility	0.526	0.842
Functional factor	0.629	0.912
Behavioral factor	0.572	0.827
Attitudinal factor	0.519	0.912

Table 4

The value of parameters related to the estimation of the validity of the model's constructs of knowledge-based decision-making indicators on organizational effectiveness indicators

After confirming the convergent validity, it was time to study the structural separation validity values. Separation validity was studied by evaluating the correlation matrix presented after using the model. The values on the matrix represented the square root of the AVE, and the other values indicated the degree of correlation between the structures. According to Table 6, the separation validity of the structures was verified, because correlation values were all smaller than the square root of the AVE.

Variables	Compatibility	Attitudinal factors	Efficiency	Flexibility	Behavioral factor	Functional factor	Organizational effectiveness
Compatibility	0.774						
Attitudinal factor	0.526	0.838					
Efficiency	0.663	0.571	0.729				
Flexibility	0.479	0.531	0.639	0.931			
Behavioral factor	0.449	0.672	0.358	0.192	0.956		
Functional factor	0.248	0.357	0.528	0.527	0.189	0.479	
Organizational effectiveness	0.670	0.439	0.286	0.246	0.549	0.536	0.753

Table 5

The separation validity of the structures of knowledge-based decision-making indicators on organizational effectiveness indicators

Assessing the effects of knowledge-based decision making structures

Evaluating the effects was carried out by comparing the values of determination coefficients (multiple correlations squared R^2) and path coefficients (β). In general, knowledge-based decision making and its indicators accounted for about 35% of the functional variance, 32% of the behavioral variance, and 26% of the variance of the attitudinal factor. The results showed that the highest percentage of explanation was for the functional (path coefficient = 0.629) and attitudinal (path coefficient = 0.564) factors. However, bootstrapping technique was used to examine the path coefficients whose results have been shown in Table 6.

Hypothesis	Standard error	T-value	The significance level
Compatibility- organizational effectiveness	0.243	0.657	0.472
Efficiency - organizational effectiveness	0.228	0.024	0.961
Flexibility- organizational effectiveness	0.164	2.308	0.018
Attitudinal factor- organizational effectiveness	0.231	2.676	0.009
Behavioral factor- organizational effectiveness	0.169	3.654	0.003
Functional factor- organizational effectiveness	0.241	3.413	0.001

Table 6
Path coefficients and t-values for a knowledge-based decision-making model

As shown in the Table above, the highest t-value belonged to behavioral and functional factors.

Developing an organizational effectiveness model regarding the dimension and components of decision-making dimensions of faculty.

To develop an organizational effectiveness model regarding dimensions and components of knowledge-based decision-making, first, the conceptual model was developed to provide a template using the indicators and factors. The influence of each of the factors was also measured based on this conceptual model. A partial least squares approach was used to develop the model and investigate the effects. Based on this approach, the model of measurement and a structural model for studying the reliability and validity of the research variables, the relationships between the endogenous and exogenous structures and the significant effects were evaluated. Finally, the fit index of the model was calculated.

Evaluating convergent validity and denotative validity

The measurement and confirmation of the validity and reliability of the reflective model were designed in Smart-PLS software to assess the model. In this model, the direct and indirect effects of indicators were also evaluated in the model. The least squares algorithm was implemented in order to estimate the indices of this stage. The results for convergent validity, including the combined validity, AVE, and factor load of the structures were compared and studied after the implementation of the model. According to the results, the structures existing in the model showed acceptable values of the parameters in such a way that the factor loads were higher than 0.5, the AVE values were higher than 0.5, and the combined values were higher than 0.7 Table 7. It was believed that if the values of given parameters were acceptable, and then the structures would have an appropriate convergent validity.

Variable	AVE	CR
Organizational effectiveness	0.521	0.934
Compatibility	0.657	0.949
Efficiency	0.830	0.912
Flexibility	0.516	0.856
Functional factor	0.679	0.904
Behavioral factor	0.528	0.816
Attitudinal factor	0.648	0.912
Knowledge-based decision making	0.526	0.843

Table 7

The amount of the parameters for the estimation of the structures of organizational effectiveness model regarding the knowledge-based decision-making dimensions and components

The structural denotative validity values should be examined after confirming the convergent validity. Denotative validity was evaluated by evaluating the correlation matrix provided after the implementation of the model. The values in the matrix indicated the square root of AVE, and the other values indicated the degree of correlation between the structures. According to Table 8, the denotative validity of the structures was verified because the values of correlation were all smaller than the square root of the AVE.

