

EXPLAINING THE PATTERNS OF PERFORMANCE EVALUATION INDICATORS OF THE COUNTRY'S ADMINISTRATIVE SECTORS

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ABSTRACT

Presentation of a sound system of assessing countries' administrative sectors increases the efficacy and potential of the Organizations. However, having such system needs an appropriate model for assessing performance. The present study shows that combination of equivalent assessing model and elevated model can be an appropriate model for assessing performance of executive Organizations. The present study has been realized through survey design. The participants of the project were two groups of people: 1- 155 managers of executive Organizations in Tehran who work in assessing and supervising sector. This sample has been selected out of 158 managers using Cochran formula. 2- 50 experts whom were selected based on aimed criteria. The reliability and validity of the questionnaires were confirmed by the 50 experts. BSC Balanced Scorecard was selected as the base model which contained (dimension 1) Financial aspect, innovation-learning, internal aspect of business (structural reform), and on the other hand (dimension 2), e-government, enhancing productivity, customer aspect was added to Balanced Scorecard. Excellence model of organization was nominated as supplementary model. DEMATEL technique signified dimension 1 as enabling variable and dimension 2 as result variable. After identifying the dimensions of research project, its indices were determined and were analyzed using mentioned software.

Keywords: *Administrative Sectors, BSC Balanced Scorecard, Performance Management, System of Performance Assessment*

INTRODUCTION

When an organization does not have a comprehensive and appropriate assessment of its own performance, and does not assess the efficiency and effectiveness of its activities at different levels, it will go towards obsolescence and deterioration and endanger its survival (Telvin, 2009). It should be noted that the evaluation of performance is useful when the purpose of using them is plotted correctly and the enough care must be taken during the performing to lead it to its original purpose. If the target and the executive mechanisms are not designed properly, after a short period of time designed executive activities and objectives will go away from its original path and improvements cannot be achieved for the organization. In this section, performance evaluation not only does not solve any problem of the organization, but it will make a heavy burden on the shoulders of the organization, and perhaps will make motivational, financial and functional problems.

Statement of Problem

One of the most important questions about administrative sectors which have been asked in governments via people and other monitoring organizations is that whether they were able to perform as per expectations?

To answer above question, after studying third and fourth development program, it is observed that specific and appropriate mechanism has not been determined to monitor and evaluate, so that, firstly monitoring subsystem in these programs just monitors after ending the program and only does budget monitoring. And secondly this sort of monitoring is also a formality monitoring and it is merely to inform and does not have reform approach. Therefore, on this basis, there is no clear mechanism to influence the outcome of the process, budget monitoring and evaluation, has not been planned in the system. Further, there is not any systematic and comprehensive assessment of the current performance of administrative sectors and not able to conform with fourth development program rule about well governance that must

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evaluate performances about correcting shortcomings of the government towards ameliorating the economic, social and political regions. And while the defined indicators in the current regulations and legislations for administrative sectors does not introduce any pattern, and current performance evaluation in the administrative sectors is not able to answer specific cases in the forth development program in line with field of organizational and human resources and hence administrative sectors evaluate administrative sectors subjectively and without and necessary pattern (Improving Performance Office, 2002).

The Necessity and Importance of Research

Administrative sectors must be assessed annually according to legal cases and the specified criteria:

Article Eighty One- Administrative sectors are required based on procedural guidelines adopted by the Cabinet, to establish the performance management including performance evaluation, performance measurement and evaluation programs and the productivity of their units implemented in the regular intermission and also report results to the organization.

Article Eighty Two- Organization has to establish performance management system to track and monitor all administrative sectors and report annually on the performance of administrative sectors and their evaluation of general and specific indicators and how to implement the provisions of this Act on the basis of procedural the proposal of the Committee of Ministers, prepare and submit to the President and Parliament.

Article Eighty Three- The organization is required to determine based on reports received from the relevant international indicators, after compliance with the prospect of notification, the status and progress of the country in comparison with the other countries of the world and report to the President and Parliament and use the results in the formulation of development strategies.

