

What Extent Lesson Learned Can Help Project Mangers under Probability of Success or Failure Circumstances?

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Abstract: - Project managers usually pave the way toward achieving the project success. However, some projects completed either successfully or not, or may be left unfinished. Central to debate on the importance of the project management success and failure factors is the question of to what extent lesson learned from real life projects can help project mangers under probability of success or failure circumstances? This paper provides some thoughts about success/failure criteria for taking preventative measures under conditions of confronting any threat of failing during managing projects. The real life projects were analyzed and lesson learned extracted based on theoretical review. This paper proposes a project divisional clusters, and comprehensive success and failure paradigms which is also tabulated and discussed in a brief manner.

Key-Words: - Project success Factors, Project failure factors, Project Management, Risk Factors

I. Introduction

A project is considered as a complex, non-ordinary, technical and procedural effort which is limited by time, budget, resource and performance to meet customer demands (Gray and Larson 2008). According to the significance of the project itself, the project management importance is made manifest itself and defined as “the process of controlling the achievement of the project objectives by applying a collection of tools and techniques” (Munns and Bjeirmi 1996). Highly influential factors that directly or indirectly cause the failure of the project are identified by many researchers in this field, for example Munns and Bjeirmi (1996) listed failure factors as an inadequate basis for the project, unqualified project manager, inadequate and ineffective communication, lack of technical know-how, inadequate sense of commitment.

Moreover, Thomas and Fernández (2008) clarified that any types of negligent regarding time, cost, and customer satisfaction will lead to fail project. Additionally, Haughey (2010) put spotlight on the importance of the management perceived model in project management as if it is considered, then project is successful, and vice versa. Nowadays, overwhelming majority of the companies are become project-oriented, considering project management as a golden key in order to achieve

project objectives and consequently for the company’s sake itself. According to crucial role of managerial process, Haughey (2010) signified that it is necessary to keep eyes on behaviour, technical skills, potential for leadership, personal strengths and weaknesses and finally experience. It seems certain that three basic managerial traits such as personal and conceptual skills, technical skills and decisional and communicational skills can play a significant role in project success. It means that, project can be successful even when there is no appropriate management and can fail even though it was managed well, but the fact of the matter is that any lax management will increase the risk of failure. Undoubtedly, project manager is of the essence in all aspects of project management.

IPMA (2006) defines the project manager is “is not responsible for achieving the business benefits of the project, which accrue to and are largely realized by the organization once the project is delivered”. Projects failure may negatively affect the whole implementing enterprise (Hong and Kim 2002; Lavbič, Vasilecas et al. 2010; Bernroider and Wong 2014; Taherdoost and Keshavarzsaleh 2015). Furthermore, today, project-centred organizations can apply integrated project management encompasses; project scope, time, cost, quality, human resource, communication, risk, procurement and stakeholder management for the purpose of

making sure that the project can be successful. The following sections discuss the project's presupposed divisional paradigm and factors which contribute to either project success or project failure in project management systematically. While there is much published on project management success/failure factors and other spheres, an in-depth theoretical research on projects success/failure factors, concepts, and project risk factors has been largely ignored. This research provides significant lesson learned tips which is pertinent to theoretical review. The findings of our research will attract a lot of interest from project managers, practitioners, and researchers.

2 Project Presupposed Divisional Paradigm

Basically, projects can be divisionalized as three main presupposed divisions (Clancy 1995):

- ✓ Division one; is perceived as successful projects in terms of being on-time, on-budget, and fulfilled what it set out to do, including functions and features.
- ✓ Division two; is perceived as fulfilled projects, but neither on-time and on-budget nor accomplishing of what it set out to do, including poor functionality and features, so called functionally challenged.
- ✓ Division three; is perceived as cancelled projects during the project development cycle.

There is empirical evidence that failure is a persistent trauma within project-oriented organizations (Lindahl and Rehn 2007). Stories of "failed", or "failing" projects, abound in the media, from construction (London's Wembley Stadium), to aerospace (F-35 fighter) and IT (UK NHS patient record system). Based on Standish Group reports, the success rate among the evaluated projects was 16.2%, functionally challenged projects was 52.7% and cancelled ones accounted for 31.1 %, see Table 1 in which the rates are tabulated between 1994 to 2002 according to CHAOS report (Clancy 1995).

