ISSN: 1992-8645

www.jatit.org



E-ISSN: 1817-3195

# FACTORS INFLUENCING INFORMATION TECHNOLOGY PROJECT MANAGEMENT SUCCESS IN THE FINANCIAL INDUSTRY

#### MOHD SAZILI SHAHIBI<sup>1</sup>, SHAMSUL ANUAR SARIFUDIN<sup>2,</sup> NORHAYATI HUSSIN<sup>3</sup>, ZAHARUDIN IBRAHIM<sup>4</sup>, JUWAHIR ALI<sup>5</sup>, SHAMSUL KAMAL WAN FAKEH<sup>6</sup>

Faculty of Information Management, Universiti Teknologi MARA Cawangan Selangor Kampus Puncak Perdana, Shah Alam, Malaysia

E-mail: mohdsazili@salam.uitm.edu.my1,yatihussin@gmail.com 3

#### ABSTRACT

This study expounds five factors including twenty aspects of project management factors that influenced Information Technology project success, such as scope management, time management, cost management, quality management and people management whose impact on the successfulness of project delivery was assessed through the survey in several project-based departments of financial industry in Malaysia. The purpose of the study is to examine the significant relationship between the project success and the management of iron triangle artifacts which include quality and people management, in order to ensure more positive outcomes in banking project delivery. Depending on the theoretical framework the questionnaire was compiled and it covered five relevant management areas including project success factors. The questionnaire was used as a data collection technique. The observation and the statistics revealed that proper management of scope, time; cost, quality and people have a strong influence on Information Technology project success. There is also a necessity for further research which arises from certain limitations of the study. Further research should cover those management factors that have not been covered in this study. It also investigates in-depth those practices that show the most significant correlation with project success.

# **Keywords:** Library And Information Science, IT Project Management, Project Management, Banking IT Project)

#### 1. INTRODUCTION

Information Technology Project management shapes the establishment of numerous commercial events in industries as the financial sector. projects drive business. Project management, subsequently, is viewed as the way toward settling on choices and characterizing particular techniques and strategies to convey a project to achievement. According to the Project Management Institute [24], projects are the organization's activities that cannot be done by ordinary or routine activities in the organization or a transient effort to achieve an unparalleled output. Extensive scale construction and engineering projects apply overpowering impact over the subject of project management. Moreover, project management is not limited to being an instrument for the construction and engineering firms only, rather, it is a type of management that is utilized as a part of an expansive scope of services, including the financial sector, consulting among others.

According to Nicholas [23], the principal distinction between project management in construction engineering industry and services is that the final product of services is not essentially tangible. The service business of which financial sector is a section is one of the developing and imperative sectors in each economy. However, in the midst of this development lies numerous challenges as far as the project achievement is concerned. These challenges restrain their advantages and block them from accomplishing their vital objectives and this requires a critical look at project success. Furthermore, such challenges obstructed undertakings from meeting their schedules and surpassed the spending which brought about issues not meeting the desired

ISSN:	1992-8645
10011.	1774-0045

www.jatit.org

quality anticipated from the project and making a project such a disappointment [35].

Project success was introduced to as achieving the goals consistent with fixed conditions of time, cost and performance. As knowledge in project management field established, the iron triangle was considered insufficient to express project success. Project success was perceived to be a complex, multidimensional idea incorporating many characteristics [21]. Projects are unique, motivation behind why project success criteria vary with one anticipated project then onto the next project [22]. To increase complexity even more, inside the most recent decades the idea of project success is drawn closer in a relationship with stakeholders' perception [13], being acknowledged that success implies diverse things to various individuals [32].

# 2. PROBLEM STATEMENT

The utilization and management of projects have ascended to another new dimension, with projects seen as basic to fiscal in both the private and public sectors. The motive for the extension of project-based work commonly emerges because of the new challenging environment and prospects achieved by technological improvements, the moving limits of knowledge, vibrant market situations, changes in environmental regulations, the drive towards shorter goods life cycles, expanded consumer participation and the increased scope and intricacy of between hierarchical relationships [5].

Business organization today is working under an abnormal state of vulnerability, project implementation is interested in a wide range of outside impact, startling occasions, always developing necessities, changing requirements and fluctuating resource streams. This obviously demonstrates if projects are applied and steps are not taken so as to oversee them effectively, the possibility of a fiasco is therefore high. According to a survey Robbins-Gioia [28], it was noticed that the regular issues in project management are absence of project management abilities, scope creep, ineffectively characterized goals and targets, high staff turnover, insufficient resources, poor development, inadequate authority given to the project managers and no basic project management techniques adopted in the project team.

Based on the above statement, the cost, time and scope have been linked with measuring a projects' success. It is reasonable to believe that, if a project meets the scope, time and cost targets for a project, it will be considered successful. Therefore, the problem statement of this research are: -

- There is a gap in the interest of Project Management and the Project Success in the financial industry. The most predominant are the focus in either its cost and time or scope and time. But the management of those artifacts is still not intact.
- Quality and people are always left behind in providing a condition to project success. The management of these two factors is also important to ensuring the project success.

