

Success Factors in Higher Learning Institution Projects

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Abstract: Success is usually in the eye of the beholder. A lot of elements are involved in the success of an institutional project. The main objective of the study is to examine significant success factors in academic projects. This study also highlights a difference amongst previous and present studies of the project. A project, in the case of success or failure, leaves knowledge for learners. It paves all the stumbling from the way of differences and one can judge themselves whether they improved their capability and ability in time series. In the Kingdom of Saudi Arabia, academic institutions were analyzed qualitatively. The findings suggest that selecting an experienced project manager, personnel offshore or onshore training and presence of an executive associate to success of the project. The findings also suggest that a success or failure of a project does not depend upon the role of management in minimizing user conflict the experienced consultants and steering committee. This study and knowledge is more beneficial for all developing countries, policy makers and the academic institutions with limited resources.

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1. Introduction

According to the statement of the Y. Paster, “A man's own adversity makes him wise, but learning from others' adversity makes him even wiser”. The main objective of this study is analyzing the past as a factor in the future success of project implantation. The project is a one-time temporary activity. Every project has a starting and an ending. It has an appropriate schedule, budget, and quality constraints [1]. The project management is a set of tools, techniques and knowledge which help to achieve the three main constraints of scope, cost and time. The literatures studies witnessed that 52.7% of projects were not able to complete on time and over cost and 31.1% not fulfilled the scope [2]. The project management plays a vital role in the success of a project and a lot of academic institutions particularly concentrate on project management. It is important as it applies managerial process and has its tools that give project managers a good opportunity to succeed in achieving our objectives. Success is usually in the eye of the beholder Budget, and time elements may be considered the sole proof for the success of a project but the most dashing element here is the past and present study for a project. It is always done that if we have a glance on project, we could find that members sit together, have a counsels and under these they without having a statistical approach give their recommendations for. Then it is trying to find out whether it could be used practically or not? Then in a second step, it is trying to find out whether the project has a practical implication? It is also trying to

find out whether can it implemented or not/so for this it is tested in big institutions of Saudi Arabia.

The literature studies examined reasons for failure of the projects in the past. As per the observations of Brown CV, Vessey [5] that, “Although failures to deliver projects within schedule and budgets were an old story, enterprise systems held even higher risks — they could be a ‘bet-our-company’ type of failure” [5].

A successful project fulfills all the aspects of ISS theory if it is completed on time and within budget. It is done under the supervision of expert committees. Then it is trying to find out how much a project yields practical qualities and can be put in a practical framework. This paper also examines the usage of SSF in management that:

- *Is SSF properly used in the implementation of a project?*
- *Is SSF are more relevant in the success of a project?*

This study follows the Yin multiple case study method [6]. A structured questionnaire is distributed amongst different educational institutions project manager of the HLI, Kingdom of Saudi Arabia. The findings confirm that following factors are more important for SSF in implementation of the project as shown in the table-1.

Table 1. SSF by Yin multiple case study method [6]

S.No	Name of factors	Brief description
1	Project Manager	A full time experienced project manager
2	Offshore/ Onshore Training	The quantity and quality capacity building of personnel of the system
3	Supporter	The existence and effectiveness of a supporter

The finding also confirms that following main factors (MF) have no effect on successful and unsuccessful projects as follows by Bradley study [41], is shown in table-2.

Table 2. Main Factors of Bradley study [41]

S.No	Name of factors
1	Appointment of consultants
2	The management role particularly in minimizing user resistance
3	The major role of a steering committee
4	An integration level of planning
5	An experience full time project manager
6	The director beyond project approvals
7	Resource allocations
8	Occasionally review of the Project

This study and knowledge is more beneficial for all developing countries, policy makers and the HLIs with limited resources.

The rest of the paper is divided into four sections. First we will put forward a brief introduction. Next we will present a background study in section 2. The section 3 outlines the methodologies of data collection while section 4 presents findings and results of our analysis along with a conclusion.

2. Background Study

As per 2001 Standish Group Study Report, the ratio of successful project is 16% which is very low as compared to the failure ratio of 84%. It was observed that 80% of project fail on account of over budgeted, late or can't contain all requirements [31-32]. According to the CHAOS Manifesto 2011 Report, the Standish Group's shows a marked increase rate in success of the project from 2008 to 2011 as shown in table-3 [33].

