IMPACT OF PROJECT MANAGER'S INTELLECTUAL COMPETENCIES ON PROJECT SUCCESS

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ABSTRACT

Literature reveals importance of leadership competencies for project managers who are responsible for successful implementation of projects. Project managers possess knowledge and skills of project management but still the rate of project success has not significantly been improved. This study investigates the impact of project manager's intellectual competencies on project success. This study will collect quantitative from project managers of public sector in Pakistan. This study used cross sectional data and employ random sampling technique to distribute survey questionnaire among respondents. Reliability and validity of construct will be tested statistical analysis by using SPSS software. Correlation and regression analyses were used to test research hypotheses. Findings indicate significant positive influence of intellectual competencies on project success and provide implications for academicians and project managers to formulate policies for improving project success. The study provides directions for future research.

Keywords: Project success, project manager, leadership, intellectual competencies.

INTRODUCTION

Intellect is learned from experience and understanding goals but intellectual leadership is often confused with emotion (Yaverbaum & Sherman, 2008). Yaverbaum and Sherman (2008) explained intellectual leadership in terms of establishing a directional sagacity to provides clear, quantifiable, malleable, and meticulous help in order to achieve project success . Intellectual

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leaders are not only required to exercise their science or art either separately or in groups but are also required to foster those who may outspread and contest their philosophies. Such leaders can be abetted – or held up – by the culture and surrounding environment. 'Intellectual leadership' today requires strong speculative and decision-making cultures.

Intellectual leadership competencies like leadership skills and behaviour contribute to enhance the likelihood of project success in an organization. Development of intellectual competency based approach to deal with initiation and association can increase and helps in building up recent era of project managers. Many researchers highlighted the importance and definitions of competencies essential for project leadership. Emerging leadership competencies needs to be followed by project managers, while some administrative abilities are critical to have better performance in modern organizations. In projects, administrative style signifies utilization of an individual's energy for leading other individuals.

The intellectual leadership competency is intended to achieve high-performance project outcomes with optimistic business results. For instance, in complex projects, utilization of the intellectual leadership competencies in congruence with that of the emotional and managerial leadership competencies can help project managers to achieve positive outcomes, ensure on schedule project completion, facilitate the project team to keep track of project confines (scope, time, and cost)5, and produce desired project deliverables. A number of studied have been conducted on managerial and emotional competencies but limited research has considered exploring intellectual competencies in the context of project outcomes. Therefore, the objective of this study is to explore the impact of project manger's intellectual competencies on project success.

INTELLECTUAL COMPETENCIES

Literature reveals that intellectuals have been esteemed and despised alike over time, eon and culture (Reuschling, 2008). An 'intellectual' is seen differently by different people (Simplican, Leader, Kosciulek, & Leahy, 2015). From the times of ancient Greece through China, Russia and Korea, intellectuals have been oppressed and impeached for views that contest prevalent values,

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ideas or political power alliances (Roberts & Wood, 2007). Similarly, in Scandinavian region, intellects are viewed as valued and contributing members of the society (Sidanius & Pratto, 2001). The reaction or instinct towards intellectuals are rooted deep in the character of a society (Hofstede & Hofstede, 2001). Competencies, on the other side, informally articulate that a group of people has the "ability" or the "acquaintance" to do certain things (Stier, 2004). Managerial sciences treat competency as a process conceded by competent persons to carry out effective actions. For instance, Guy (1999) delineated that competent person select and mobilize resources to perform a set of activities. It is not uncommon to see leaders operating at either ends of a gamut of leadership styles. At one end is the managers fixated to achieve outcomes while at the other people are a priori. Intellectual approach is the ore of results-motivated leaders where leaders focused on relationship driven by compassion. However, success is mostly likely associated with a balanced focus on both; the results and the people.

A number of studies considered empirically examine the overall project success t

Recent research studies suggested to identify
leadership competencies affecting project success during different project stages t

Figure 1 - Research Model

METHODS

Project manager's intellectual competencies were measured by adapting Leadership Dimension Questionnaire (LDQ) from Dulewicz and Higgs (2005, 2008). Project success was measured by using Project Success Assessment Questionnaire (PSAQ) developed by Shenhar & Dvir (2007) and operationalized by Ahmed et al (2016) on 5 - point Likert scale "strongly disagree" to "strongly agree". A survey questionnaire based methodology was used to collect data from project managers of public sector projects in Pakistan. The questionnaire was divided in three parts to get data on: a) demographics; b) intellectual competencies; and c) project success.

Demographics included questions about respondents and projects. Respondents were asked to answer the questions based on their last successfully completed project. An online questionnaire was developed and the link of the survey was distributed through email among 200 project managers of public sector projects. We received 120 responses (60%) from the respondents where 76 male and 29 female project managers participated in the survey. Participants possess bachelor degree (20%), Master degree (35%), MS/MPhil degree (30%) and PhD degree (14%). Project manager's having experience of managing projects 27.6% less than 3 years, 26.7% with 3-5 years, 23.8% with 5-10 years, 12.4 with 10-15 years, and 9.5 % with more than 15 years. Team size of project reported in this survey were; 60 project having upto 20 team members; 36 project with team members upto 50; and 9 projects with above than 50 team members. The nature of projects was capacity building (53%), construction and infrastructure (36%), labs and equipments (9%) and health facilities (1%).