# **3. RESEARCH OBJECTIVES**

This study aims to examine the significant relationship between the project success and the management of iron triangle artifacts such as cost, time and scope and these include quality and people, in order to ensure more positive outcomes in financial service industry institutions project delivery.

#### 4. LITERATURE REVIEW

The utilization of projects covers all parts of the banking sectors as a means of arranging the activity, directing the accomplishment of the desired targets. There is an immediate relationship between projects, projects portfolio, programs and the organization plan. As cited by Cleland and Gareis [10] a project as the primary method for making and managing change, is utilized to actualize procedures. Meskendahl [20] mentioned that the projects as the focal building square utilized as a part of the actualizing plan, in this way business achievement are controlled by the accomplishment of the activities. As indicated by Project Management Institute [25], adjusting projects to key strategic objectives conveys esteem to an organization. Executing successful projects creates positive impacts on the organization, affecting short and medium as well as long term improvement.

Profitability and competitive advantage usually relates to the success of the business. A few reviews have been made in this field because of

### Journal of Theoretical and Applied Information Technology

<u>31<sup>st</sup> May 2019. Vol.97. No 10</u> © 2005 – ongoing JATIT & LLS

		3/(111
ISSN: 1992-8645	www.jatit.org	E-ISSN: 1817-3195

the significance of finding what achievement is and how it is measured. Management factors that can contribute to the projects' success are the focus of this study. A topic that has an extraordinary enthusiasm in project management literature. According to Project Management Institute [26], more than thirty percent (30%) of projects fail to achieve their desired objective. Thus, success in projects relationships is even more essential since the quantity of failing projects is significantly high.

In the early days, project success was referred to as achieving the goals in tandem with fixed conditions of time, cost and performance. As knowledge in project management field established, the iron triangle was considered insufficient to express project success. Project success was perceived to be a complex, multidimensional idea incorporating many characteristics [21]. Projects are unique, motivation behind why project success criteria vary with one anticipate project then onto the next [22]. To increase complexity even more, inside the most recent decades the idea of project success is drawn closer in relationship with stakeholders' perception [13], being acknowledged that success implies diverse things to various individuals [32].

#### 4.1 Previous Research

Many organizations believe that a project is a success if the project is finishes within time-line, with the given budgetary plan and meets the client prerequisites with the predefined quality [39]. In addition, there are several parameters by which an organization considers a project a success. Ramos and Mota [29] however stated that project stakeholders such as the CEO, directors, senior management, project manager, operations managers, team members, vendors, suppliers and third parties have a different understanding of the project success.

For instance, the project team has to work extra hours and during the weekend in order to ensure the project is completed within time. Thus, for the top management, a project maybe considered as a success but might not be deemed so by the project team [27]. Also can be vice versa, those projects considered as a successful project for by the project team but may not be for top management as it is not delivered as per the quality and objective of the project. The project has utilized thirty percent (30%) more on actual project budget and has been delayed by two (2) months. Thus it can be concluded that as stated by Beleiu et al [4] that different stakeholders translate the project success in an unexpected way.

# 4.2 Project Management

Project management usually deals with initiating, planning, scheduling, monitoring and controlling all of the project activities in order to achieve the desired goals. Duncan [11] stated that project management is the practice of knowledge, abilities, tools and methods to project activities to project requirements. meet the Project management is the way to managing a project from its start through its execution to its closure. This statement is in line with Project Management Institute (PMBOK 4th Ed. Guide) [25], which noted that project management is accomplished through the application and integration of the project management processes of initiating, planning, executing, monitoring, controlling and closing.

# 4.2 Project Success

In the late 1990's, Dvir et al. [12] had stated that the main variables that contribute to projects' success are the success factors as the control factor that can be managed by the project managers to increase the possibility of delivering the desired outcomes [38]. In the early days, many project management literatures focused on how to find the generic factors that contribute to project success. Savolainen [31] noted that a mix of components will decide the success or failure of a project and impacting these components at the correct time which makes success more plausible. These days, the factors of a project success depend on a project type. Thus, to find a factor that can contribute to project success is more challenging [9]. This is because of the pressure on actualizing the success of the project in a very vigorous global market, rapid growth of business and continuous global innovation [30].

Over the past decades, success factors have significantly progressed from concentrating on the operation level of a project to embracing a project stakeholder [13]. Davis [13] added that there were few lists of success factors that exist as defined by the numerous literature. According to Pinto and Slevin (1987), as cited by [13] there are © 2005 – ongoing JATIT & LLS

ISSN: 1992-8645	www.jatit.org	E-ISSN: 1817-3195

ten (10) elements or success factors defined. These are namely (1) customer acknowledgment, (2) customer consultation, (3) project team members, (4) hierarchical management support, (5) project schedule, (6) technical assignments, (7) project mission, (8) communication, (9) troubleshooting as well as (10) controlling and monitoring. The aforementioned statement was again supported by Tuner and Muller [36] in their study. This study has analyzed and reviewed five (5) selected framework. The framework chosen was based on the similarities of the title, framework variables and definitions that relate to the research proposal as per Table 1 below.