Table 3. CHAOS Manifesto Report, the Standish Group's [33]

Project(s)	1994	1996	1998	2000	2002
Challenged	53%	33%	46%	49%	51%
Succeeded	16%	27%	26%	28%	34%
Failed	31%	40%	28%	23%	15%

The rate of success may differ to the

judgment of an individual. Freeman and Beale [34] highlighted that success means “*different things to different people*”. Therefore criteria for complete success must reflect different views and interests. It leads to a multi-criteria and multi-dimensional approach [35-36]. The benchmarks for measuring the success or failure of any project by different authors are shown as in table-3 [36-37].

Table 4. Main Functions of Project Management by the Authors [35-37]

S.No	3-Main Functions by Pinto and Mantel [36]	4-Main Functions by Shenhar, Dvir and Levy [37]
1	The process of implementation,	Meeting design goals
2	The perceived value of the project	Benefit to the customer
3	User satisfaction with the delivered project	Commercial success
4	-----	Future potential.

The Ashley [38] presented a model regarding determinants of project a success which is shown in figure-1.

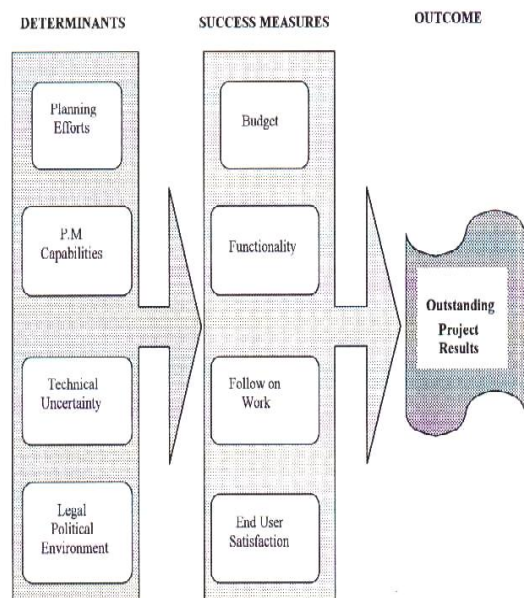


Figure 1. Determinants of Project Success [38]

In some other literature studies, the role of some well known researchers can not be negligible like as Fayol, Koontz, Druckers etc .Fayol and Koontz [6-7] highlighted following five (5) main functions in project management while the authors of latest literature study such as Daft, Jones and George; Williams [10-12] reduced main function from five to four in the project management as detail of different authors shown in table-5:

Table 5. Main Functions of Project Management by different Authors

S.No	Main Functions by Fayol	Main Functions by Koontz	Main Functions by Daft, Jones and George; Williams
1	Planning	Planning	Planning
2	Organizing	Organizing	Organizing
3	Coordinating	Staffing	Staffing
4	Commanding	Leading	Leading
5	Controlling	Controlling	-----

In literature study, Koontz model focused on following main inputs of project management as shown in table-6 [6].

Table 6. Main inputs of Project Management by Koontz [6]

S.No	Main inputs of Project Management
1	Human
2	Capital
3	Management
4	Technology

The Drucker study [9] is the same as Koontz and quoted that a good result is the responsibility of the management. His study added values that management is also responsible for “*productivity and achievement*” and “*organize work for productivity*” [9].

The Drucker [9] study examined that *development was controlled by the One which have a significant role on performances and results*. The Drucker study also has some questions that “*What is the minimum information needed control a project?*”. The Bullen and Rockart [13] highlighted *key areas of activity* in SSF for project Manager *which produce favorable results in order to achieve his objectives. A successful manager always concentrates on their scarcest resource and time which make a difference of things between success and failure.*”

The Nicolaou [14] study highlighted a number of factors for implementation of project success. The Sneller [15] study report regarding SSF depends upon the classical management theory in projects. He surveyed 150 project managers and proposed that user satisfaction is a composite success variable for improvement in performance metrics. He failed to find any other relationship between success factors [15]. The findings of Sumner [17] study based from four (4) case studies of 500 top computer executives of the Fortune. The Laughlin [18], a consultant of IBM Global Services, gives recommendations on his own work. The propose framework of Holland and Light [19] is merging SSF into the tactical and strategic factors. It was based from eight (8) case studies. Nah [20] focused in ten

(10) articles by practitioners and academics. His discussion focused that what are the main critical factors which play a vital role in project success? The Brown and Vessey [5] identify five (5) main SSF for the projects after study of dozen projects. The detail finding of all the authors is shown in table-7.