Variable	Achieving the goals	Organizational resources	Internal process	Background	Structural	Necessary	Procedural	Technology	Organizational structure	Innovative culture	Operational, strategic and structural flexibility	The ability to process the information	Participation of the majority of votes	Thinking and analysis	Decision making	Expert knowledge	Recognizing the issue	The culture of work and innovation	Future orienting	Organizational culture
Achieving the goals	0.756																			
Organizational resources	0.554	0.805																		
Internal processes	0.643	0.524	0.719																	
Background	0.464	0.553	0.652	0.908																
Structural	0.446	0.645	0.324	0.136	0.923															
necessary	0.448	0.377	0.328	0.301	0.429	0.726														

Procedural	0.375	0.429	0.280	0.346	0.359	0.416	0.733													
Technology	0.592	0.172	0.401	0.183	0.173	0.487	0.537	0.753												
Organizational structure	0.487	0.466	0.544	0.417	0.385	0.457	0.495	0.840	0.814											
Innovative culture	0.678	0.625	0.554	0.532	0.353	0.424	0.579	0.765	0.786	0.823										
Operational, strategic and structural flexibility	0.445	0.844	0.465	0.742	0.656	0.624	0.683	0.534	0.534	0.537	0.718									
The ability to process the information	0.675	0.459	0.453	0.346	0.754	0.576	0.429	0.346	0.576	0.590	0.526	0.675								
participation of the majority vote	0.657	0.489	0.752	0.258	0.192	0.567	0.472	0.308	0.264	0.742	0.638	0.589	0.783							
Thinking and analysis	0.484	0.438	0.764	0.612	0.454	0.756	0.874	0.547	0.593	0.482	0.547	0.480	0.472	0.893						
Decision making	0.712	0.348	0.870	0.148	0.657	0.564	0.436	0.693	0.619	0.470	0.524	0.631	0.462	0.479	0.812					
Expert knowledge	0.562	0.324	0.657	0.453	0.148	0.467	0.478	0.194	0.375	0.594	0.485	0.560	0.426	0.574	0.684	0.540				
Recognizing the issue	0.536	0.234	0.765	0.583	0.437	0.109	0.331	0.675	0.535	0.428	0.340	0.810	0.331	0.543	0.783	0.238	0.902			
The culture of work and innovation	0.742	0.452	0.541	0.230	0.765	0.674	0.463	0.831	0.479	0.328	0.631	0.730	0.531	0.386	0.537	0.521	0.583	0.631		
Future orienting	0.752	0.540	0.761	0.538	0.358	0.473	0.380	0.581	0.431	0.745	0.123	0.436	0.389	0.512	0.176	0.354	0.270	0.501	0.748	
Organizational culture	0.195	0.487	0.730	0.274	0.405	0.362	0.507	0.438	0.341	0.638	0.345	0.421	0.178	0.315	0.438	0.621	0.375	0.721	0.194	0.697

Table 8
The denotative validity of the structures of organizational effectiveness model regarding knowledge-based decision-making dimensions and components

Assessing the effects between the structures of organizational effectiveness model regarding the knowledge-based dimensions and components.

Assessing the effects was carried out by comparing the values of determination coefficients (multiple square correlation R²) and path coefficients (β). In general, the existing structures in the model account for about 67% of the organizational effectiveness variance according to the dimensions and components of knowledge-based decision-making.

As it has been indicated in results, the highest percentages of explanation were for the functional (path coefficient = 0.432) and attitudinal (path coefficient = 0.375) factors. In other words, these two indicators had the highest impact.

However, bootstrapping technique was used in order to study the path coefficients.

As shown in Table 9, the highest t-value was related to the attitudinal factor.

Finally, the organizational effectiveness model can be shown based on Figure 3 and Table 9, regarding the dimensions and components of knowledge-based decision making.

Hypothesis	Standard error	T-value	The significance level
Organizational effectiveness – compatibility	0.186	0.476	0.035
Knowledge-based decision making-attitudinal factor	0.267	0.678	0.001
Organizational effectiveness- efficiency	0.171	2.0785	0.026
Organizational effectiveness- flexibility	0.184	0.457	0.044
Knowledge-based decision making- behavioral factor	0.208	0.021	0.003
Knowledge-based decision making- functional factor	0.184	2.367	0.025
Knowledge-based decision making- efficiency	0.181	2.211	0.002
Organizational effectiveness- attitudinal factor	0.179	1.458	0.005
Organizational effectiveness- behavioral factor	0.181	0.640	0.001
Organizational effectiveness- functional factor	0.135	0.274	0.001
Knowledge-based decision making- flexibility	0.127	0.437	0.004
Knowledge-based decision making- compatibility	0.124	0.341	0.003

