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# Impact of external stakeholder's engagement on project portfolio Management success, IT industry in Lahore, Pakistan

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## ABSTRACT

Companies need project portfolio management (PPM) to deal with the increasing number of projects and used it to ensure strategic arrangement and adequate use of available resources. Moreover, customers were demand more attention from their suppliers. The management of a project portfolio and the corresponding customers, supplier's engagement signified a link between PPM and external stakeholder's engagement. Supplier engagement in project portfolio management success had become an increasingly popular technique for improving project capability and project performance in PPM. By defining the range of PPM, this study hypothesized a connection between external stakeholders like customers and supplier's engagement and project portfolio management success. The results were based on a cross-sectional sample of 100 well known Software Houses in Lahore, Pakistan. Study employed Pearson's correlation and step wise hierarichal regression to find the results. Study found a significant relationship between customers and supplier's engagement and PPM success. While moderating effect of role clarity showed partial moderation.

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## Introduction

Project stakeholder management is recently introduced as important key area of the proeject management. Its processes and techniques positively affected the project activities. Project portfolio management (PPM) intended to complete a combination of projects under the sponsorship of a specific organization in which the projects share limited resources [1] and [12]. It included various activities, such as decision making on which projects were to be given main concern, which projects were to be added to or abandoned from the portfolio, and how to allocate raw material for different projects in PPM [3]. In PPM handling of projects were difficult task. There was need of stakeholder's engagement especially external stakeholders like customers and suppliers. Mostly projects were customized in the project portfolio management. Hence, successful accomplishment of the projects required engagement of customers essentially in PPM.

Moreover, the management of customer's engagement in portfolios was receiving more concentration in practice and in research [15] and [25]. However, in alliance to the project portfolio of a company, the optimization of individual portfolios did not essentially amend overall business performance; hence the portfolios required to be coordinated with the customers [24]. Customer's engagement enhanced the significance and appropriate inquiry what need to be achieved from the projects in PPM.

Firms increasingly realized that supplier engagement in PPM success was valuable with regard to the costs and quality of portfolio projects and the costs and time associated with the project portfolio management development. Furthermore, more and more suppliers were becoming involved in their customer's development projects. This involvement may vary from giving minor plan suggestions to being responsible for the complete development of PPM projects. In contrast with generally held theory, however, prior research had shown that supplier

engagement in PPM may not always lead to improvements in project competence and project efficacy [4] [14] and [28]. Still, this did not imply that supplier engagement was a poor strategy; it emphasized that supplier engagement should be managed carefully. [27] found positive relationship value for the customers in project portfolio management success. Same like [29] found significant effect of supplier's engagement on the project efficiency and project effectiveness in proeject portfolio management success. However, the clarity of the role as a moderator of external stakeholders for project portfolios was unaddressed. An empirical research was thus required to explore and quantify the impact of external stakeholder's engagement on Project Portfolio Management success with distinct effect of their role clarity.

For this study IT sector was selected because of the distinctive portfolios managed in IT sector, as [6] and [13] also used IT industry in their studies. In the light of above, the study examined the project portfolio management success in managing diversified and complex projects and impact of external stakeholder's engagement on project portfolio management success in IT sector, Pakistan.

This study will show the intensity of engagement of external stakeholders in PPM and its impact on project portfolio management success. This study will explored the nature of impact of external stakeholders on PPM success. This study will find out whether role clarity moderates the relationship between external stakeholder's engagement and PPM success. This will put a light on project portfolio management in IT industry of Pakistan, which is not yet done in Pakistan.

Study developed some questions to find the impact of the external stakeholder's engagement on project portfolio management success. What is the effect of customer's engagement on project portfolio management success? What is the effect of supplier's engagement on project portfolio management? What is the effect of customer's engagement with

moderating role of role clarity on project portfolio management success? What is the effect of supplier's engagement with moderating role of role clarity on project portfolio management success?

