

# Designing A Budgeting Model With Strategic Planning Approach: Case Study Of The Ministry Of Energy

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**Abstract:** In traditional costing systems, the emphasis is on the production volume and products' units and also it is assumed that the products consume the resources. In activity based costing, it is argued that the production of the products requires some activities and activities are consumers of the resources. Therefore, in costing based on the activity, initially overhead costs is allocated to the activities (pile up of costs under the title of costs reservoirs) and then the allocated costs to the activities are allocated based on a factor called cost driver to products or production lines. In activity based costing, the major activities in the process of production are divided into four classes of product unit level, product category level, product support level, and factory level. In the present research we aim to design a budgeting model with strategic planning approach and regarding the views of the elites and the previous researches, a questionnaire is presented on the intended field and using the structural equations (SEMs) a model is presented in order to evaluate the parameters of the applied strategy in the Ministry of Power that according to the results related to the impact coefficient the greatest coefficient is related to the allocation of financial resources on financial strategy dimension with an impact factor value of 4.954.

**Keywords:** planning; strategic planning; budgeting; management; Costing; Ministry of Power

## 1 INTRODUCTION

One of the major elements of management is planning. Planning is a management element and a process that within its framework all activities on the intended goals and method of reaching to that and moving toward that are combined and its goal is to reach organizational results. In general the management should have an appropriate planning for all available resources. Of major factors causing new attitudes in design of budgeting model with the approach of strategic planning include variation process and technological, social and economic transformations in internal and external environments of organizations always faced with. If the organizations want to be in conformity with these variations they should have a comprehensive and strategic attitude and consider various requirements, therefore in this research we try to present a budgeting model with appropriate strategic planning approach in the Ministry of Power based on this relationship between budgeting and strategic management.

## 2 RESEARCH BACKGROUND

As said, planning includes method to reach organizational goals, and consequently strategy includes all required facilities for conducting organizational duties successfully (Kaplan & Norton, 2001), therefore strategic planning is a process in which the long term organizational goals are determined and decision making based on the methods in order to reach to these goals already predicted.

In other words, organized and ordered effort for basic decisions and fundamental measures which forms the orientation of an organization's activities with other institutions in legal framework (Ajami et.al, 1998). Time plan, for strategic planning process depends on the nature, organization needs and external environment. Planning in organizations are conducted in manufacturing and service formats which are changing rapidly. In such a situation, planning may be done once or twice in a year as a series of gradual comprehensive and detailed stages with regard to mission, perspective, values, environmental analysis, goals, strategies, responsibilities, time table, budget etc. in other words, if an organization is practicing in a constant market for many years planning may be done once in a year and only in specific sections. For example, planning through goals during the work, responsibilities, time table, budget etc. is updated each year (Asgari et.al, 2012). Strategic planning is implemented with the beginning of the activities of the organization. Strategic planning usually is a part of a commercial business plan, along with marketing plan, financial and operational plan (Irvani et.al, 2012). Strategic planning is a process for establishing goals of financial resources and development of strategies for human resources in order to achieve goals, policies through mobilization, development and maintenance of human resources (Asadi et.al, 2010). In Yang et al (2015), some new definitions of budgeting management is presented and it is stated that the budgeting management can play a crucial role as an important factor in relation with organization performance. In this study a framework for assessing the relationship with budgeting and success of projects and at the end efficiency value and benefit in the organization is presented. In Brash et al paper (2015), it is mentioned that small companies need budgeting development as an important resource for achieving organization goals in order to preserve themselves and create competition. In this paper with the approach that with better using of the resources and comparison of the methods among globalized and non-globalized small companies it is possible to reach their goal which is the assessment of the impact of resources on the organization. Bidles et al (2015), have investigated the impacts of the budgeting management information systems with regard to a case study in general sections. It is stated that the section

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of budgeting management information system would be able to give some valuable results for organization. So emphasizing on that may reduce costs, increase connections, and reduce time spent on the activities. With the case study on the public universities of the united states this study claims that still these universities is able to increase their efficiencies with regard to and emphasis on the resources of information systems.