Table 9

Path coefficients and t-values for the organizational effectiveness model regarding the dimensions and components of knowledge-based decision-making

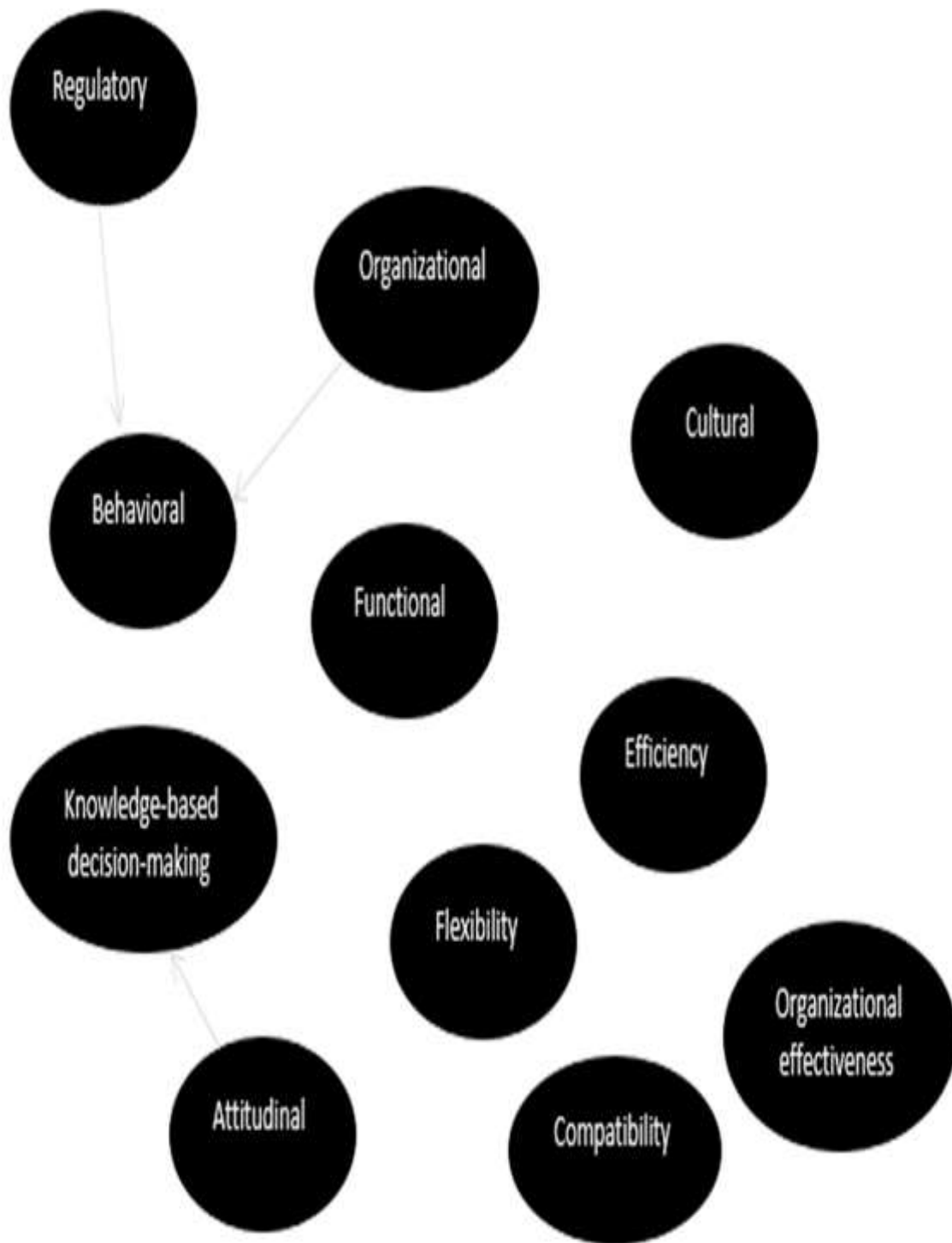


Figure 3
T values for the significance test of effects in the organizational effectiveness model regarding the dimensions and components of knowledge-based decision-making.