Some Purposes have been defined for this study which was as: To determined the impact of customer's engagement on project portfolio management success. To determined the impact of supplier's engagement on project portfolio management success. To determined the impact of customer's engagement with moderating role of role clarity on project portfolio management success. To determined the impact of supplier's engagement with moderating role of role clarity on project portfolio management success.

### **Theoretical Background**

Project portfolio management was receiving increasing attention both in practice and as a field of academic research [18] [19] and [26]. A project portfolio was defined as a set of projects that were executed and managed under the management and sponsorship of a particular organization [1]. A coordinated project portfolio reflected an organization's investment strategy [8], added value beyond the results of individually managed projects [21], amends available resources and should represent stability between associated risks and short and long-term goals [1] and [22]. Project portfolio management enhanced the effectiveness of the projects. External stakeholder's engagement also improved the efficiency and effectiveness of the PPM projects.

External stakeholders were also the part of the project stakeholder management and play important role in project portfolio success. Furthermore, external stakeholders included suppliers and customers. In addition, organizations now a day faced customers who demand high value and value-adding activities such as mutual product development, financial or consulting services [15]. Companies acuminate their customer focused by introducing ideas such as customer relationship management to generate better relationships with project portfolio management success [11] to increased value both for the customer and for the PPM success [5]. Customer's engagement had major role in the project portfolio management success. Customer's engagement enhanced the efficiency of the projects in PPM.

Different studies suggested that supplier involvement in new product development in PPM lead to higher advancement [2] and even the project handler's financial presentation lead to an increase [7]. [10] concluded based on other studies that widespread supplier involvement in project portfolio development processes increased the productivity, speed and product quality in product development. The mentioned project and process technology complexity of PPM decreased by involving a supplier [20]. However, there were also downsides on supplier engagement. [10] stated based on earlier studies, that managing supplier engagement in PPM poses quite some challenges. [16] found pragmatic evidence that not all managers support the proposed positive effects of supplier's engagement in PPM processes.

Normally engagement of external stakeholders was not considered important in the project portfolio management success. In external stakeholder's customers, suppliers, donors and many other stakeholders were incorporated. Study described that buyer – supplier association in new product development had positive impact on the product innovation. From knowledge point of view it was observed that supplier knowledge was connected with the buyer knowledge. Different supplier's knowledge was added different contributions in the

new product development in the form of new practices, new thoughts and new ways of struggle [23].

The relationship value of customers in project portfolio management had a positive and significant effect on the project portfolio management success. It means customers had direct relation with the project portfolio management success [27]. Positive relationship between customer knowledge management and project performance depended on project complexity. Customer knowledge concerned with the project portfolio management success, it directly affected the project portfolio management success [31]. Customer's directly linked with the project portfolio management success because projects were accomplished according to the customer's requirements. From given literature, study developed the following hypothesis to rationally measure the relationship of customer's engagement and project portfolio management success.

### **H1: The greater the customer's engagement PPM, the better prospects for success of PPM.**

Four types of supplier's involvement were found for information flow, the communication & media convention, amount of communication, the topics described and specified working involved in portfolio projects [29]. Planning and execution of strategic processes and techniques were not only short term objectives were attained but also long term objectives gained by adding the supplier engagement [9]. Positive trimmings of supplier involvement were effectiveness and efficiency of short term product; these were increased when suppliers were engaged. Supplier involvement also augmented the product value and quality [30]. Suppliers play important role in the project portfolio management success. Supplier's engagement had significant role in escalating the project value and performance, so from the given literature study developed hypothesis to measure the relation between supplier's engagement and PPM success:

### **H2: The more effectively supplier engagement during PPM, the better prospects for success of PPM.**

[27] found positive relationship between customers and the project portfolio management success. Relationship value of customer's engagement with moderating role of role clarity on project portfolio management success was unaddressed. [23] explained that supplier and customer knowledge had significance in the project portfolio management. Their knowledge was added contribution to project portfolio management success. In literature there were no studies in which customers with role clarity were discussed. So to find the effect of customer's engagement on project portfolio management success with retraining effect of role clarity, study produced following hypothesis to test the relationship strength between the customer's engagement and PPM success:

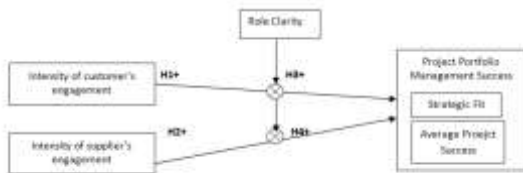
### **H3: Role clarity moderates the relationship between customer's engagement and project portfolio management success.**

Four types of supplier's association improved the competence of the portfolio success. Supplier's engagement effect on the project portfolio management success with moderating effect of role clarity was still unaddressed [29]. Supplier engagement was essential for short term as well as long term projects for new project development in PPM [9]. Supplier engagement provided a lot of benefit for achieving the PPM success in conclusive direction [30]. Supplier involvement was necessary to increase the performance in the project portfolio management success. Suppliers were also essential part of the stakeholder's engagement and also execute significant role to enhance the project portfolio management success. From the

existing literature, study formed hypothesis to find the effect of supplier's engagement on the project portfolio management success with moderating effect of role clarity:

**H4: Role clarity moderates the relationship between supplier's engagement and project portfolio management success.**

This literature explained about different belongings which directly or indirectly bent the performance of the Project Portfolio Management Success. Important factor which had positive effect on the Project Portfolio Management Success were involvement of external stakeholder. In this literature engagement of external stakeholders was still not explored, and effect of external stakeholders on the Project Portfolio Management accomplishment was also still not deliberated. This study intended to find the impact of customers and supplier's engagement on the Project Portfolio Management Success.



**Figure: 1 Hypothesized Model**

[27] analyzed that relationship value of external stakeholders e.g. customers with moderating effect of portfolio characteristics and external instability increased the performance and level of success in the project portfolio management success. Supplier's engagement also had noteworthy impact on the PPM performance [29]. The current study determined the impact of customers and supplier's engagement on project portfolio management success. Project portfolio management was measured by strategic fit average project success. [6] relate this study with the stakeholder's theory in project portfolio management success perception. [12] defined a stakeholder as "any team or one person who can exaggerate the achievement of the organization's objectives. Based on this explanation [6] defined project portfolio stakeholders as any group or individual in involvement with a project portfolio, such as the cluster or individual affected the attainment of the portfolio's objectives. So this theory supported the present study because study perceived that customers and supplier's engagement had significant effect on the project portfolio management success.

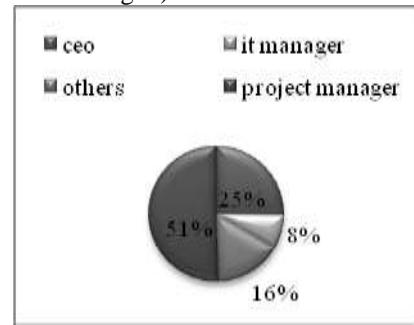
#### Methodology

This was cross sectional study conducted in IT industry Lahore, Pakistan for the duration of September 2012 to June 2014. The study selected 30 high budgeted and well known software houses for preliminary survey. The response was gathered from 100 respondents by simple random sampling and the study used pre-tested, reliable and valid scales borrowed from the studies of [6] and [27]. The reliability and validity of the instruments were good with high scores. Scale of customer's relationship value was customized to test the supplier's relationship value for this specific study. Table.1 showed the reliability values of the instruments used by this study and has been tested by using SPSS 20.0. For analysis of data and results study used SPSS 20.0 for conducting the frequency distributions, Pearson's Correlation and Pair wise hierarchal Regression. Details were given in the Table 2 and Table 3.