Chapter Eleven Civil Service Management Act - Performance Evaluation

Importance of time is highlighted when we are now in the fourth year of Development Plan and also the general policies of the Fifth Development Plan was developed and a lack of accurate and timely assessment of the performance of the executive sectors will be a huge gap between the existing development plans and thus the realization of development programs and consequently the outlook is not practical. Provide a proper system for evaluating the performance of administrative sectors while increasing productivity, effectiveness, efficiency and motivation of researchers and also help to achieve goals and improve the performance of government agencies, which requires a suitable model for evaluating the performance (Moeen, 2005)

For realizing the objectives of local government organizations without a model to evaluate and review programs is not possible. And organizations cannot act without considering the facts and the results of its operations and effective management of the implementation of their actions. Necessity to evaluate the performance of the government on the basis of legal and administrative provisions relating to the assessment of performance of the administrative sectors of management and human capital implemented by presidency will be explored.

Research Objectives

Identify and describe the developmental model of a performance evaluation in administrative sectors in Tehran

Identify and describe the developed model indicators to evaluate the performance of administrative sectors in Tehran

Research Questions

1- What characteristics have the developed model to evaluate the performance of the administrative sectors in Tehran?

2- What characteristics have developed model indicators to evaluate the performance of administrative sectors in Tehran?

The theoretical literature

1- Performance Management

Performance management, strategic and integrated process that improves the performance of those who work in organizations and to develop individual and collective capabilities, provides sustainable success

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of organizations. Performance management is related to broader issues such as business and general orientation to achieve long-term objectives, thus, if an organization wants to operate more effectively in their environment, is a strategic imperative.

Performance Management is an audit of insight, knowledge and, actual and potential abilities of human resources and training individuals in line with development strategy. In the above definition, performance management with improving human resources approach in order to fulfill the organization's strategies is considered. Australian management consulting committee's report in which Performance management includes the use of collaborative strategies and activities to improve individual, team and organization. In this report of the Committee, the Performance Management is one of the components required to form a partnership government Framework (Hossein, 2008).

Table 1: Weaknesses and strengths of patterns

	Pattern	Weaknesses	Strengths
EFQM Quality Management)	(Europe)	Data collection, evaluation, scoring for dimensions considered difficult. It needs a lot of time and focus. Not enough rich to analyze the causes.	To create a validation system (health check) for the appropriate organizational processes and to determine strengths and weaknesses. Enable organizations to emulate the best organizations in the field of organizational processes Principles are defined His focus is customer
BSC Scorecard)	(Balanced)	It can be executed only if the strategy and vision of the organization under study is defined Implementation of the model is difficult (because of the definition of appropriate standards of corporate strategy)	for develop an understanding of cause and effect between performance measures managers to enable them to be better strategic decisions for determine the priority of the project is to improve Strategic bilateral relationship of organizational layers makes Available Aspects of integrity is considered Flexibility is good.
CED analysis)	(covered)	Defined areas of expertise are comprehensive Classification specialized field is not compatible with the new management paradigm The model has been defined	Specific definition is provided for the various models knows the entire organization and is applicable to one or more areas Approach, existing cognitive model of organizational excellence standards
Baldrij		New patterns and more comprehensive than this pattern has emerged Applying this approach is time consuming	Multiple pattern for commercial, educational and healthcare provides has developmental Approach to has Customer and market focus
Deming Award		Not having Standard and specific indicators The pattern is pretty old This pattern is not easy to collect data Not objectively interpret output	Appropriate to make a proper verification system Principles are defined Flexible Comprehensive look at the organization Feasibility of quantitative needs

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2- Performance Evaluation Patterns

During the formation of various organizations, several models have been used to evaluate performance. Organizations according their needs first used only a few indicators and criteria for performance evaluation. By expanding the scope of activities and organizational performance, dynamic environment, and the introduction of modern management topics and issues such as customer satisfaction, social responsibility caused organizations do not confined to the narrow parameters. Therefore, a comprehensive and multi-criteria model for evaluating organizations were formed and evolved. These models are evaluated from different organizations and taking into account multiple factors, provide appropriate means for assessing the performance of modern organizations. In general, the models based on design and implementation of the evaluation (and somewhat in compliance with traditional and modern perspectives), can be divided into two general categories as follows (Miklaee, 2006).

MATERIALS AND METHODS

Since the main objective of this study was to identify the variables affecting the administrative performance, the dependent variables of study was to improve the performance and effectiveness evaluation.

