

Full Length Research Paper

Identifying and prioritizing effective factors in the performance based budgeting in telecommunications company with TOPSIS method

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The purpose of this paper is to identify and prioritize effective factors in the performance based budgeting (PBB) in Telecommunication Company of East Azerbaijan, Iran. The participants of the study include 96 managers, vice-managers and employees of financial, administrative and budgetary units of the company. The tool for data collection in this study was a questionnaire that has 53 questions which was distributed after proving its validity and reliability. After collecting the questionnaire, the data obtained were summarized and classified using descriptive statistical methods and in order to test the research hypotheses, SPSS, Excel and TOPSIS software were used. The results showed that environmental, administrative and operational controls are requirements of PBB and its non-compliance in organizations is a barrier in ABB implementation. From the aforementioned factors, environmental factors are the most influential and executive and control factors go in next, respectively.

Key word: Performance based budgeting, environmental factors, executive factors, control factors.

INTRODUCTION

Nowadays, budget has a crucial role in the economy and acts as the government financial policy tool (Kiomarsy et al., 2009). One of the methods used in budgeting is performance based budgeting (PBB). In this method, the separation of funds into tasks, programs, activities, projects, volume of operations and cost of the government operations and government agencies are calculated and measured based on scientific methods such as cost accounting and work measurement method (EbrahimiNejad and Frjvnd, 2007). Budget reform in the United States indicates a perpetual tug of war between the executive and legislative branches of government for power. In the past century, the U.S. Federal budget

reforms have been centralizing (the Budget Act of 1921) performance based activity (performance budgeting of the 1950s), focused on program evaluation, management-oriented, bottom-up, tight, and concerned with results (Willoughby and Benson, 2011). More than 60 years have passed after the emergence and introduction of PBB in the world. However, ABB continues to be an ideal in the minds of officials and policy makers.

Given the fact that Iran's economic policy makers take PBB into account in The Fourth Development Plan, suggests the necessity of allocating resources to government agencies in achieving sustainable development in Iran. Taking important and effective steps seems necessary. Considering the PBB establishment in other developed and developing countries and scientific theories in this respect (Such as Shah Model and management model) important steps can be taken of PBB to right track effective factors for establishment.

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Therefore, in the present study we attempted to prioritize and identify factors affecting the establishment of PBB of the case company.

RESEARCH LITERATURE

Performance based budgeting concept has a very old history. Unlike the program budgeting system component that was in vogue before World War II in the United States, Performance Based Budgeting dates back to the 1950s. The goal of these terms was to offer functional information for budgeting system and change in the government process approach for focusing on inputs to outputs. This approach was propagated by Hoover Commission, which was in governmental form, in 1949, and its wide implementation was considered (Hasanabadi and Najarsaraf, 2007). In addition, regarding increment as a concern to financial constant, increasing expectations about transparency and truth and government responsibility in increasing constitutional law awareness, and promoting people's activities on using taxpayers' money (Shah, 2010) have made governments to consider Performance Based Budgeting, greatly.

By way of comprising, Performance Based Budgeting is only useful to guide public organizations' managers to manage public affairs and make decisions, while Performance Based Budget controls, in addition to guidance, the performance of all staffs and governmental departments (Mahdavi, 2007). In program budget, internal costs of programs and activities are predicted on the basis of decision and cost materials; while in Performance Based Budget, price accounting methods are completed for estimating costs, and work measurement is carried out rather than cost materials (Ansarry, 1999: 135). Some different views, ideas and definitions are offered about Performance Based Budgeting. Some of these Performance Based Budgeting definitions are offered subsequently. Based on definition of Organization for Economic Cooperation and Development (OECD), Performance Based Budgeting is a type of budgeting that relates allocated credits to measurable results (Schick, 2003). In fact, Performance Based Budgeting is concerned with using information performance in every budget cycle process and propagating information to individuals who make decision on optimal allocation of sources, appropriately (Boyle, 2011). Based on the definition of General Accounting Office (GAO), Performance Based Budgeting is a method that relates performance information to the budget (Kline, 1997). The Performance Based Budgeting is an annual program along with annual budget that shows a relation between allocated funds to every program and result obtained from that program (Young, 2003). Tending to Performance Based Budgeting results in development and keeping of accounts in executive financial affairs (Carter, 1999). In regulating this

Performance Based Budgeting, the activity itself and the price of works (Andrew, 2004), which should be done, is considered rather than focusing on the activities of executive organizations.

