



Preliminary study of the impact of critical success factors on project success in Pakistan

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Abstract

This preliminary study attempts to link the critical success factors on overall project success in public sector organizations in Pakistan. In this study it's reflected that major critical success factors (soundness of business and workforce, planning and control, quality performance and past performance) can enhance the success of the project in Pakistan. The purpose of this preliminary study was to verify the reliability of the survey instrument which has been used in European countries. It was found that the planning and control was the highest Cronbach Alpha value, while the range for each construct in the present study is between 0.68 to 0.88. Therefore, based on the Cronbach alpha value score, the proposed survey instrument has fulfilled the basic requirement of a valid instrument.

Keywords: Soundness of Business and Workforce, Planning and Control, Quality, Performance, Past Performance

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Introduction

Project success factors require special and permanent attention to guarantee a strong likelihood of project's success; otherwise, if these factors are not taken seriously, it could contribute to the failure of a project (Kandelousi and Abdollahi, 2011). In this study we will analyze and investigate critical factors (CF) that influence the project success in public sector organizations of Pakistan. Project management is conceptualized as the procedure of decision making and development of tools and techniques for project success. For the success of any project, awareness and understanding of project management and CF is must. Moreover, with scientific methods how they access and analyze these factors, and on the basis of this create probability to enhance the chances of a project success (Mobey and Parker, 2002). In Pakistan, Planning Commission of Pakistan is government body and responsible for development projects. Planning Commission works in all over the Pakistan. This body provides guidelines pertaining to project planning and control, provide quality standards and monitoring system. To enhance the probability of success in projects good knowledge of CF plays a vital role, (Mobey and Parker, 2002). In this study it's reflected that major CF and enhance the chances of project success in Pakistan.

Aim of the study

The major aim of this study is to analyze the important critical factor of project success in Pakistan. The objective of current research is to analyze the importance of critical success factors with overall project success in Pakistan. There are many factors which can influence the project success however this study is focusing on Soundness of Business Workforce, Planning Control, Quality Performance and Past Performance. Therefore, the specific research objectives are as below:

Research objectives

- 1: To find out the impact of soundness of business and workforce (SBW) on project success (PS).
- 2: To determine the impact of Planning and control (PC) on project success (PS).
- 3: To find out the impact quality performance (QP) on project success (PS).
- 4: To determine the impact of past performance (PP) on project success (PS).

Project management

In past studies we have seen literature of project manager and success but the critical factors impacting on project success are under research particularly in Pakistan. Many projects around the world keep failing, resulting in loss of millions of dollars for organizations. Looking in to current challenging environment in public sector organizations in Pakistan with new trends and technologies. There is dire need the research on identifying the most critical success factors for project success in public sector organization of Pakistan. Azzopardi (2009) stated project management as thousand years old practice +dating back to the Egyptian epoch, however being used formally in organizations as a management tool in 1950's. The roots of project management originate from in two different planning and control in projects problems face in USA. This was the first ever experience with such projects that was not done earlier. Since neither cost nor time could have been accurately estimated the project was engulfed in huge uncertainties. Completion project dates were based on chances: optimism and pessimism. Program Evaluation Review Technique (PERT) was the great achievement of project experts. Practicing PERT resulted in creation of another methodology termed as (PPS) project planning and scheduling being launched by the



private sector. It was considered more definite and realistic than PERT as it required realistic estimates of cost and time. The introduction of the personal computers with low cost software's for project management further improved and promoted the use of project management. Project management emerged as a separate discipline from diverse fields of application like engineering, construction, telecommunications, and defense. The 1950s era could simply be termed as the era of modern project management.

Presently, the culture of project based organization is common, organizations has divided their work in projects for quick growth of an organization. For organizational growth best management practices and and techniques are necessary. We can analyze through individual project success that project is using right tools and techniques. Success is a very general but an attractive word and it is not easy to define, different people have different criteria of success (Muller and Turner, 2005). In his study the project success framework and consensus of different experts on project success. This topic is under discussion regularly from last many years (Baccarini, 1999).

Critical factors for project success

The idea of CSF was introduced by Denial in 1961. The idea of CSF was more prominent when it was used to define that what are major critical factors for business or enterprise? After some time, in many areas the CSF was a major subject. CSF is a business approach (Rockart, 1979; Bruno and Leidecker 1984). It is discovered from the review of literature that a list of CSF and conclusion of Slevin and Pinto (1986) is the master piece of research work. Many researchers use this list for their study. This framework is very common and popular and they identified success factor (Muller and Turner, 2005). After detail review of literature we identified four variable SBW, PC, QP and PP. we have explained briefly all the variables in next portion.