Table 7. Main SSF for the projects by different Authors

S.No	Main SSF by Nicolaou study	Main SSF by Sneller study	Main SSF by Brown and Vessey study
1	Involvement and participation of a user in a system development	User participation in planning	The planning includes an existence of a proper plan with support of well defined nstitutional plan, clear project goals and a motivating justification.
2	Need base assessment	Reporting level of project manager	The organizing includes a full time professional experienced project manager who regularly reports to a high level in the HLI and a time budget with a manageable workload
3	Analysis phase processes of the project	Experience levels of project manager	The staffing includes offshore/onshore training of management and users, skills of the project leader selecting the experience consultants and user teams, and incentives for successful completion of project.
4	The level of data integration designed into the system	Use of a consultant	The leading includes the top management support, a top priority culture of shared values, project champion, communications between team, management and the rest of the institutes, change management and a satisfying mindset.
5	-----	Use of formal tracking system during implementat ion.	The controlling of the project should originate with top management, usually using a steering committee. The progress against the plan should be monitored in terms of time, budget and institutional impact of the project.

The present study selecting ten (10) SSF from seventeen case studies of the Kingdom of Saudi Arabia institutions to determine:

- Whether the literature study's recommendation were practiced and followed in the implementation of projects;

- Whether the projects were successfully completed within schedule and budget.

The figure-2 showed a detail of suggested SSF also confirm of Bradley study [41]:

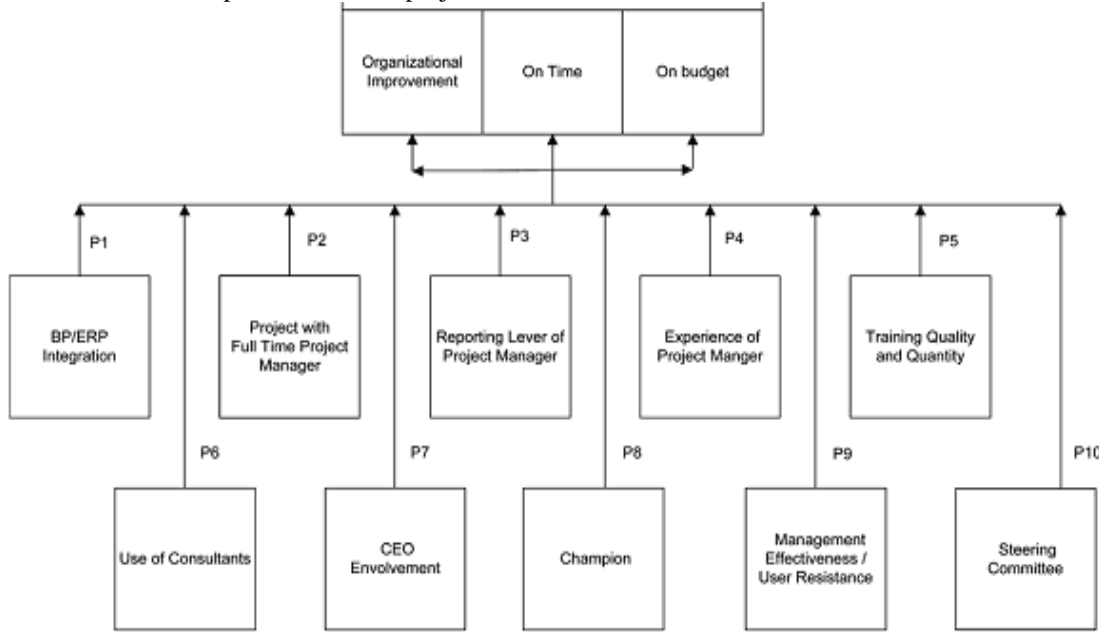


Figure 2. Significant Success Factors [41]