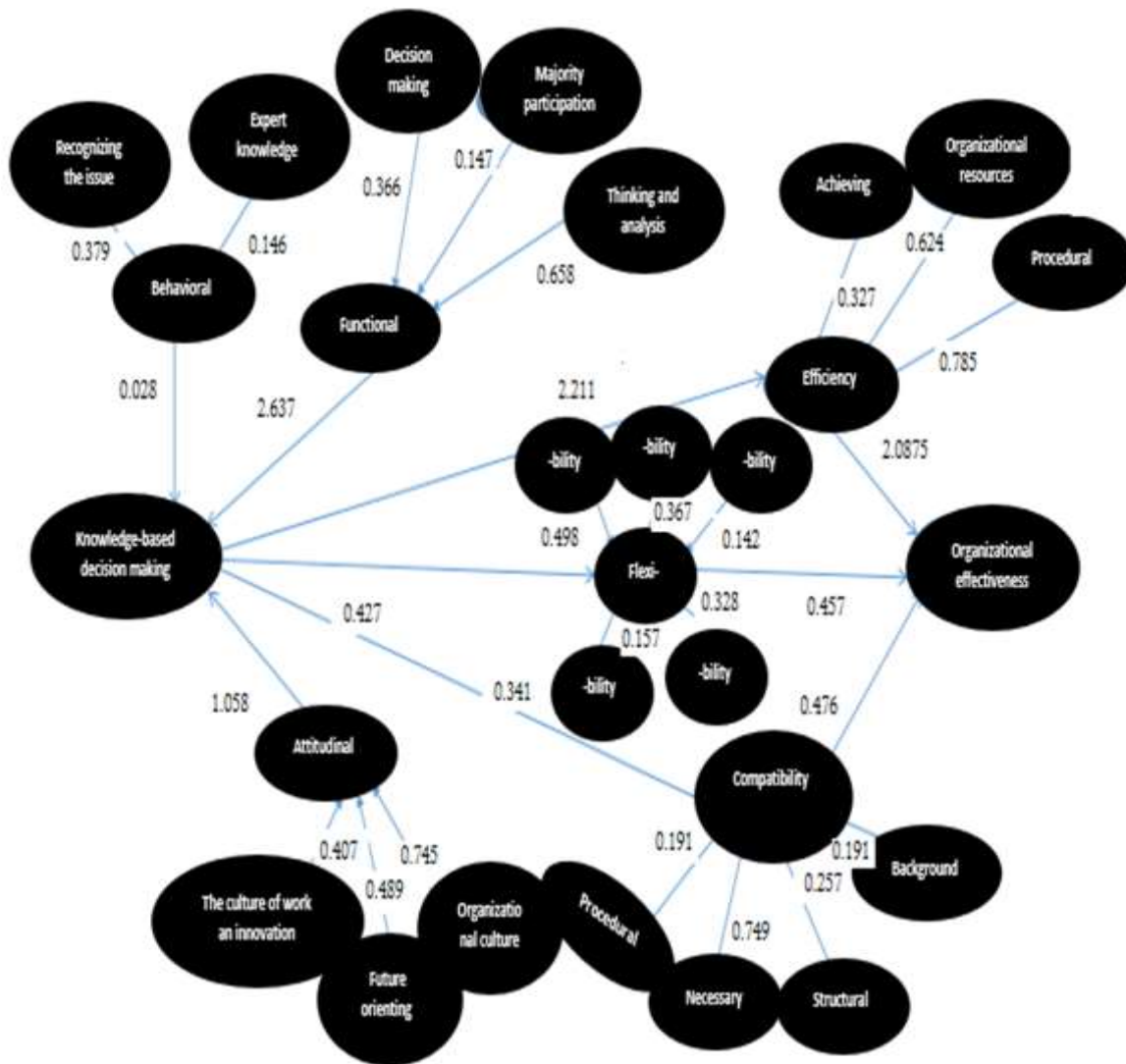


Figure 4

A comprehensive model of organizational effectiveness based on the dimensions and components of knowledge-based decision-making

In Figure 4 finally, the GoF index formula was used to calculate the fit index of the model. Based on this formula, the fit index of the comprehensive organizational effectiveness model regarding the dimensions and components of decision-making were knowledge-based and were determined according to the results of the mean AVE multiplication and the mean of the coefficients. The result of this formula was 0.46 which, according, was perfect. Therefore, it can be concluded that the model benefited from good fit and predictive power.