Project planning and control

If we execute the project as per planning it does not mean that project will be successful. If the planning is faulty there will be many chances of project failure. If we use detail and quality planning then probability of success will be defiantly enhance. Many studies establish that planning is the major CSF (Johnson, 2001). Moreover, it is fact that planning is first step where we can develop plan and changers according to need. Till the time there is no major comprehensive tool to analyze the quality of planning. Project planning is the process of to develop project plan to meet project objectives (Meredith & Mantel, 1995). Most important factor to manage the project is planning and control. Moreover, success of project is also based on planning and control. The major attributes of the planning are collect requirement, scope writing, tools and techniques for cast, time and for other knowledge areas. Moreover, variance analysis and cast and schedule are also important part of control. Detail planning decrease the chance of risks and failure. It's also support in forecasting for future projects. Project manager is the responsibility for project planning, he must assure the quality execution and understand stakeholders needs.

Soundness of business and workforce

Before defining soundness and workforce of business (SBW) we must understand that what performance management is. Simply, that SBW is the corporate performance, project team success, result oriented deliverables and consistency to achieve project objectives. Choi & Zhao, (2005) defined SBW as in seven different factors namely capital for work, technical skills, liability, risk management, work experience, turnover, successful past performance. It is established that SWB can be defined smoothness of business and also establish that it is critical factor of project success. An established organization can produce better result. Until now, there are different concepts of soundness and workforce of business (SBW). Especially yearly profit and capital of a business can shows the soundness of an organization. Moreover, financial and also human turnover shows the sustainability and progress of the workforce. Usually, SBW consider

as financial progress, security and physical resources. Moreover, it also includes reputation and consistency of an organization.

Project quality performance

This globalization has created competitive environment all in business world Adam et al. (2001). This competitive environment, challenge oriented market, new ideas and work pressure create the Total Quality Management (TQM) (Ahire et al., 1995). Management of quality and control quality has been recognized as critical factor in last decade. TQM has created significant impact on organizational performance and project success. The quality mean is not just minimize the cost and develop standard but also increase profit of the business. To check relationship detail study is important for researcher but also important for an organization. To implement the quality organization should give time for planning and execution of quality. For said purpose organization introduce quality management practices. Quality is the satisfaction measurement criteria for every part of project deliverable.

Past performance

Past performance of the organization is very important for the success of project. It is hypothesized that pervious performance reflects the status of an organization and also impact on the project success. March & Sutton (1997) explained about different studies of performance management and effects. He said need more studies to analyze the impact of past performance on organization. The function of performance is common in term of management because it is a major factor in an organization so its definition is an organizational level is self explanatory (March and Sutton, 1997). In view of previous literature, success of project is based on time, budget and scope. According to Levin (2010) an enterprise or any company wants to deliver best products and services for their customers and to increase the sustainability of their projects. If an organization has experience and past performance is satisfactory, it will be the main factor for the success of project and this success automatically convert into organizational success. Presently, many organizations are project based organizations and strategies on project and project level. In project environment you can easily assess the performance. For future planning of projects and guidelines past projects performance is the key factor. In this study we also analyze the impact of past performance on project success in Pakistani public sector organization.

Proposed research model

The proposed research model for the present study adopted from the previous study (Doloi, Iyer and Sawhney, 2010) and shown in Figure 1 comprises the four independent variables (planning and control, soundness of business and workforce, quality performance and past performance) to assess the impact of dependent variable (overall project success).

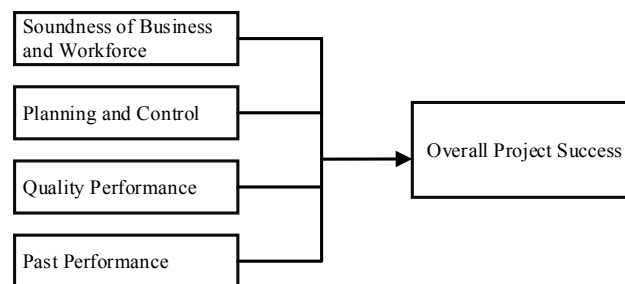


Fig. 1. Research Model, (Source: Doloi, Iyer and Sawhney, 2010)