Regarding resources and attempts done for Performance Based Budgeting, it is important to be assured of the function of this method. However, it should be mentioned that many analysts such as Schick believe that implementing Performance Based Budgeting will fail (Willoughby and Melkers, 2000). Many researchers have evaluated Performance Based Budgeting experience and they have obtained this result. So that budget department of the United States Congress announced that there is a little evidence from improving Performance Based Budgeting in local (Walter, 1972), state and international levels. In other developed and/or developing countries, there are existing scientific theories such as Shah model and management model. We can use these factors to track environment, executive and control factors, which are all factors in budgeting system.

Environment factors

If we suppose budgeting as a process that it is implemented in organizations which are considered as open systems, this system would deal with two types of macro external environment (Khodadadhosaeiny and Azizi, 2006).

Macro-environment

It consists of forces that do not affect short-time activities of organization directly; but they have indirect effect on organization's long-term decisions. This part of the environment forms a general area (condition) for management decision-making, and they consist of factors such as economic, social-cultural, and legal-political, technological and natural environmental conditions. Legal-political factor, general prevailing philosophy, government political goals and also, governmental laws and regulations have more importance and preference. Since budgeting is a means for a government to obtain its goals and it is done by executive organization, political and governmental dimensions (aspects) should be considered to a large extent.

Functional (industry) environment

It consists of factors that directly affect organizations' activities. It involves real organizations or groups and people that organization should interact with for them to succeed. These are environmental factors that affect organization operation directly. Groups and people such as, customers, suppliers, competitors and supervisors are more important and they are related to executive factors.

Performance based budget		Promotion	25%	
		Maintenance		
		Operations	65%	
		Infrastructure		
Strategic budget	{	Strategic planning	}	10%

FIGURE 1. Performance based budget and strategic budget.

Source: Kaplan et al. (2007: 424), strategy-oriented organizations, translation Parviz Bakhtiyari.

Internal environments

It consists of culture and resources of organization; in other words, it consists of factors that are connected with organization's implementation of functions.

Executive factors

A manager should undertake key responsibilities to help the organization in achieving high performance through all its resources such as humans, money, materials, technology and information.

Strategic programming managers

Without planning, managers will not know how to utilize their employees and resources effectively. Strategic program tells the managers the conditions they are now in and it also specifies long-term organization purposes via identifying its organizational environment and, identifying similar competing organizations. This gives the awareness of possible, realistic, intelligent threats and as well as the opportunities and how to make use of them.

In new approaches, financial budgeting is composed of two different processes. In FIGURE 1, only a little percent of annual cost and expenditures is spent for strategic programs. Much cost resulted from products compound and size and product services. Strategic budgeting programs enable organizations to develop products and new services, powers, relations to customers and capacity development for future growth (Kaplan and Norton, 2007).

Strategic budget and Performance Based Budgeting refer to programs and required activities to cover distance between successful performance and the performance; which is proved by constant improvement and based on normal business process (Kaplan and Norton, 2007).

Human resources management

Human resource is one of the basic components of an organizational system. The implementation of BPT system is impossible without expert and effective human force. Thus, executive and legislative forces should approve appropriate bills for selection and training desired (good) human force in financial and budget departments in the management and programming organization of the country. Training human force should be done to understand and implement this system in different dimensions (directions). Additionally, new human force should be employed in budget and financial departments based on scientific tests and entrance examinations with higher university degrees in accounting courses.

Organization and management

Regarding the nature of Performance Based Budgeting and its effectiveness involving factors in implementing it, organization is considered as bed and management as an executioner of Performance Based Budgeting. So to identify the best bed for Performance Based Budgeting as well as management, we should understand their different types briefly.

