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THE EFFECTIVENESS OF OUTCOMEOF PROJECT MANAGEMENT PRACTICES OF THE GOVERNMENT CONTRACTORS IN KERALA

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Abstract

This paper discusses the state of projects and project management within one of the largest government ministries in Kerala, India. As the Project management is considered as an effective approach for developing countries to use in improving their managerial capabilities and also to facilitate the successful completion of projects. The successful projects are accepted by different categories. This study helps to understand about the Government projects undertaken by the State government of Kerala. Perception about the various factors influencing the project management practices, etc. About 415 responses from the contractors has been used for the analysis and interpretation. The results shows various aspects related with the outcome of project management practices and the contractor's experience in the area.

Introduction

A project is a short term aspire with a well-defined structured beginning and end adopted to meet the organisations unique goals and objectives, and consistently to bring out beneficial change or certain added value. The relevance of the Government organisation could be

emphasized and being felt through the undertaking of socially relevant projects. Hence there arises the necessity of management of these projects in most efficient and economical way. So project management is essential and has a significant importance.

The term project management practices used in synonym with project management competence with demonstrable performance (Crawford, 2005). Certain authors have suggested that project management practices are the management tools and techniques used in the project activities. The term has been associated with the project management maturitymodel, suggesting that the level of continuity and capability of an organization in dealing with its projects strongly depends on project management practice (Brookes and Clark, 2009). Besner and Hobbs (2006) identified that the value of project management practices through investigating the use of tools and techniques.Thus it can be seen that project management practices are considered as a range of customs and rules used for the effective implementation of projects.

Review of literature

Project management is an effective approach for developing countries to use in improving their management capabilities and facilitate the successful completion of projects, thereby achieving developmental goals. However, research has identified that there is a lack of knowledge of project management techniques and tools, and insufficient time spent on reporting and controlling in certain context (**Abbasi and Al-Mharmah,2000**).

Deming [1986] advocated that to have a successful implementation of quality management practices, awarding contracts largely based on price should be discouraged. The focus of certain project clients may however not be largely based on quality of the project especially at the pre-contract stage. The cost aspect of contracts is what therefore plays a crucial role in setting the criteria for awarding contracts. Deming's suggestion of improving upon quality of projects needs to be highly considered by construction professionals. When the expectation of client on the quality of the project is usually high, the practice of awarding contracts on the price criteria may not necessarily increase the desired performance of the project.

Rationale of the Study

Though the Government have undertaken various other social welfare and benefit projects for boosting the quality of the life of the people, prior importance is given to the infrastructure development. The infrastructural projects are usually implemented in the Government sector through the public works departments and its agencies. Contactors involvement and Reponses about the various factors influencing the Project Management Practices.

Statement of the Problem

It is the duty of the Government is to provide adequate infrastructure facilities for the overall development of the economy. The infrastructure development is undertaken in the form of creation of new assets as well as modernization of the existing ones. In both cases, that it is undertaken through various government projects.Thus the success of a Government regime is measured in terms of the successful completion of various projects in order to give relief and prosperity to the people. It is believed that a good system of project management is the backbone for success of any projects. The present study is proposed to examine the effectiveness of the infrastructure projects undertaken by the Government of Kerala. The effectiveness of the projects is assessed through the project management practices followed by the contractors who undertake the project. Also it is necessary to the relation between these elements. Hence the present paper attempts to analyze these factors related with outcome of project management practices of the government contractors of Kerala.

Objectives of the Study

The following are the major objectives for the study:

1. To understand the various elements associated with the outcome of PMP.

2. To evaluate effectiveness of outcomes of PMP with the experience of the contractors in the government sector.

Variables of the Study

Dependent Variables:	**Independent Variables**
1. Project Cost and Benefit	• Completion within the budgeted cost • Project cost justifiable with social benefit • Cost justifiable with the resources utilised for the project • Cost incurred with a public vision
2. Period of Completion of Projects	• Completion of projects within the expected time • The commission of project in right time • Project with right future orientation • Project relevance rewards with passage of time
3. Justification of Establishment of Projects	• Social justification • Economic justification • Regional justification • Development Orientation
4. Quality of Benefits of the project	• Quality construction of the project • Quality services from the projects • Quality in up keeping and maintenance of the projects • Quality of people in operating the project
5. Mechanism for Eliminating Corruptive Practices	• Corruption free employees • Prompt delivery of service without delay • No sign of undue influence • Fair pricing of product and services
6. Utility Dimension of the Project	• Obtaining expected social benefits • Obtaining Expected Economic benefit • Address the Expected development benefits • Obtaining Expected Local benefit

Hypothesis of the study

In light of the analysis, the study's aim was to validate the following hypothesis:

H0: There is no significant relation between the effectiveness of the outcome of the project management practices of contractors with respect to the experience of the contractors.

H1: There is significant relation between the effectiveness of the outcome of the project management practices of contractors with respect to the experience of the contractors.