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Table 1. CHAOS report

Division	1994	1996	1998	2000	2002
Successful projects	16%	27%	26%	28%	34%
Functionally challenged projects	53%	33%	46%	49%	51%
Cancelled projects	31%	40%	28%	23%	15%

3 Project Success Factors

As long as the project management and final result are inherently interrelated together, the success of the project has often been associated with final result of the project and project success criteria but, there has not been a concept can defined how they can link and affect each other. Success factors that are implemented by both national and multinational organizations are listed as twelve success factors as an example of adequacy of company-wide education, maturity of an organization's processes, adequacy with which a visible risk register is maintained, adequacy in maintaining an up-to-date risk management plan, adequacy of documentation of organizational responsibilities for the project, keeping the project as far as possible below a duration of 3 years, allowing changes to the scope, maintaining the integrity of the performance measurement baseline, there being an effective benefits delivery and management process, portfolio and programme management practices, a suite of projects, a program and portfolio metrics and an effective means of "learning from experience" on projects (Cooke-Davies 2002; Taherdoost and Keshavarzsaleh 2015). Shenhar and Levy (1997) recognized the success factors dimensions in terms of short-term and long-term goals according to timeframe of expected results (Table 2).

A very long term goal of preparing for the future is considering and developing new tools, techniques, products, and markets. The top five canons that contributed to project success are initiating, planning, executing, monitoring and controlling and closing are briefly discussed as follows (Taherdoost and Keshavarzsaleh 2015):

- ✓ **Initiating:** To ensure that the “people” as dynamic factor is given just as much attention as more technical components are at the inception of the project and follow what it set out to do as well as to identify all relevant stockholders, including those who are influential or be influenced by, project’s decision, activity and exit points.
- ✓ **Planning:** In terms of planning, keeping the ending point in mind is as important as starting point. A project needs to create prospective value for an organization, correspondingly, following organizational adoption strategy in order to create a value, should be highlighted as well as Critically, project managers should keep organizational adoption, value creation and value exchange in their minds. These are should be tattooed on value creators mind.
- ✓ **Executing:** Now it is time to manage stakeholders need and expectations, this is perceived as how to manage project’s stakeholders effectively? Through utilizing experts and being flexible about changing agents during project execution processes. Moreover, Executor should not be agnostic against any hesitation and negligent.
- ✓ **Monitoring and Controlling:** Assess and meet the ever-growing and ever-evolving expectation of stakeholders through offering adjustable planning.
- ✓ **Closing:** Project is considered closed till delivering its value and being adopt to organization considering lesson learned of the project interval.

Table 2: Time-Based Success Factors

Period	Critical Success Factors
Short-term	<ul style="list-style-type: none"> • Meeting cost • Meeting time • Meeting goals
Medium-term	<ul style="list-style-type: none"> • Meeting Customer demand • Meeting technical specifications • Matching tangible and intangible outcomes • Problem identifying and solving
Long-term	<ul style="list-style-type: none"> • Commercial success • Gaining fat market share • Focusing upon, satisfaction and confidence

4 Project Failure Factors

Notably, failure or problem research is typically based on lessons learned from a wide range of projects however; they are mostly similar enough to be generalized. Failure in project is pertinent to two type of projects to consider when evaluating causes of failure: routine projects (i.e. are well understood, routine projects with a clearly defined scope and few unknowns) and complex projects (i.e. typically have many unknowns and an unclear scope), which is categorized by Meredith, et al. (2002). Actual failure occurs due to there is an inconsistency between what was planned and what was accomplished. On the other hand, planning failure occurs because there is inconsistency between what was planned and what was perceived actual achievable. Kerzner (2009) acknowledged the fact that human dynamics play an important role in project management failure, citing poor motivation, productivity, and human relations; lack of employee and functional commitment; delayed problem solving; and unresolved policy and stakeholder issues. Moreover, characteristic of tendencies observed in complex projects are identified by (Murray 2000):

- ✓ Unrealistic project scope given the available resources
- ✓ Project development experience
- ✓ Improper management of scope creep
- ✓ The continuous expansion of the project scope
- ✓ New technology that is critical to the project has not been previously developed
- ✓ The organization's issues are not understood
- ✓ Custom work is needed for the organization's business activities

Projects fail mainly due to negligence in organization, people , process and technical issues in which they are categorized and briefly discussed as follows (Clancy 1995; Coley 2007; Tsun Chow and Cao 2008):

- ✓ **Organization:** This factor refers to lack of executive sponsorship, lack management commitment, traditional organization culture, political-oriented organizational culture, and oversized-organization which lead to project failure in terms of plans are not used appropriately to guide project forward.

- ✓ **People:** This is caused by lack of technical know-how, lack of competent project management, lack of teamwork, any resistance amongst individuals or groups, and wrong or bad customer relationship management along with stakeholders.
- ✓ **Process:** The absence and underestimating of project scope, project requirements, and planning, and lack of customer presence are perceived as factors in which cause failure significantly.
- ✓ **Technical:** This refers to the basic level of requirements as an inappropriate use of technology and tools in which obtainable base level of requirements and the developing features are neglected and ultimately lead to fail project.