Modern (new) theories not only concentrate on human, but on values of organization and all its directions and performances and finally, organization environment and its innovation. And it requires flexibility of organizational internal structures to respond to innovations; it also recommends active and effective innovation to control environment changes rather than passive behaviors.

In high innovative changes organizations, organizational structures support innovation (Mirsepasi, 2003). Innovative organizations reorganize creation of smaller units to enable innovative teams (groups) to act and provoke innovation in new projects. Implementing Performance Based Budgeting system is a cooperative work (Irannejadparizi, 2006). It should not be expected

that this system is implemented in budget and financial united framework. Organization management should cooperate with the company.

Change management

The fundamental changes in the budget management of the developed countries in economic and development organization are considered by developing countries, which want to adjust their budget system. The experience of these countries shows that designing budget system adjustment requirement, compiling programs and its exact executive instructions are not very difficult, but changing budgeting system from traditional to operational encounters a major limitation. This limitation has two dimensions: 1) required management capacity to implement budget management. 2) "changing management skills" that are required to begin new system, to continue adjustments process, to continue implementing new system and that are compatible with environmental changes (Hasanabadi and Najarsaraf, 2007).

Financial management

Financial management can be considered as a sub-branch of budget management with the difference that in budget management, type of required management is considered for Performance Based Budgeting; whereas in financial management, the most necessary for accounting methods and financial organizations are considered for the implementation of Performance Based Budgeting, correctly.

Control factors (control system)

To identify existing deficiencies in implementing Performance Based Budgeting system, activities process should be feedback and this feedback should be obtained by different aspects such as organization structure, human resources, accountancy system and event-record methods, organization goals and finally, results obtained from works which should have enough efficiency, compared to organization profitability using Performance Based Budgeting method. Also, organization needs strong internal control systems to preserve critical properties such as cash funds, equipment and information of banks like accountancy information and its customers. Performance education system in many organizations is related to such internal control functions. These are important but focusing only on internal control results in following wrong regulations in proving duties and results. In fact, the last international control system is information formal system, where senior managers use it to communicate with their employees in strategy cases.

RESEARCH BACKGROUND

A number of research backgrounds will be discussed:

- 1) Jordan and Hakbert (1999) carried out a research entitled "implementing Performance Based Budgeting successes and purposes". Their findings showed that program responsibility is more effective in succeeding in budgeting system establishment based on performance rather than budget allocation purpose (Jordan and Hakbart, 1999).
- 2) Grain and Brain (2002) carried out a research entitled "the effect of Performance Based Budgeting on states' performance", where the effect of budgeting based on performance to annual states' performance was studied (Grain and Brain, 2002).
- 3) In Political Sciences Institution, Dong Kong, in a research, studied Performance Based Budgeting in the US. He evaluated cases, such as a history of Performance Based Budgeting in America, identifying a number of challenges relevant to theatrical basics and Performance Based Budgeting principles; he documented current operations and researches relevant to designing and establishing it, and evaluating views relevant to Performance Based Budgeting (Dongsungkong, 2005).
- 4) Mahmoodi (2005), in a research entitled, "evaluating Performance Based Budgeting implementation problems in governmental organizations and offering required approaches to reduce problems," found that there was a meaningful relation between implementing Performance Based Budgeting and management factors, and Performance Based Budgeting implementation problems were related to i) technical process facto, ii) human factors, iii) environment and management factor, respectively. So, it was recommended that these problems were identified and then they were resolved for implementing Performance Based Budgeting (Mahmoodi, 2005).
- 5) Asadi et al. (2006), in a research titled, "identification of Performance Based Budget establishment programs in Islamic Republic of Iran custom based on Shah model" found that Performance Based Budgeting establishment preventive factors in an organization are: stimulation acceptance, policy authority, legal authority, organizational authority, technical ability, performance evaluating ability, management acceptance, the ability of human force and political acceptance ,respectively (Asadi et al., 2006).
- 6) Salemsafi (2004) did a research "evaluating results of Performance Based Budgeting system establishment in distinguishing department of Valieashospital in Meshkin City of Ardabil Province, Iran focusing on ended services cost". The results obtained from Performance Based Budgeting system in hospital diagnosis activity center were evaluated based on desired proficiency indicators (radiology stereotype number and personal costs rations) and undesired proficiency indicators (experiments number