The formula for calculating the fit index of model
GoF= 0.46

$$GoF = \sqrt{AVE \times R^2}$$

Discussion and conclusion

In the study of the relationships between organizational effectiveness - flexibility, and knowledge-based decision making - flexibility, which have been approved, it can be stated that dynamic and comprehensive look at the managerial activities of this section, especially the technology subsection, could be one of the most effective drivers of meeting customer needs for organizational effectiveness. In other words, each of these activities as the variables examined by this subsection was considered a dynamic capability for the organization. In addition, if they be fulfilled, we can create a competitive advantage in the end. In the study of the relationships between organizational effectiveness -efficiency, and knowledge-based decision-making- efficiency that have been approved, it can be noted that the attention of researchers, managers, and professionals to the activity or efficiency processes, along with other managerial activities for effectiveness as backup activities, can result in a more complete model for fulfilling the organizational goals. Consequently, the necessity of paying due attention to the efficiency factor is essential. In the study of the relationships between organizational effectiveness-compatibility, and knowledge-based decision-making- flexibility, which has already been approved, it should be stated that organizations need to carry out a set of strategic management processes to have a sustainable competitive advantage including subsections that lead organization and covered network to fulfill the defined goals in the vision considering the background, structural, necessary and procedural variables; hence, it can be said it will have a positive effect on the organizational effectiveness that is the fulfillment of goals. Furthermore, it should be noted that the administration of today's organizations is very complicated because of the changes in the current world, and everything used to run organizations in the past have lost their effectiveness in the current knowledge-based century. Although in the past, management and improvement of effectiveness were managed by traditional and hierarchical methods, structures of hierarchy and command chain models must now be transformed into multi-pronged and interconnected network structures in order to manage organizations effectively. The organization should be in a dynamic and organic mode and pay attention to external factors and environmental conditions while considering the internal and key relationships of factors. The lack of a difference in terms of the dimensions of the learning organization considers the centralized management of the bureaucracy and the lack of delegating authority, laws, and regulations as the bureaucratic organization's profile, which Max Weber calls "a bureaucratic organization". In fact, despite these perspectives and characteristics, the tax administration is also required to follow such organizational rules. In the study of the relationships between knowledge-based decision making - functional factor, and functional factor -organizational effectiveness that were approved, it should be stated that the lack of attention to the related factors and components has caused a lot of problems, considering the relevant subsections of this item, including the participation of the majority, thinking and analysis, and decision-making. In spite of the benefits and positive outcomes resulting from the use of functional work regarding the participation, thinking and analysis, not only increases the performance and organizational effectiveness but also leads to some fundamental failures. Accordingly, the diagnosis of collaborative and analytic work, the determinants and influences on its creation, and the achievement of productive and effective participatory practices in organizations are essential. Thus, without identifying the effective factors in the performance of the collaborative and analytical work, the organizational effectiveness cannot be created. In the study of the relationships between knowledge-based decision making- behavioral factor, and behavioral factor -organizational effectiveness that were already approved, it should be stated that expert knowledge and recognizing the issues are the approaches in behavioral factor that indicate the benefit achieved from effective

management approaches and related processes in order to implement strategies in the organization. As the organization grows, more complex dimensions of behavioral factors and more varied and specialized indicators will be needed.

We are guided by the strategic maturity levels in the context of this identification. It is very important to pay attention to the degree to which the organization is ready to establish a strategic alignment with the behavioral factor in achieving organizational effectiveness. Expert knowledge and recognizing the issues indicate the level of awareness about the future changes resulting from the implementation of the strategy, the functions and values of the program in the organization, which measures the degree of readiness of the organization's human resources in this area.

References

Davenport, T. H. & Prusak, L. Working knowledge: How organizations manage what they know. Harvard Business Press. 1998.

Ford, D. N. & Sterman, J. D. "Expert knowledge elicitation to improve formal and mental models". System Dynamics Review: The Journal of the System Dynamics Society, Vol: 14 num 4 (1998): 309-340.

Gold, A. H.; Malhotra, A. & Segars, A. H. "Knowledge management: An organizational capabilities perspective". Journal of management information systems, Vol: 18 num (2001): 185-214.

Peker, S.; Kocyigit, A. & Eren, P. E. "LRFMP model for customer segmentation in the grocery retail industry: a case study". Marketing Intelligence & Planning, Vol: 35 num 4 (2017): 544-559.

Škraba, A.; Kljajić, M. & Leskovar, R. "Group exploration of system dynamics models—is there a place for a feedback loop in the decision process?". System dynamics review, Vol: 19 num 3 (2003): 243-263.

Sterrman, J. D. "Misperceptions of feedback in dynamic decision making". Organizational behavior and human decision processes, Vol: 43 num 3 (1989): 301-335.

Sterman, J. D. "Learning in and about complex systems". System Dynamics Review, Vol: 10 num 2-3 (1994): 291-330.

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