So it can be said that this study is an applied research and considering the using field methods such as questionnaires and library study methods of this study, it can be stated that research on the nature and method, a descriptive-survey. Assessment tools and measurement instruments that can be achieved with the information they need to experience and analyze the phenomena studied, and eventually the truth will collect (HafezNia, 2003)

In this study, the following procedures will be used to collect data

- 1- Library studies, check books and related studies, and Internet search to gather information, the combination of these methods, mainly to the study of literature and the study records will be used
- 2-the Delphi technique in various stages the study including design, prototype, and the design of survey questions will be
- 3- Questionnaires: the most important research data were collected using questionnaires. A questionnaire was developed to answer all questions, their responses within a given range of options to choose (DanaeeFard, 2007).

Sample Size and Sampling

The population is a collection of individuals or entities that have at least one common trait. In each study, a sample of target population that the researcher is interested in the characteristics (attributes) of the study's variables. The population definition should be inclusive and exclusive. That this definition should be expressed as a point in time and space to include all subjects and also considering the inclusion of units that must be addressed to prevent the study (Homan, 2001).

The statistical population of the study consisted of two groups:

- A - The first group consists of experts and masters in public administration in Tehran. Criteria and selection criteria in the sampling are listed.
- B- The second group consists of executive directors and assistants of 86 administrative sector of 18 ministries in Tehran, in the areas of assessment, monitoring and control are serving, up to a total of 258 persons.

Sampling and Sample Size

A - Experts

Among experts and Masters of Public Administration degree at the country level, using selective and non-probability sampling, 50 subjects were selected. Selection criteria are as follows:

- Availability - includes executive positions in the respective sector - holds a PhD in management and training in the relevant subject - working in training centers and academic and research. Their opinions will be used in two parts of this study:

- 1-determination of performance evaluation patterns available in the administrative sectors of country at the beginning of the questionnaire

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2- Determination of the validity of developed model of performance evaluation.

Directors and assistants of administrative sectors:

There are 18 ministries in Iran and 86 administrative sectors are in the Tehran. 1 director and 2 assistant which work in the field of performance evaluation were selected. The achieved sample consists of 155 participants which is obtained using Cochran formula.

$$n1 = \frac{N *}{(N - 1) *}$$

$$n1 = \frac{258 * (\frac{1}{96})^2 * 0.5 * 0.5}{257 * (\frac{0}{1})^2 + (\frac{1}{96})^2 * 0.5 * 0.5} = \boxed{155}$$

Z= the coefficient of Confidence to the coefficient of sample

ε= the accuracy of estimation or the highest acceptable error (0/1)

N= the number of population

P= the ratio of success

q= 1-p

Table 2: List of administrative sectors

Number	Ministry	Number of administrative sectors	Number of population	Number of sample
1	Petroleum	8	24	14
2	Energy	5	15	9
3	Health and Medical Education	4	12	7
4	Education	4	12	7
5	Youth Affairs and Sports	3	9	6
6	Welfare and Social Security and cooperatives	5	15	9
7	Industries and Mines	10	30	18
8	Interior	4	12	7
9	Economic Affairs and Finance	5	15	9
10	Communications and Information Technology	5	15	9
11	Foreign Affairs	5	15	9
12	Roads, Housing and Urban Development	8	24	14
13	Culture and Islamic Guidance	8	24	14
14	Science, Research and Technology	3	9	6
15	Justice	4	12	7
16	Agriculture	5	15	9
17	Intelligence and National Security	0	0	0
18	Defense and Armed Forces Logistics	0	0	0
	Total	86	258	155

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RESULTS AND DISCUSSION

Findings

What features does the developed model which is used for assessing performance of administrative sectors have?