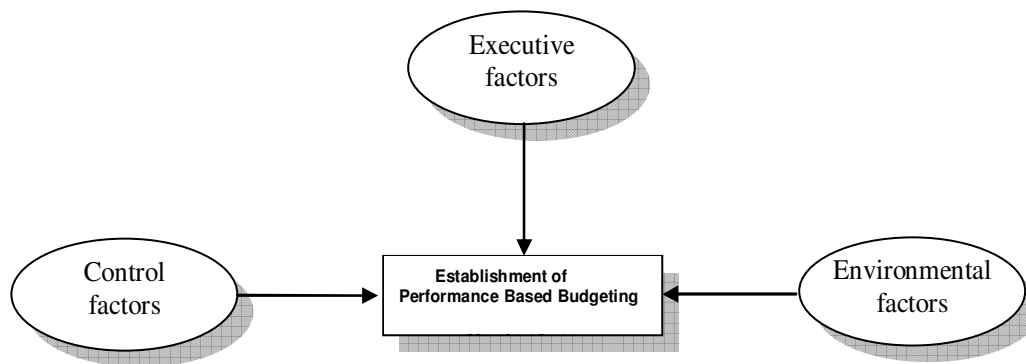


Figure 2. Research theoretical framework.

Table 1. Questions into the questionnaire.

Variable	Dimension	Number of questions	Question number
Environmental factors	1. Governance	1 and 2	2
	2. Political	3 to 5	3
Executive factors	1. Management Planning	6 to 7	33
	2. Human Resources Management	8 to 13	
	3. Enterprise management	14 to 20	
	4. Changes Management	21 to 25	
	5. Financial Management	26 to 32	
	6. Information System Management	33 to 38	
Control factors	1. Performance management and performance indicators	39 to 50	15
	2. Reporting system	51 to 53	
Total			53

ratio and sonographic number ratio); desired justice indicator (staff receipt ratio) and stability and efficacy indicators regarding total proved allocated revenues ration were studied (Salemsafi, 2004).

7) Mohammdi (2002), in a research, "evaluating budgeting problems in Ilam Province, Iran and offering appropriate approach "found that: i) lack of exact prediction annual budget by executive organization, ii) lack of human force with sufficient education, experience and experts, iii) lack of appropriate budgeting culture cost management and lack of attention to efficiency and efficacy, iv), lack of appropriate structure and organizations of province executive organizations (Mohammdi, 2002).

RESEARCH THEORETICAL FRAMEWORK

To identify effective factors for establishing Performance Based Budgeting in studied company, two theories of Alen Shah and management, consisting of 1) environment factors, 2) executive factors, as research theory framework were considered (Figure 2).

RESEARCH METHODS

Current research is practical in terms of its method, management and purpose. Its statistical community is managers, assistant and financial, administration and budget department staff of Telecommunication Company of East Azerbaijan, making a total of 69. Due to limited statistical community, total statistical community is considered as statistically sample. In other words, census way of sampling was used. Questionnaire information collecting device contains 53 questions (Table 1). Questionnaire questions have been regulated on firm-point Lickert scale. Questionnaire admissibility is external. Questionnaire stability has been obtained based on cronbach' s alphabet test, 0.877, 0.974 and 0.945 for environment, executive and control factors, respectively, and research questionnaire has high stability.

REASERCH FINDINGS

To analyze data obtained from collected questionnaire, descriptive and deductive statistical method has been used. Firstly, abundance distribution tables and respondents' percent relevant to demography and questions and research variables using SPSS software have been offered for the statistical description of the given answers

Table 2. Frequency and percentage distribution of responses to questions about general statistical sample (Gender, age, educational level, and years of service).