5 Conclusion

This paper discusses about project success and failure factors and its clusters. The new scheme we presented in this paper, presents the factors both success and failure along with project divisionalized types in a more systematic way. Project divisionalized paradigm helps project managers understand and overlooked dimensions of project success and failure factors. For example, the project itself divided and classified as successful, functionally challenged and cancelled one.

Furthermore, success factors categorized in time-based manners as short-term, medium term, long-term and very long-term projects including crucial factors which should be considered. Moreover, regarding failure factors, this paper represents a systematic clusters of factors lead to failure is initiating, planning, executing, monitoring and executing and finally closing steps in project management periodically. Thus, project managers need better understanding the success/failure factors and interaction between them.

We know what are the project success/failure factors and we know how to prevent the failure or at least increase the chance of success, but why do the projects still fail? We expect to see additional future research concentrating on the mutually exclusive and inclusive relationships between all aforementioned critical factors in terms of both success and failure factors.

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References

- [1] Bernroider, E. W. N. and C. W. Y. Wong, Lai, K., (2014). "From dynamic capabilities to ERP enabled business improvements: The mediating effect of the implementation project." international Journal of Project Management 32: 350-362.
- [2] Clancy, T. (1995). " The Standish Group Report." Chaos report Retrieved Feb 20, 2008.
- [3] Coley, P. (2007). "Why projects fail? ." Project fail Retrieved 27 Feb, 2008, from www.coleyconsulting.co.uk.
- [4] Collins, A., Baccharini, D., 2004. (2004). "Project success—a survey." J. Cons. Res 5(2): 211–231.
- [5] Cooke-Davies, T. (2002). "The real success factors on projects." International Journal of Project Management 20(3): 185–190.
- [6] Gray, C. F. and E. W. Larson (2008). Project Management : The managerial process., McGraw–Hill Educations, Singapore.
- [7] Haughey, D. (2010). "How to recruit an IT project manager." Project Smart: 1-4.
- [8] Hong, K.-K. and Y.-G. Kim (2002). "The critical success factors for ERP implementation: an organizational fit perspective." Information & Management 40: 25-40.
- [9] IPMA (2006). IPMA Competence Baseline (ICB). The Netherlands. 3.0.
- [10] ISO/IEC 16326. ISO/IEC 16326:2009: ISO/IEC and . (2009). Systems and Software Engineering – Life Cycle Processes – Project Management. Geneva, Switzerland.
- [11] Kerzner, H. (2009). Project management : a systems approach to planning, scheduling and controlling. Wiley & Sons. Hoboken, New Jersey:.
- [12] Lavbič, D., O. Vasilecas, et al. (2010). "Ontology-based multi-agent system to support business users and management." technology ,economic, development 16: 327-347.
- [13] Lindahl, M. and A. Rehn (2007). "Towards a theory of project failure." international journal of management concept philosophy 2(3): 246–254.
- [14] Meredith, J. R., S.J. Mantel, et al. (2002). "Project management : a managerial approach."
- [15] Munns, A. K. and B. F. Bjeirmi (1996). "The role of project management in achieving

- project success." T Int. J. Proj. Manage. 14(2): 81–87.
- [16] Munns, A. K. and B. F. Bjeirmi (1996). "The role of the Project Management in achieving project success." International Journal of Project Management, Scotland, UK 14(2): 81-87.
- [17] Murray, J. P. (2000). "Reducing IT project complexity. Information Strategy." The Executive's Journal 16(3): 30.
- [18] Shenhar, A. J. and O. Levy (1997). "Mapping the dimensions of project success." Project Management Journal 28(2): 5-14.
- [19] Taherdoost, H. and A. Keshavarzsaleh. (2015). "Change Management in Project Management." Retrieved 11 July, 2015, from <http://www.ahooraltd.com>.
- [20] Taherdoost, H. and A. Keshavarzsaleh (2015). "How to Lead to Sustainable and Successful IT Project Management? Propose 5Ps Guideline." International Journal of Advanced Computer Science and Information Technology 4(1): 14-37.
- [21] Taherdoost, H. and A. Keshavarzsaleh (2015). A Theoretical Review on IT Project Success/Failure Factors and Evaluating the Associated Risks. Telecommunications and Informatics, Sliema, Malta, World Scientific and Engineering Academy and Society.
- [22] Thomas, G. and W. Fernández (2008). "Sucess in IT Projects: A matter of definition?" International Journal of Project Management 26(7): 733- 742.
- [23] Tsun Chow and D.-B. Cao (2008). "A survey study of critical success factors in agile software projects." The Journal of Systems and Software 81: 961-971.