Based on the literature reviewed here and the interviews done, totally, 16 model of assessing performance were identified. First, we will examine the 16 models to prioritize them based on their efficiency for our purpose using the Delphi technique and the results are as the table below:

Table 3: The Delphi technique results

Models of assessing performance	Expert 1	Expert 2	Expert 3	Expert4	Expert5	Expert6	Expert7	Expert8	Expert9	Expert10	mean
Sink and tattle Model	7	7	7	7	9	9	9	7	7	9	7.80
Matrix Model of assessing performance	9	9	7	9	7	9	7	9	9	7	8.20
Results Model	7	7	5	7	7	7	7	9	9	9	7.40
BSC (Balanced Scorecard)	9	9	7	7	7	7	5	7	9	7	7.40
Excellence Mode	7	9	7	9	7	5	7	7	7	9	7.40
EFQM	7	9	7	9	7	5	7	7	7	9	7.40
Deming Award	7	9	7	7	9	7	7	7	7	7	7.40
Baldrij	7	7	9	9	9	7	7	9	7	9	8.00
Performance Pyramid model	9	9	7	9	7	9	7	9	9	7	8.20

Using one-sample t-test, based on the views of managers and assistants to assess the importance of each factor in the performance evaluation of administrative sectors is discussed. Since the data is collected with Likert 5 degrees out number 3 is the middle point Likert intended. Also, because the study was evaluated at 95% therefore, if the calculated average of the following test statistic (a significant amount) than the critical value (the error = 5%) is smaller, Test the null hypothesis was rejected and the claim will be approved. one-sample t-test results of the calculations is in below

Balanced Model Scorecard and the EFQM model were applied to evaluate the performance of the administrative sectors. So the most important aspects of performance evaluation in administrative sectors are: financial aspects, internal business perspective, customer perspective, innovation and learning perspective, e-government, according to staff (human resources), structural reforms, improve productivity, and citizen empowerment. Based on the identification of indicators and expert opinion regarding the employees, and the criterion standard enabling called "personnel issues" is introduced. Structural reform measures with the internal aspects of the business are considered synonymous. Thus we get the following seven criteria

- Financial aspects of the business, internal (structural reform) - customer (citizen-oriented) - personnel aspect (human resources) - innovation-learning -and e-government -enhancing productivity Thus, to achieve a comprehensive model for evaluating executive performance criteria identified by the following steps are taken:

First Step- Identify the relationships among the main criteria based on expert opinion with DEMATEL technique

The Second Step- The developing of a scale to assess performance based on each of the identified dimensions

Third Step- Drawing the initial developmental model for evaluation of the performance of the administrative sectors

Fourth Step- Indicators assessing the performance of administrative sectors

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Fifth Step- Designing the conceptual model developed to evaluate the performance of the administrative sectors

The first step Identify the pattern of the main criteria

In order to calculate internal relationships of above recognized main criteria and to achieve their relationship pattern, 50 questionnaires distributed among experts in the field of performance evaluation to evaluate development model and the relationships and credit. DEMATEL technique has been used to reflect the internal relationships among the main criteria. So that experts are able to express their opinion about effects (Direction and intensity of the effects) among the cases more strongly. It should be noted that the resulting matrix of DEMATEL technique (internal relationship matrix) shows and displays both cause and effect relationship between the variables interact and affect each other's.

According to the relationships model causal graph can be drawn:

Table 4: The patterns of causal graph of the principal criteria

	D-R	D+R	Prioritizing	R (the degrees of being affected)	Prioritizing	D (the degree of Effectiveness)
Financial Aspect	-0.050	8.302	4 th priority	4.176	1 st priority	4.126
Customer aspect	-0.759	7.162	2 nd priority	4.167	7 th priority	3.201
innovation-learning	0.935	6.852	7 th priority	2.959	4 th priority	3.893
e-government	0.944	6.823	3 rd priority	2.939	6 th priority	3.883
personnel aspect (human resources)	-0.115	7.908	6 th priority	4.011	3 rd priority	3.896
internal aspect of business(structural reform)	0.801	7.154	5 th priority	3.177	2 nd priority	3.977
enhancing productivity	-1.262	7.933	1 st priority	4.597	5 th priority	3.335

In the table above, the sum of elements of each row (D) shows the degree of a factor being influential on other factors of the system. Therefore, financial aspect has the highest influential degree. The structural reform has the second rank, customer aspect and enhancing productivity has the least influential degree.

The sum of elements of each row (R) shows the degree of a factor being influenced by other factors of the system. Therefore, financial aspect has the highest degree of being influenced. , Financial aspect and e-government has high degree of being influenced.

The horizontal vector of (D+R) shows the degree of impact of the factor in the whole system. In other words, the higher the (D+R) degree, the higher its interaction with other parts of the system. Therefore, financial aspect has the highest interaction with other criteria under study. Learning- innovation aspect and e-government has least degree of interaction.