### 3 RESEARCH METHOD

For assessment of the budgeting model in the intended organization the case study in the Ministry of Power is used. Regarding the questionnaire of the project with respect to the

evaluated indexes, the questionnaire is composed of major dimensions of the model that the goal of preparing this questionnaire is the identification and definition of the practices of budgeting management in the intended organization. Analysis of the data for examining the correctness of the assumptions bears a great importance in every research. Today, in most researches based on the collected information from the subject of the research, the analysis of the information is one of the most important sections of the research. Raw data are analysed with the statistical software and after processing it is delivered to consumers in the form of information.

**TABLE I: STRATEGIES USED IN THE ORGANIZATION**

concept	components	Indexes
Design of budgeting model with strategic planning approach	Learning strategy (A)	Development of the ability of workers
		Continuous improvement of organizational culture
		Organizational flexibility
		Modernization of processes
	Financial strategy (B)	Costing based on activity
		Allocation of financial resources
		accountability
		Conformity of budgeting strategies with external environment
	Competence strategy	Contribution of workers in decisions of organization Q9
		Freedom of action
		Self-control or performance management

Now we evaluate and design the intended model in the organization with respect to the present questionnaire and structural equations (SEMs):

#### 3.1 Statistical societies :

In this research, research society is comprised of 200 individuals from all experts including managers, responsible experts and units' officials, elites and organizational decision makers serving system's internal and external clients in processes of different units.

#### 3.2 Research sample:

Considering 200 personnel of sample volume 97 individuals was estimated using Cochran formula, in collecting data two methods of documentary and field were used. In order to measure each components of the research the prepared questionnaire was used. Method of collecting information and data: statistical method used in this research is the correlation analysis and confirmatory factor analysis. In this research the tools of data collecting are a series of standard questionnaire which are prepared for collecting the data required for the research. Scoring was based on the Likert spectrum and ranges from completely against to completely agree from 1 to 5 scores.

#### 3.3 Statistical analysis method:

In order to analyse the data for determination the confirmatory factor analysis, path analysis, structural equations SEM were used.

#### 3.4 Statistical methods:

To analyse the collected information the descriptive statistical indexes including mean calculation, standard deviation and etc. were used.

#### 3.5 The results of the study:

With regards to the mentioned indexes in the above table the intended model is as follows:

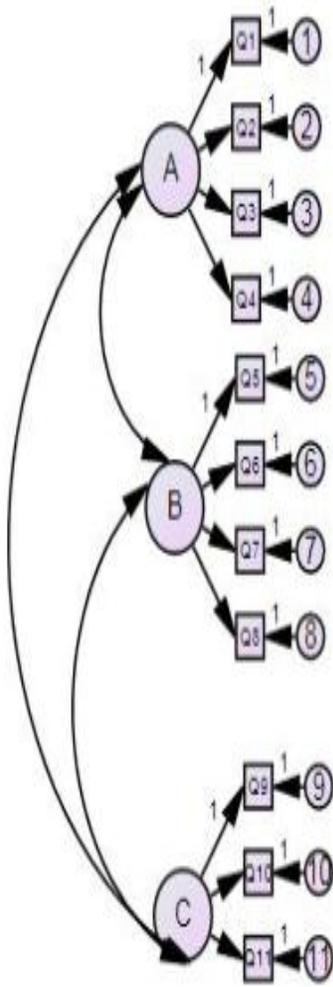


Fig. 1 research model

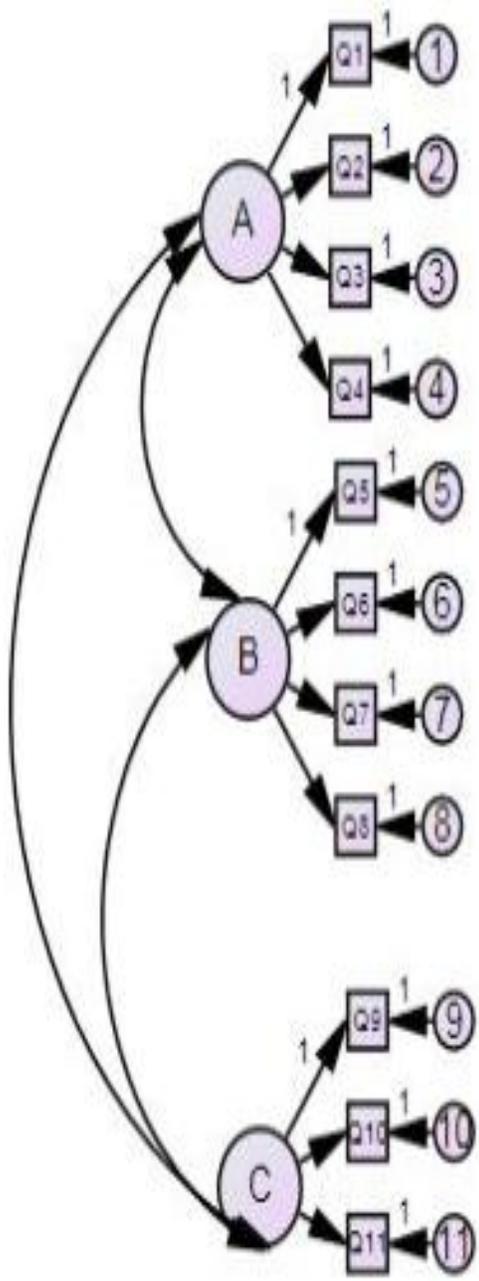


TABLE 2: MODEL REGRESSION WEIGHT

Meaningfulness level	Impact coefficient			
0.000	2.322	Financial strategy	→	Costing based on the activity
0.02	4.954	Financial strategy	→	Allocation of financial resources
0.006	-3.583	Financial strategy	→	Accountability
0.002	-4.502	Financial strategy	→	Conformity of budgeting strategies with external environment
0.9542	0.03	Empowerment strategy	→	Contribution of workers in organization's decisions
0.000	-.007	Empowerment strategy	→	Freedom of action
0.015	.008	Empowerment strategy	→	Self-control or performance management

1.239	0.02	Learning strategy	→	Development of workers abilities
.734	.041	Learning strategy	→	Continuous improvement of the organizational culture
-.101	0.026	Learning strategy	→	Organizational flexibility
.696	.035	Learning strategy	→	Modernization of processes

#### 4 CONCLUSION

The Considering the conducted calculations in the previous step and company's strategies in 3 dimensions of learning, ability and finance evaluation and presentation of a model on the intended case study were done. The results indicate that the organization moves according to the determined strategies and also based on the results the greatest impact was in the budgeting model design section with strategic planning approach in the Ministry of Power in sections of financial resources allocation, conformity of budgeting strategies with external environment and costing based on activity in financial strategy dimension. Also the smallest impact was related to the freedom of action, self-control and organizational flexibility. Most of the developed and developing countries are trying to bring closer the their budgeting order in a process of improvement or change into a performance based or operational order in which the relationship between budget credits and the performance of executive organs are comprehensible and transparent, and in this way provide credible and trustworthy information for budgeting decisions of the government and the parliament. Budgeting based on the performance which requires the executive organs focus on the results of the plans improves the effectiveness, efficiency and accountability of government plans. Budgeting system based on the performance through comprehensive quality management and costs reduction and consumers satisfaction increase improves the performance of the government and in fact leads to more effective use of organization resources and the managers can use the available resources for achieving expected goals determined in the budget. According to the experimental results and observations, the main goal of the establishment of the performance based budgeting system is the improvement of the plan accountability against budget process and budget allocation. Performance based budgeting, is a valuable tool for creating fundamental perception of the integration of the resources used and performance. In conclusion the plans officials, have an opportunity for assessment of the interaction between resources and the expected results. This experience favorably improves the general management of plans.

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