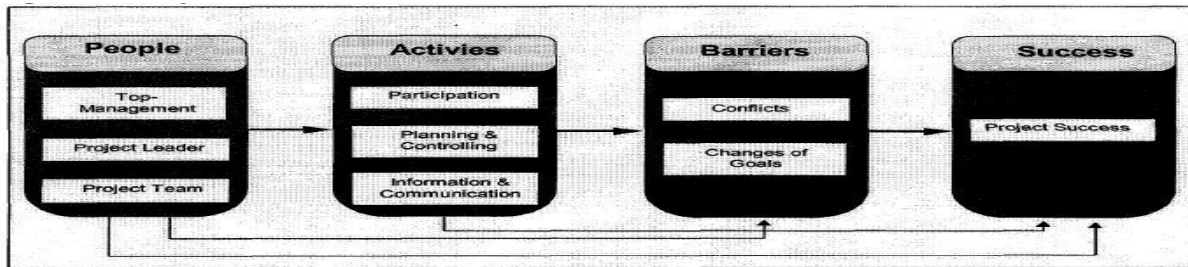


Figure 3. Significant Success Factors [21]

The Hanse George and Thomas Lechler review included 155 studies and investigated 9760 projects (about 2800 successful, 2200 unsuccessful and 4760 unclassified projects). They focused on following four major factors presented in figure -3 as well as shown in table-8.

Table 8. Main SSF by Hanse George and Thomas Lechler study [21]

S.No	Main Functions of project management
1	People
2	Activities
3	Barriers
4	Success

According to the Markus and Tanis [22] study observation that project is “a lack of consensus and clarity about the meaning of ‘success’ where

information systems are concerned.” During 1981-87, the Lone and McLean [23-24] reviewed 180 research articles and developed a success model for Information System (IS). This model was based on six (6) dimension systems as shown in table-9 [41].

Table 9. Dimension systems by Lone and McLean [23-24]

S.No	Dimension systems
1	Use
2	User Satisfaction
3	Quality
4	Quality Information
5	Individual Impact
6	Institutional Impact

The DeLone- McLean success model

observed a greater impact on the success of the project which is mostly accepted by all the researchers as referenced in 285 papers of the literature studies through mid-2002 [23-24]. The DeLone and McLean [23-24] state that their success model is a standard of the specification and justification for measurement of the dependent variable in research of information systems. The Seddon [25] extends the DeLone–McLean model [25-27]. Satisfaction means a measure of success rather than a dimension of success [28]. The Ifinedo and Nahar [28] proposed a successful model in which they eliminated “use” and “user satisfaction” from the six (6) dimensions of the DeLone–McLean model, but added quality, Workgroup impact and vendor or consultant [41]. The Ernst and Young survey pointed out that project performance is measured on the operational level. They proposed the following three (3) criteria’s [29] as shown in table-10:

Table 10. Criteria’s by Ernst and Young [29]

Criteria-I	Criteria-II	Criteria-III
Is the projects delivered on budget?	Is the projects delivered on time?	Is user satisfied with the projects delivered?

The Brown and Vessey [5] observed that project successes are “*an up-and-running system with agreed-upon requirements delivered within schedule and budget*”. In this study, an organizational impact, within schedule and budget performance of the projects are used as success criteria as developed in the DeLone–McLean model.

In this study, all these three factors are considered for implementation of a successful project. Beside all these stated, a brief additional literature study review which has some significant contribution to project success is presented in table-11 [39].

Table 11. Literature reviewed by Jugdev, Kam and Ralf Muller [39]

Name of Authors	Dimensions for a project success
Morris and Hough (1987)	Project management (i.e specifications, schedule and budget) Project functionality (i.e technical and financial requirements) Contractors’ commercial performance Project closure or termination (making reasonable and efficient decision on canceling a project)
Pinto and Slevin (1988)	Organizational validity Organizational effectiveness and efficiency Technical validity
Pinto and Prescottt (1990)	Schedule and budget Value (merit, positive impact, improved organizational effectiveness)

	User or Client satisfaction (in terms of product use, benefits to end users through increased efficiency or employee effectiveness)
Kerzner (1987); Freeman and Beale (1992)	Efficiency of execution Personal growth Technical performance Business performance Manufacturability Managerial and organizational implications (user or customer satisfaction)
Belassi and Tukel (1996)	Factors related to the organization Factors related to the external environment Factors related to project Factors related to the project manager and team
Shenhar et al. (1997)	Impact on customers or user Business and direct success Project efficiency Preparing for the future
Turner (1999)	Provide satisfactory benefits to the owner Satisfy the needs of owners, users, and stakeholders Satisfy the needs of the project team and supporters Meet its restated objectives to produce the facility Meet its stated business purpose Make a profit for all the project team and their supporters Have a deliverable that should be produced to specification within schedule and budget
Cleland and Ireland (2002)	The contribution that the project made to the strategic mission of the organization or firm The degree to which technical project performance goals were attained (e.g. Scope, Cost and Time)