Second step- scale development to assess performance based on determined dimensions

According to the output, Dematel technique is the preliminary developed model. Based on this preliminary model there are two sets of variables: cause and effect variables as below:

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Cause Variables

Financial Aspect, innovation-learning, personnel aspect (human resources) internal aspect of business (structural reform)

Effect Variables: e-government, Customer aspect, enhancing productivity

Table 5: Converging – diverging correlation (enabling and results variables)

		Dimensions of enabling system				Dimensions of results		
		Financial Aspect	personnel aspect (human resources)	innovation-learning	internal aspect of business(structural reform)	e-governme nt	Customer aspect	enhancing productivity
Financial Aspect	Managing income and expenses	0/859	0/358	0/321	0/231	0/132	0/060	/1120
	Facility Management and Human Capital Management of funds (sources and uses	0/654	0/421	0/221	0/433	0/333	0/213	/1110
	Customer Satisfaction	0/532	0/231	0/423	0/489	0/312	0/412	/4890
Customer aspect	Familiarizing people with the rights and duties	0/544	0/879	0/212	0/765	0/879	0/879	/3210/
	Punishing and rewarding employees training	0/756	0/674	0/604	0/454	0/674	0/674	/2210
	Employee and manager	0/231	0/543	0/543	0/543	0/543	0/543	/4230
innovation-learning	Promoting employees based on their merit	0/454	0/321	0/454	0/543	0/423	0/231	/3210
	Deployment and performance evaluation system	0/654	0/221	0/674	0/231	0/423	0/433	/2210
e-governme nt	Services electronically	0/765	0/423	0/899	0/433	0/423	0/489	/4230
	Create a database	0/654	0/321	0/098	0/489	0/898	0/143	/3210
personnel	Subscribe	0/354	0/221	0/832	0/543	0/632	0/321	/2210
		0/765	0/423	0/211	0/231	0/434	0/321	/423

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		Dimensions of enabling system				Dimensions of results		
		Financial Aspect	personnel aspect (human resources)	innovation-learning	internal aspect of business(structural reform)	e-governme nt	Customer aspect	enhancing productivity
aspect (human resources)	electronic processes and equipment ways of rewarding and punishing employees appraisal system of Performance and job satisfaction	0/098	0/645	0/454	0/321	0/454	0/543	/4540
	Timely payment of wages	1.00	0/432	0/321	0/321	0/321	0/098	1.00
	promotion of Islamic culture	0/878	0/321	0/221	0/221	0/321	1.00	/2210
internal aspect of business (structural reform)	assignment of tasks to the private sector	1.00	0/221	0/221	0/521	0/321	0/098	/4230
	The administrative health	0/986	0/423	0/423	0/631	0/321	0/09	/2210
	Rate of labor productivity	0/342	0/221	0/221	0/342	0/321	0/098	/4230
enhancing productivity	The rate of efficiency of sectors	0/321	0/980	1.00	0/067	0/321	0/087	/4540
	Level of productivity in society	0/221	1.00	0/123	1.00	0/321	1.00	/6540
		0/423	1.00	0/908	0/356	0/321	0/076	/7650

Third step- what are the characteristics of dimensions and features of development model to assess performance of administrative sectors in Tehran?

According to the distributed questionnaire among experts within performance assessment, converging – diverging correlation and Spearman rank correlation was used.