Parameter	Gender			Age					Educational level					Years of service							
	Man	Women	Total	<25	25-35	36-45	45-55	>55	Total	Diploma	Associate degree	Bachelors	Masters	PhD	Total	<5	5-10	11-15	16-20	>20	Total
Frequency	96	0	96	0	1	40	55	0	96	2	0	54	40	0	96	0	0	19	2	75	96
Percent	100	0	100	0	0.1	41.17	57.3	0	100	2.1	0	56.3	41.7	0	100	0	0	19.8	1.2	78.1	100

Table 3. Descriptive statistics of variables.

Parameter	Environmental factors	Executive factors	Control factors
Total	96	96	96
No answer	0	0	0
Average	17.4167	89.18	43.98
Median	18.00	105.00	52.00
Fashion	23	105	52
Standard deviation	4.8311	26.744	11.741
Variance	23.340	715.291	137.863
Rating	12	86	37
Minimum	11	47	25
Maximum	23	133	62

to the research questionnaire questions (Table 2). In deductive level, TOPSIS software has been used for the purpose of hypotheses testing. In TOPSIS method, M option, M point was considered in an N dimension space. In this technique, selected option sounds have the lowest distance to positive ideal solution (the best possible condition A_i^+) and the highest distance to negative ideal solution (the worst possible in every branch is increasing or reducing, uniformly (Azar and Rajabzadeh, 2003). In this method, relative importance for every indicator has been given as weights for decision-makers, and their weights have been considered equally, as $1/110 = 0.009$. To obtain results, Excel software was used for required formulas, and finally, using this method

available options based on importance and variances were ordered based on information obtained from Table 3. It is seen that the average environmental, executive and control factors independence variables are 17.4167, 11.66, 89, 89, 18 and 43.98, respectively.

In Table 4, it is seen that the agreement of the three powers of legislative, executive, judicature in Performance Based Budgeting has been recognized as first and most important factor for establishing Performance Based Budgeting in studied company, with highest score among 53 factors.

Additionally, legislative power co-operates with executive power for approving implementation of Performance Based Budgeting", and adaption of

current company reporting system to reality. From Table 5, using accountancy method in Performance Based Budgeting has been recognized as first and the most important executive factors for establishing Performance Based Budgeting in studied company, with the highest score among 53 factors. Adaption of management structure for establishing Performance Based Budgeting, using information technology in responsibility is in the next order.

From Table 6, agreement of the three powers: legislative executive, judicature in Performance Based Budgeting has been recognized as the first and most important factor for establishing Performance Based Budgeting in studied company, with the highest score among 5 factors.

Table 4. TOPSIS test for all components.

The ranking of factors affecting establishment of performance based budget					
R	Prime cost	A close relative to the ideal	R	Questions title	A close relative to the ideal
1	Quality information resources	0.79060159	28	Prime cost	0.38967737
2	Expertise and management skills	0.77796891	29	Quality information resources	0.38846511
3	Use of IT	0.67605451	30	Expertise and management skills	0.38232676
4	Deviations from	0.67426638	31	Use of IT	0.37998028
5	Terms and computational finance	0.63739633	32	Deviations from	0.37747360
6	Quantity of information resources	0.60999060	33	Terms and computational finance	0.37510450
7	Performance indicators	0.60322361	34	Quantity of information resources	0.36888569
8	Effectiveness indicators	0.57828656	35	Performance indicators	0.36382579
9	Projected results pre	0.57685112	36	Effectiveness indicators	0.35615920
10	Training in performance evaluation	0.55289805	37	Projected results pre	0.35336341
11	Managers have enough on hand tools and accessories	0.53201341	38	Training in performance evaluation	0.34215312
12	Government with a legal obligation	0.51649653	39	Managers have enough on hand tools and accessories	0.34201291
13	Supervisory management program	0.50463512	40	Government with a legal obligation	0.33822995
14	Reward and punishment	0.50276565	41	Supervisory Management Program	0.33576820
15	Learning about the cost	0.47198925	42	Reward and punishment	0.33528023
16	Rights and benefits	0.44180287	43	Learning about the cost	0.32894897
17	Education	0.43557759	44	Rights and Benefits	0.31954236
18	Appropriate manner in response	0.43235773	45	Education	0.31718541
19	Directors authorized a budget adjustment	0.43019192	46	Appropriate manner in response	0.31366439
20	Performance indicators of behavior	0.42820579	47	Directors authorized a budget adjustment	0.31201835
21	Application and verification requirements	0.42543170	48	Performance indicators of behavior	0.29834204
22	Training courses	0.41610102	49	Application and verification requirements	0.29774342
23	Education	0.40952286	50	Training courses	0.28937249
24	Cost analysis by ABC	0.4052384	51	Education	0.28152147
25	Experiences and knowledge	0.40362789	52	Cost analysis by ABC	0.25482519
26		0.39915699	53	Experiences and knowledge	0.18781437
27	Information technology in the cost	0.39134555			