3. Methodology

This study used a multiple case study approach as follows by Yin [6]. Following the Yin approach, data were collected through interviews and questionnaires from universities of the Kingdom of Saudi Arabia. The choice was given to the respondent to provide data through questionnaires or to be interviewed. We continuously monitored the collected data regarding accuracy, consistency and completeness. At the time of data collection, it was also screened away for accuracy and legibility. This allowed to go back to the respondents to clarify any problems. In a spreadsheet program, all the data were stored so that it could be accessed in subsequent data analysis. Most information was based on subjective judgments from personal recall. Subjective information was taken as being accurate.

Table 12. Proposed Recommendation Categories

Category-1	Category-2	Category-3
Management techniques considered in the implementation of successful project institutions, but not used less or at all in unsuccessful project intuitions.	Management Practices considered being more important to success. It does not differentiate between successful and unsuccessful projects. These factors may be very important for success of the project but do not appear adequate guarantee for successful implementation of the projects	Management practices supported in the literature studies but not supported in the case studies

4. Findings and Conclusion

This study improves understanding of SSF in implementation of projects. This study also starts with an aim of the implementation project. The literature study gives some untested and unstructured recommendation. The proposed recommendation is divided into three (3) categories as shown in table-12.

4.1 Role of Significant Success Factors with some impact on success and failure of a project

The significant success factors that have an impact on project success which have been observed from collected data of structured questionnaire are following:

4.1.1 Functional Specialist

The use of a functional specialist expert can't be ignored in project success. Projects without field expert are not more successful than those having an expert where the expert plays a significant role.

4.1.2 Offshore or Onshore Training

The role of expert training cannot be ignored here. It also plays a significant role in a project's success. All highly rated and successful project focuses on offshore or onshore training of their employees. Although it yields some expenses element too much but better for a successful project.

4.1.3 Project manager

We can't ignore the role of the project manager in project success. All successful projects of project managers had more experience and project management than unsuccessful project managers. A monetary or non-monetary rewards or incentives for motivation are not a consideration for a good project manager. A good project manager considers the only recognition of performance.

4.2 Role of Significant Success Factors without any impact on success and failure of a project

The significant success factors that did not differentiate between success and failure which have been observed from collecting data from structured

questionnaire are following:

4.2.1 Steering committee

Culminating our view, the use of steering committees is doomed as subaltern as well without taking into consideration whether a project is successful or not.

4.2.2 Project skills consultant

A whacking element in the success of the project is consultant's presence. It has a positive role on the project but not significantly on time and on/under budget performance of projects or institutional improvement.

4.2.3 Role of management

All successful and unsuccessful project implementation supposed management as an efficient and effective in minimizing resistance of the user.

Keeping in view of requirements, the data were collected by questionnaire. The present study identifies the relative importance of different dimensions to overall project success which describes a brief analysis result as shown in table-13. It also follows the extension of data collected by Poli [40-41].

Table 13. Result Analysis of data collected by questionnaire

Success Dimension	Efficiency - Schedule	Efficiency - Budget	Impact on User	Impact on Institution	Building for the Future
Not Achieved	4	5	2	1	2
Achieved	13	12	15	16	15
Perceived Overall success	17	17	17	17	17
Success frequency	0.75	0.73	0.88	0.93	0.88

4.3 Role of momentous and influential Significant Success Factors

Beside these, stated above, some momentous and influential significant success factors have also been observed for collecting data from a questionnaire which are shown in table-14.

Table 14. Momentous and influential Significant Success Factors (ISSF)

S.No	Momentous and influential Significant Success Factors
1	Timely approval and release of fund
2	Minimizing procedural delaying tactics
3	Strong communication and capacities
4	Proper project planning, controlling and monitoring
5	Proper implementation of policies
6	Proper implementation team skills

These all significant success factors are more efficient and beneficial for all developing countries, policy makers and the academic institutions with limited resources.

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