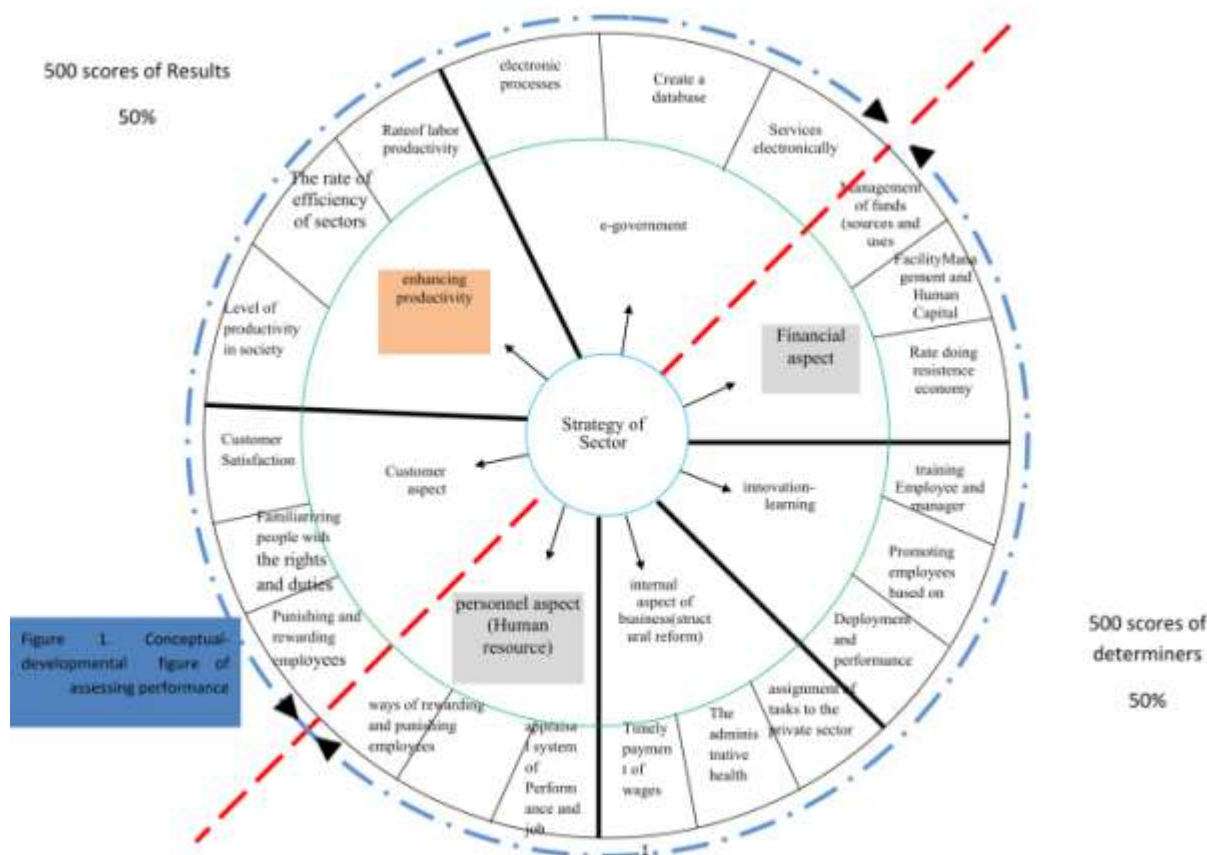
Fourth step- the developed model of performance assessment system of administrative sectors

Among all such complicated layers and levels which one should be selected to assess the performance of administrative sectors?

In the analyses, the BSC pattern was selected as the suggested model of administrative sectors which has been developed afterwards and EFQM was applied as a supplementary method. Therefore, the model was divided into two enabling and results dimensions and scoring system was applied to them. While

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determining the dimensions and variables of the model special attention was paid to the prerequisites and requirements of administrative sectors.



Discussion

Based the findings with regard to the expert group within performance assessment area, enabling and results dimensions were identified using converging – diverging correlation as below:

Financial aspect based on resistance economy: Managing income and expenses, Management of funds (sources and uses, Familiarizing people with the rights and duties.

Innovation-Learning: Training Employee and manager, Deployment and performance evaluation system, promoting employees based on their merit

Personnel aspect (human resources): ways of rewarding and punishing employees, appraisal system of Performance and job satisfaction, and Timely payment of wages

Internal aspect of business (structural reform): promotion of Islamic culture, assignment of tasks to the private sector

Customer Aspect: Customer Satisfaction, Familiarizing people with the rights and duties, Punishing and rewarding employees

E-government: Services electronically, Create a database, and automaticizing common processes

Enhancing Productivity: The administrative health, Rate of labor productivity, the rate of efficiency of sectors, and Level of productivity in society

The present study suggests that financial aspect and economical aspects in administrative sectors as an appropriate method of managing income and expenses, Management of funds, and Facility Management and Human Capital demands special attention. The results imply all the administrative sectors to apply the assessment model suggested in this research to appraise their own performance.

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