Methodology

With the use of both primary and secondary data, the study was conducted in a descriptive and analytical framework.Primary data has been collected through conducting a field survey among the contractors of Government projects by using a structured interview schedule. Population of the study is the contractors of government sector. Sample size is determined by using a formula (Yamene, 1967) constitute around 400 contractors and a sample of 415 is taken in total to be more accurate. SPSS and MS Excel were used to statistically analyse the acquired data. Percentage analysis, arithmetic mean, and standard deviation were utilised as descriptive statistical tools. To see if there are any statistically significant differences between the means of variable groups, one-way analysis of variance (ANOVA) is employed.

Discussions and Results:

The hypothesis has been tested with analysis of variance. it is done to understand the relationship between the experience of the contractors with all the six factors that constitute to the effectiveness of the project management practices.

For this purpose, ie.to analyse the effectiveness of the outcome of the project management practices six elements has been considered. They are project cost and benefit, period of completion of project, justification of establishment of projects, quality of benefits of project, mechanism for eliminating corruptive practise and utility dimension of the project with the experience of the contractors.

On the basis of the hypothesis tested following output or table of descriptives and ANOVA has been obtained and interpretation has been made off.

Analysis of effectiveness of the outcome of project management practices with respect to the experience of the contractors

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Project Cost and Benefit	2	235	15.1617	2.14222	.13974	14.8864	15.4370	12.00	19.00
	3	126	16.4127	2.38418	.21240	15.9923	16.8331	8.00	19.00
	4	54	18.4630	2.04398	.27815	17.9051	19.0209	8.00	20.00
	Total	415	15.9711	2.46701	.12110	15.7330	16.2091	8.00	20.00
Period of Completion of Projects	2	235	15.3277	2.42826	.15840	15.0156	15.6397	11.00	20.00
	3	126	15.8571	2.62820	.23414	15.3938	16.3205	8.00	20.00
	4	54	17.4815	2.07174	.28193	16.9160	18.0470	8.00	20.00
	Total	415	15.7687	2.54230	.12480	15.5234	16.0140	8.00	20.00
Justification Of Establishment of Projects	2	235	15.3277	2.33495	.15232	15.0276	15.6277	10.00	19.00
	3	126	17.3651	1.97829	.17624	17.0163	17.7139	12.00	20.00
	4	54	18.2037	2.29338	.31209	17.5777	18.8297	8.00	20.00
	Total	415	16.3205	2.50814	.12312	16.0785	16.5625	8.00	20.00
Quality of Benefits of the Project	2	235	15.2723	2.66392	.17377	14.9300	15.6147	10.00	20.00
	3	126	16.6508	1.64106	.14620	16.3615	16.9401	12.00	20.00
	4	54	17.9074	2.69359	.36655	17.1722	18.6426	8.00	20.00
	Total	415	16.0337	2.57990	.12664	15.7848	16.2827	8.00	20.00
Mechanism for Eliminating Corruptive Practises	2	235	15.0511	2.79910	.18259	14.6913	15.4108	10.00	20.00
	3	126	16.6111	4.17224	.37169	15.8755	17.3467	12.00	55.00
	4	54	15.2593	1.94437	.26460	14.7285	15.7900	8.00	17.00
	Total	415	15.5518	3.26548	.16030	15.2367	15.8669	8.00	55.00
Utility Dimension of the Project	2	235	14.6043	2.56555	.16736	14.2745	14.9340	10.00	20.00
	3	126	16.4524	1.47842	.13171	16.1917	16.7130	12.00	20.00
	4	54	17.4259	2.53728	.34528	16.7334	18.1185	8.00	20.00
	Total	415	15.5325	2.53350	.12436	15.2881	15.7770	8.00	20.00

		Sum of Squares	df	Mean Square	F	Sig.
Project Cost and Benefit	Between Groups	513.832	2	256.916	52.771	.000
	Within Groups	2005.821	412	4.868		
	Total	2519.653	414			
Period of Completion of Projcts	Between Groups	205.113	2	102.556	17.102	.000
	Within Groups	2470.680	412	5.997		
	Total	2675.793	414			
Justification Of Establishment of Projects	Between Groups	560.640	2	280.320	56.510	.000
	Within Groups	2043.736	412	4.961		
	Total	2604.376	414			
Quality of Benefits of the Project	Between Groups	373.786	2	186.893	32.329	.000
	Within Groups	2381.742	412	5.781		
	Total	2755.528	414			
Mechanism for Eliminating Corruptive Practises	Between Groups	204.934	2	102.467	10.028	.000
	Within Groups	4209.702	412	10.218		
	Total	4414.636	414			
Utility Dimension of the Project	Between Groups	502.697	2	251.349	48.062	.000
	Within Groups	2154.614	412	5.230		
	Total	2657.311	414			