Also, legislative power co-operating with executive power for approving and implementing Performance Based Budgeting and identifying members of parliament for approving budget are in the next order.

Based on Table 7, adaption of current company reporting system to reality has been recognized as the first and most important factor for controlling factors to establish Performance Based Budgeting in the company under investigation, with the highest score among 15 factors. This is followed by using process indicators in measuring work size and services in budget regulating and to define budget indicators in evaluation.

Based on the information obtained from Table 8, environment factors are the most important factors for establishing Performance Based Budgeting in the studied

company, and executive and control factors are in the next order, respectively.

Conclusions

Based on results of current research, it can be concluded that these effective factors are important for establishing Performance Based Budgeting. Some of them have more importance than the others. The important point that should be made is that if the aforementioned effective factors are not implemented correctly for establishing Performance Based Budgeting, it is considered as a problem itself and also all these factors are connected with respect to analyzing questionnaire information.

Table 5. TOPSIS testing for executive component.

Ranking of executive factors					
R	Questions title	A close relative to the ideal	R	Questions title	A close relative to the ideal
1	Accrual accounting	0.60322361	18	Expertise and management skills	0.38232676
2	Aligns to government body	0.57828656	19	Use of IT	0.37998028
3	Information technology in responding	0.55289805	20	Terms and computational finance	0.37510450
4	Rapid access to information resources	0.53201341	21	Quantity of information resources	0.36888569
5	Strategic planning	0.47198925	22	Managers have enough on hand tools and accessories	0.34201291
6	Organizational culture	0.44180287	23	Reward and punishment	0.33528023
7	Management and leadership style	0.43557759	24	Learning about the cost	0.32894897
8	Short-term planning	0.43235773	25	Rights and benefits	0.31954236
9	Learning the ABC	0.42820579	26	Education	0.31718541
10	Organizational processes and procedures	0.425431070	27	Appropriate manner in response	0.31366439
11	Changes in the use of operating budget	0.40952286	28	Directors authorized a budget adjustment	0.31201835
12	In response to community organizations	0.40523084	29	Application and verification requirements	0.29774342
13	Organizational Structure	0.40362789	30	Training	0.28937249
14	Compatibility of information systems	0.39915699	31	Education	0.28152147
15	Information technology in the cost	0.39134555	32	Cost analysis by ABC	0.25482519
16	Prime cost	0.38967737	33	Experiences and knowledge	0.18781437
17	Quality information resources	0.38846511			

Table 6. TOPSIS test for environmental components.

Ranking of environmental factors		
R	Title question	A close relative to the ideal
1	Three branches of forces agreement	0.79060159
2	Participation of the legislature with the executive	0.77796891
3	Awareness and understanding of Parliament	0.63739633
4	Government support of the administration	0.50276565
5	Government with a legal obligation	0.33822995

TOPSIS and SPSS have been used. In TOPSIS method, agreement of the executive, legislative and judicature powers in Performance Based Budgeting has been recognized as the first and most important factor from environment, executive and control factors for establishing Performance Based Budgeting in studied company, with the highest scores among 53 factors. This is because of the type of tests employed. Additionally, based on the present research on the effective factors for establishing Performance Based Budgeting, it can be said that existing agreement between the three powers for approving and implementing Performance Based Budgeting, raising the awareness of the members of parliament for approving budget, using accounting method, having experts and powerful human force in Performance Based Budgeting, enabling and training human force in proportional to Performance Based Budgeting can be considered as the most important requirements for establishing Performance Based