FINDINGS AND DISCUSSION

Validity was measured through Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Kaiser, 1974) and Bartlett (1950) test of Sphericity in SPSS software. The KMO test yielded a value of 0.860 for project manager's intellectual competence which is above cutoff value of 0.60. The Bartlett's test revealed a significant result for project manager's intellectual competencies [$\chi2$ =932.075, n=120, df=105, p<.001]. For project success, the KMO test shown a value of .878, well above the threshold of .60 and the Bartlett's test also yielded a significant result [$\chi2$ =1828.263, n=120, df=300, p<.001]. Reliability of constructs was tested using Cronbach Alpha tests (Cronbach, 1951). Summary of validity and reliability for intellectual competencies and project success is given in Table 3 and Table 4, respectively.

Table 3 - Reliability and Validity of Project Manager's Intellectual Competencies

Variable	Cronbach Alpha	Code	Factor Loading		
			Factor 1	*Factor 2*	*Factor 3*
Strategic Perspective	0.86	SP1	.717		
		SP2	.763		
		SP3	.690		
		SP4	.569		
		SP5	.704		
		SP6	.703		
Critical Analysis and Judgment	0.86	CAJ1		.776	
		CAJ2		.817	
		CAJ3		.678	
		CAJ4		.507	
		CAJ5		.766	
Vision and Imagination	0.82	VI1			.711

Variable	Cronbach	Code	Factor Loading
		VI2	.695
		VI3	.795
		VI4	.769

Table 4 - Reliability and Validity of Project Success

Variable	Cronbach Alpha	Code	Factor Loading				
			Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Project Efficiency	0.78	PE1	.825				
		PE2	.769				
		PE3	.524				
		PE4	.797				
		PE5	.838				
Impact on User	0.85	IU1		.587			
		IU2		.547			
		IU3		.605			
		IU4		.611			
		IU5		.696			
Impact on Team	.86	IT1			. 604		
		IT2			.704		
		IT3			.854		
		IT4			.802		
		IT5			.561		
Business Success	.89	BS1				.697	
		BS2				.715	
		BS3				.711	
		BS4				.656	
		BS5				.668	

Variable	Cronbach Alpha	Code	Factor Loading				
			Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Preparing for Future	.85	PF1					.532
		PF2					.724
		PF3					.788
		PF4					.799
		PF5					.764

Table 5 - Summary of Correlation Analysis

Sr.	Variable	Mean	SD	1	2	3	4	5	6	7	8
1	Strategic Perspective	3.92	.664	1							
2	Critical Analysis & Judgment	3.84	.732	.694**	1						
3	Vision and Imagination	3.83	.747	.523**	.639**	1					
4	Project Efficiency	3.36	.678	.330**	.342**	.270**	1				

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		Mean	SD	1	2	3	4	5	6	7	8
5	Impact on User	3.60	.673	$.302^{**}$	$.314^{**}$	$.228^{*}$	$.682^{**}$				
6	Impact on Team	3.56	.699	$.342^{**}$	$.293^{**}$	$.252^{**}$	$.635^{**}$	$.588^{**}$	1		
7	Organizational Success	3.54	.744	$.332^{**}$	$.354^{**}$	$.310^{**}$	$.594^{**}$	$.658^{**}$	$.546^{**}$	1	
8	Preparing for the Future	3.63	.668	$.386^{**}$	$.360^{**}$	$.407^{**}$	$.480^{**}$	$.609^{**}$	$.513^{**}$	$.807^{**}$	1

Table 6 - Summary of Regression Analysis

Variable						Project Success							
Hyp	IV	R	R^2	Adj R^2	F	Sig	T	Sig	β	SE	TL	VIF

Success is about achievement of objectives and goals of a project (Cho & Dansereau, 2010) and comparison between an organization's actual outputs with envisioned outputs (Tomal & Jones, 2015). Leadership competencies are the basic elements contributing for betterment of

performance of an organization and success. According to Mastrangelo, R. Eddy, and J. Lorenzet (2014), efficient project leaders are those who have the ability to inspire their team members. A vital role is played by the project managers for achieving project objectives and provide pleasant working environment which ultimately encourages the attitudes, behaviors and motivates the team members. In agreement with Babcock-Roberson and Strickland (2010), competent project leadership encourages followers to participate, progress, and achieve project outcomes. Leadership competencies govern organizational success, which are considered key contributors in improving organizational performance. Project managers intellectual competencies have vital role in accomplishment of project outcomes. Lacking of such leadership competencies affect project performance and may lead to project failure (Higgs & Aitken, 2003).

CONCLUSION

The effect of leadership on project success is well tested empirically but limited is known about the impact of intellectual leadership competencies on project success. To address this issue, this study examines the relationship between leadership competencies and project success, to make significant contribution in the existing body of knowledge. Finding implies that project manager's strategic perspective significantly contribute towards preparing for the future. However, project manager's critical analysis and judgment may not be a significant predictor of any particular project success dimension. Project managers possessing strong vision and imagination competencies have significant influence on preparing for the future to contribute in the project success. This study was limited to examine relationship between intellectual competencies and project success in public sector. Further research is suggested to validate this model other than public sector. Moreover, future studies may consider examining the impact of managerial or emotional competencies of project managers on project outcomes. Longitudinal studies are encouraged as this study was limited to cross sectional data. Moreover, examining the impact of senior management and sponsor's intellectual competencies on project success may be an interesting area for future research.

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