Methodology

This preliminary study has mainly employed the quantitative method (i.e. survey questionnaire) in order to understand the better



picture of critical success factors in the Pakistani public sector organizations. Bhattacharjee (2012) argues that the survey research have inherent strengths compared to other research methods is ideally suited for remotely collecting data about a population that is too large to observe directly. To ensure consistency among all variables, this research measures all items using 1 to 5 points Likert scale except for the demographic data. The Likert scale is designed to examine how strongly the respondent agree or disagree with a certain statement (Sekaran, 2003). These 5 points scale, where 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree. This has been the most widely used method of scaling in the social sciences research. Moreover, this scale is much easier to construct, and much more reliable than other scales (Dumas, 1999).

Reliability and validity analysis

Questionnaire was used to collect information on Planning and Control, Soundness of Business and Workforce, Quality Performance and Past Performance on Project Success. The survey questionnaire was adopted with previous study (Doloi, Iyer and Sawhney, 2010). Consequently, it required to test for applicability in the context of Pakistan which will help to create its ecological reliability and validity. The questionnaire comprised of two parts namely; Section 1) Project success comprised 4 items, planning and control comprised 6 items, soundness of business and workforce comprised 7 items, quality performance comprised 6 items and past performance comprised 6 items. Section 2) demographic information of the respondents and background section with 6 items; Therefore, the survey questionnaire contains total 35 items to achieve the present research objective.

Pilot study

Pilot test is a technique to pre test the reliability of survey instrument before to conduct actual data. It is a technique to measure the research variables from the sample to achieve the objectives of the studies (Abdullah and Chong, 2014). The present pilot study was done among the 30 project managers from public sector organizations to check the content validity of survey questionnaire. Reliability for the questionnaire was examined using Cronbach's alpha. Out of 35 survey questionnaires, 30 survey questionnaires were collected from the respondents among the defined population. All the respondents found the survey questionnaire were easy to understand and there were no observations requiring change to the survey questionnaire. Reliability test was done to check the internal consistency using Cronbach's alpha. As value of Cronbach's alpha was excellent so we can say that reliability of the items is above acceptance level and we can carry on for further study. Now the next stage is to run the internal consistency using Cronbach's alpha.

Table 1: Summary of Reliability Statistics (Cronbach's Alpha)

Variables	Items	Cronbach's Alpha
Soundness of Business and Workforce	7	0.786
Planning and Control	6	0.884
Quality Performance	6	0.752
Past Performance	6	0.684
Project Success	4	0.871

Reliability analysis

According to Sekaran (2005) reliability is an indication of stability and consistency with which the instruments measure the concepts and ensures the goodness of the measures. Smith, Thorpe and Jackson (2009) argue that reliability is important because it assesses how far each questionnaire can be relied upon to produce the same result for each occasion that it is used. In Table 1, we performed reliability analysis on all variables. The value of Cronach's alpha of above 0.60 is reliable (Sekaran, 2005). Alpha value of Soundness of Business and Workforce was 0.786, Project Planning and Control was 0.884, Quality performance was 0.752, Past Performance was 0.684 and Project Success was 0.871. It was found that the questionnaire items are reliable and effective. Therefore, based on the Cronbach

alpha value score, the proposed survey instrument has fulfilled the basic requirement of a valid instrument.

Conclusion

The findings of this preliminary study shows that the overall project success need to be improve further in Pakistani public sector organizations. Mobey & Parker (2002) argue that to enhance the probability of success in projects good knowledge of critical success factors pays a vital role. Project management is the part of management and the discipline of social science. Pakistani business and social sector is facing extreme negative results and failures due to poor economic condition, energy and law and order situation. Pakistan is facing business uncertainty, a lot of pressure on project executers, unanticipated actions, requirements and constraints changing and uneven resource sharing. This obviously shows that if we not take proper steps to manage these critical factors the probability of failure will be high. New techniques and methods of project management can support management to meet project objectives. Development projects have a vital role in the growth of any country especially in socio economic development.

Future research

Looking in to the current challenging environment in public sector organizations in Pakistan with new trends and technologies, there is dire need the research on identifying the most critical success factors for project success in public sector organization of Pakistan. Critical success factors are needed to be measured to find its relationship and impact on project success and it becomes a significant area to study from the perspective of Pakistani public sectors organizations. The findings may be generalized to the other South Asian Association for Regional Co-operation countries because of the similarities of the region.

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