Budgeting. In the present study, these factors have been focused considerably. In addition, it should be noted that if these requirements are not implemented, all of them would be considered as problems for establishing Performance Based Budgeting. Studies done in this area confirmed results obtained from this research. The results of this research are in line with Mahmoodi (2005)'s, "evaluating Performance Based Budgeting implementation problems in governmental organizations and offering required approaches to reduce problems" and also, Rabeti's research (2007), "evaluating and identifying Performance Based Budgeting implementation problems in Islamic republic of Iran's army". The problems are classified into three categories: environmental, organizational and individual factors. The results of these researches showed that lack of implementing Performance Based Budgeting properly has been due to environmental, organizational and individual factors. There is a meaningful relation between environmental,

Table 7. TOPSIS test for the control components.

Ranking of environmental factors		
R	Title question	A close relative to the ideal
1	Adapting to the reality	0.67605451
2	Process indicators	0.67426638
3	Index funds	0.60999060
4	Standard indicators	0.57685112
5	The proportion reporting with the operational budget	0.51649653
6	Financial indicators	0.50463512
7	Quantify the performance	0.43019192
8	Supervisory management program	0.41610102
9	Deviations from	0.37747360
10	Performance indicators	0.36382579
11	Effectiveness indicators	0.35615920
12	The results predicted	0.35336341
13	Training in performance evaluation	0.34215312
14	Supervisory Management Program	0.33576820
15	Performance indicators of behavior	0.29834204

Table 8. Prioritize effective factors on the establishment of performance based budget.

Ranking of environmental factors		
R	Title question	A close relative to the ideal
1	Environmental factors	0.85987955
2	Control factors	0.27695104
3	Executive factors	0.08959151

organizational and individual factors and problems of implementing Performance Based Budgeting, and lack of implementing environmental, organizational and individual factors can be a problem in implementing Performance Based Budgeting.

RECOMMENDATIONS

1. Improving environmental factors: these are some recommendations to improve environment factors: a. the executive body and the parliament should be in harmony to approve the required laws and co-operate with all organizations and departments for establishing Performance Based Budgeting. b. Adjusting laws and regulations based on the concepts and principles of budget transparency instruction; adjusting experimental to identify and remove possible ambiguities and deficiencies that executors encountered and then final approval is one of offered approaches that it requires national attempt of the three powers and executive organization. b. It is recommended that financial regulation and laws such as the law of public accounts, the law of accounts court, the law of program and budget should be complied and/ or adjusted and administrative

approaches and current conflict laws of Telecommunication Company should be resolved. d. Taking geographical, native and climate conditions of this budget type of executive organizations and changing available approaches regarding country conditions are recommended.

2. Improving executive factors: these are some recommendations on improving executive factors: a). training managers and experts of organization technically to get familiarity with the activities based on budgeting concepts; b). Compiling approach program to co-operate with all organizational departments conformable with middle-term programs such as fourth development program of the government; c). Establishing budget and financial information comprehensive system, to achieve the required information for individuals involved in budgeting and to calculate direct and indirect costs, and finally ended price of products and regulating performance reports can be defined; d). Implementing appropriate stimulating system, for real performance and conformity with budget result in reward; otherwise it leads to punishment; e). One of the practical approaches is establishing ended price accountancy along with the governmental accountancy in the organization. Operating resources enables organization to interact with the current

financial system; f). Providing software and hardware system relevant to financial affairs and Performance Based Budgeting and to make software suitable to Telecommunication Company and Iran's conditions; g). Using expert and efficiency human resources in financial affairs and budgeting and also, changing the use of individuals in organization for interested purposes.

3. Improving control factors: a. wide technical training of managers and experts of the organization in order to identify indicators of evaluating performance, which are used in programs if required. b. Identifying and compiling indicators of evaluating performance based on the Iran's environmental features and using developed countries experiences. c. Improving and strengthening evolution and supervision structure: 1) financial auditing-controlling cost. 2) Operational auditing-controlling result. 3) Qualities-technical supervision-controlling event

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