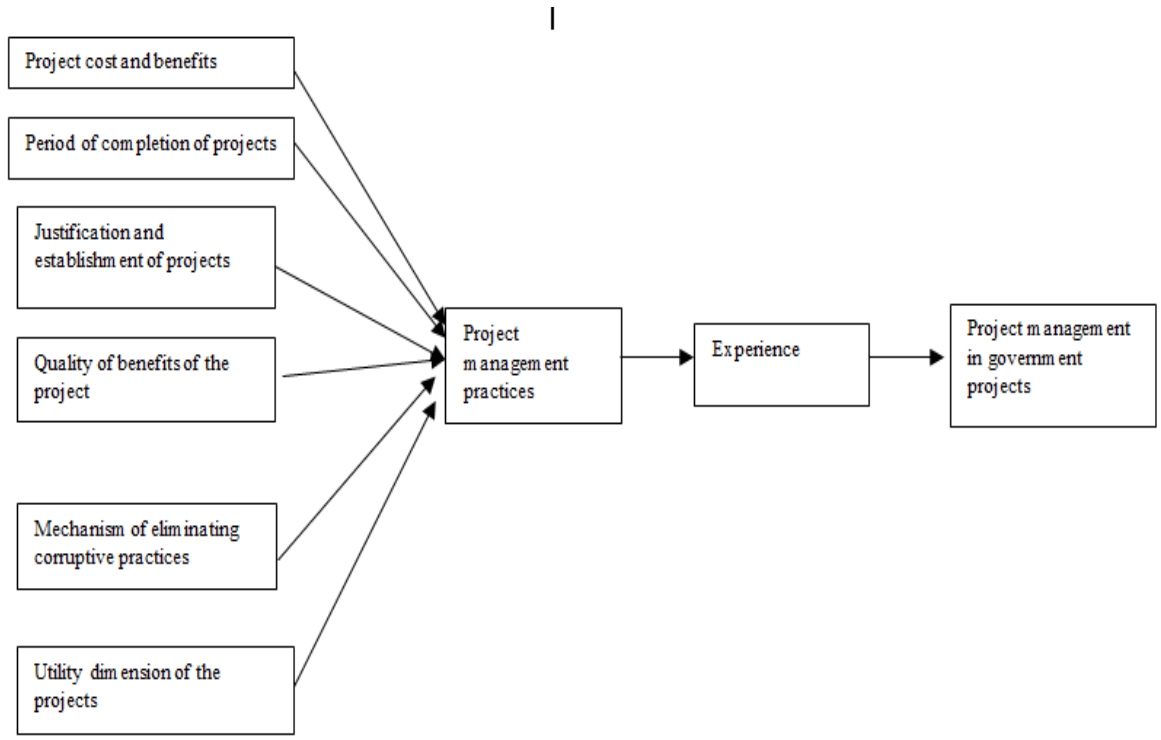
The following interpretations were observed from the above table:

- As per the ANOVA table it is clear that the project cost and benefits is handled effectively by contractors with above 25 years of experience (mean score 18.46) where f value (52.77) found significant (p .000<.05). It indicates that there is statistically relation between project cost benefits and experience of the contractors.
- The ANOVA tables states that, when period of completion of projects and experience of contractors is considered, contractors with above 25 years of experience (mean score 17.48) where f value (17.10) found significant (p .000<.05). It indicates that there is statistically significant relation between period of project completion and experience of the contractors.
- On the basis of ANOVA table justification of establishment of projects is also high in the case of contractors having more than 25 years of experience (mean score 18.20) where f value (56.510) found significant (p .000<.05). It indicates that there is statistically significant relation between contractor's experience and establishment of projects.
- It can also be inferred from the ANOVA table that in the case of quality of benefits of the projects contractor's with above 25 years of experience has significant role (mean score 17.90) where f value (32.39) found significant (p .000<.05). It also indicates that there is statistical relation between project quality benefits and contractor's experience.
- When mechanism for eliminating corruptive practices and contractor's experience is considered it has more inclination towards contractor's with 16-25 years of experience (mean score 16.61) where f value (10.02) found significant (p .000<.05). It also indicates that there

is statistical relation between mechanism for eliminating corruptive practises and contractor's experience.

- The ANOVA tables also states the utility dimension of the project and contractor's experience is mostly associated with the contractor's having more than 25 years of experience (mean score 17.42) where f value (48.062) found significant (p .000<.05). it also expresses that there is statistical relation between contractor's experience and utility dimension of the project.
- So by analysing above interpretations it can also be stated that as there is significant relationship between the effectiveness of outcome of the project management practices with respect to the experience of the contractors. Hence the null hypothesis is rejected and following model can be drawn from this analysis.

Elements of project management practices



Conclusion

The study has conveyed some challenges and restrictions experienced in having project management practices implemented and adopted in public sector organizations. Also the study put forward various variables associated with project management practices and how it is affected by the contractors working in the government sector. In each elements of project management practices contractors with more than 25 years of experienced showed more competent except in the case of mechanism for corruptive practices. Hence it can be concluded that there is significant relation between the effectiveness and outcome of project management practise. Also experience are inevitable in conducting a project successfully in a professional manner.

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