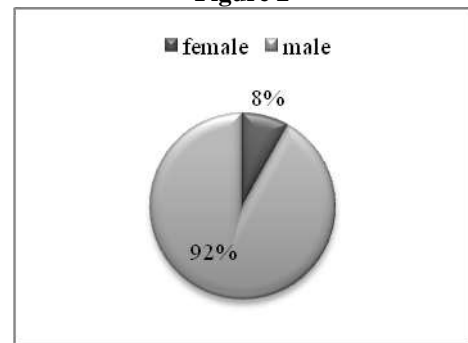
#### Results And Findings

The study described the frequency distribution of the demographic variables by pie charts as given in Fig. 2 and 3. Majority of the respondents have designations of project

managers in the software houses (as explained 51% in Fig. 2). Maximum of the respondents were males in the software houses (as described 92% in Fig. 3).



**Figure 2**



**Figure 3**

The instruments were confirmed as tremendously reliable with the help of SPSS 20.0 (Cronbach's alpha = 0.961, Table 1).

**Table 1**

No of Items	Cronbach's Alpha
31	0.961

The Pearson's Correlation of external stakeholder's engagement and project portfolio management success were performed by SPSS 20.0 and explained in Table 2.

**Table 2**

	Variables	1	2	3
1	RVC			
2	RVS	0.806		
3	RC	0.674	0.609	
4	PPS	0.427	0.380	0.310

Results of pair wise hierarchal regression mentioned that customer's engagement had positive and significant effect on the project portfolio success (0.391,  $p < 0.05$ , Table 3). Study supposed that customer's engagement had significant and positive effect on the project portfolio management success with moderating effect of the role clarity. Results mentioned that customer's engagement had significant effect on the project portfolio management success with moderating effect of role clarity (0.219,  $p < 0.05$ , Table 3). Furthermore, Supplier's engagement had positive and significant effect on the project portfolio management success (0.330,  $p < 0.05$ , Table 3).

**Table 3**

	Model	$\beta$	Std. Error	Beta	t	Sig.
1	Zscore(RVC)	.391	.090	.391	4.333	.000*
	Interaction1	.125	.052	.219	2.422	.017*
	R Square	0.229				
	P-Value					0.000*
2	Zscore(RVS)	.330	.095	.330	3.488	.001*
	Interaction 2	.127	.058	.206	2.181	.032*
	R Square	0.185				
	P-Value					0.000*

Results privileged that supplier's engagement had significant effect on the project portfolio management success

with moderating function of role clarity (0.206,  $p < 0.05$ , Table 3). Hence, external stakeholder's engagement partially moderated the impact of external stakeholder's engagement on the project portfolio management success. External stakeholder's engagement had noteworthy effect on the project portfolio management success. Study substantiated the all hypothesis.

### Conclusion

Based on results and opinion external stakeholder's engagement had significant effect on the project portfolio management success. External stakeholder's engagement had noteworthy effect with or without moderation of role clarity on the project portfolio triumph. Furthermore, results show that customers and supplier's engagement partially affect the project portfolio management success in presence of the role clarity, while have full impact on the PPM success in absence of role clarity. Hence, Role clarity partially moderates the relationship outside the organization.

### Discussions

Main Purpose of this study was to find the relationship between external stakeholder's engagement and project portfolio management success. [27] originate positive relationship values of customers for PPM success. Customer knowledge management had significant impact on the project performance [31]. External stakeholder's engagement had significant and strong relationship with the project portfolio management success and with moderation it partially moderated the project portfolio management Success. Long term and short term objectives obtained by adding the supplier engagement [9]. Supplier engagement enhanced the product worth and quality [30]. Studies found positive effect of supplier's engagement in the project and product development. This study found positive and noteworthy impact of the supplier's engagement on the project portfolio management success.

### Future Research And Limitations

The existing research model can be applied in other sectors e.g. construction, short and long term projects. Further research can be generated by adding external stakeholders in the current research model. This study has been conducted in the IT sector in Lahore, Pakistan. Other major cities like Karachi and Islamabad might produce different and better results. Furthermore, present study has been carried out on smaller sample size but by increasing the sample size can be obtained more constructive results.

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