Thus, based on the below literature that focuses on project success, the independent variables were derived and modified from the five (5) literature model. Figure 1 below depicts the proposed framework for the study.

 Table 1: Summary of Selected Theoretical Review

Author	Aim of study	Research Method	Main Findings
Sylvester and Shima (2010)	The study is aimed to critically identify and evaluate the depth of the Project Management Triangle concept applied in the execution of projects tendered by the Oil and Gas Companies to relevant contractors.		A theoretical framework is proposed for the purpose of this research
Sudhakar (2016)	The study is aimed to find out the meaning of project success by considering various factors of projects. The factors impacting project success is identified to understand the meaning of project success.	Literature Review from prominent empirical studies	The research found that the top of the most success factors for many projects include project objective, top management commitment, competent project team and user involvement.
Kuen C. W, and Zailani S. (2007)	This study aimed to identify what are the influencing factors for the success of the project,-particularly the Malaysian context.	Quantitative	This paper provides a framework that identifies the factors for the project success.
Chow, T., and Cao, D. B. (2008)	This research study was a survey study on the critical success factors of Agile software development projects using a quantitative approach	Quantitative (143 Agile Projects)	The results revealed that only 10 out of 48 hypotheses were supported, identifying three critical success factors for Agile software development projects
Ahmad, Younis, Ahmad and Anwar (2015)	The objective of the current study is to analyze the importance of critical success factors in the overall project success in the public sector of Pakistan.	Quantitative (300 respondents)	The study found that there is a significant relationship between critical success factors with overall project success.

# 5. THEORETICAL REVIEW

© 2005 – ongoing JATIT & LLS

Project Success in

Banking



Н1

Н2

HЗ

H4

H5

Figure 1: Research Framework

The research framework established in Table 1.

www.jatit.org

2779

project manager to deliver a fully functioning product or solution. To avoid any unnecessary spending or delay, time must be managed properly and efficiently [6]. As stated earlier, time is developed based on the scope of work and cost, higher time equivalents higher cost or bigger scope. According to Lambropoulos [19] there are a significant number of failure projects because of not meeting the allocated time and budget. Thus,

H2: Time Management positively predicts Project Success

the following hypothesis is formulated:

# 5.3 Scope Management

Scope as per PMBOK 4th Ed. Guide [25] stated that the scope is the functional components that when met, it is considered that the project been delivered and completed. The scope is also known as the job specification which is defined and produced by the particular bank. The project will be executed based on the established scope. It is usually generated and identified even before the project has started [14]. The scope is expected to be finalized when the full session of the user requirement gathering has completed. A Practical measure on the scope success is when the project is delivered with the expected quality [37]. The scope of work must be balance balanced with time and cost. The bank and the project must own the scope of work based on the bank's expectations. Thus, the following hypothesis is formulated:

H3: Scope of Management positively predicts Project Success

# 5.4 Quality Management

Quality comprises of time element, cost element and scope element. Therefore, the proper management of time, cost and scope will contribute to higher project quality. However, in some situation, the project was successfully delivered according to agreed time, cost and scope but yet still not as per the expected quality. The quality of the delivered product or solution is defined by the project stakeholders through their satisfaction and effective management. For the project, quality product or solution can simply be defined as less maintenance over a long period of time [3]. On a negative side, the bank has to allocate more money and longer implementation time in order to produce high-quality products or

#### 5.1 Cost Management

**Cost Management** 

Time Management

Scope Management

**Quality Management** 

People Management

Cost is an estimation of the money that is required by the project. Cost covers all components in the project cycle such as internal and external manpower rates, project resources, bills of quantities, bill of materials, risk appraisal as well as project procurement and etc. In other words, cost covers all monetary aspects of the project. Cost affects the overall project implementation as the bank will have a specific aim in cost-management [40]. The bank as an end user aim is to have a fully function functional product or solution according to the underlined project scope of work. Hence, they have to provide a sufficient amount of money to the project. They also have to comply with the demand of the organization, stakeholder and solution provider. Meanwhile, the person responsible to lead the project aim need to manage properly the cost as well as enough allocated budget for the project through wise behavior. This is essential for the project to be delivered with the cost allocated without any cost re-baseline. Thus, the following hypothesis is formulated:

*H1: Cost Management positively predicts Project Success* 

# 5.2 Time Management

CPMBOK 4th Ed. Guide [5] stated that time refers to the actual time to complete the project. It starts from production or solution delivery until end user signs off for a project. In normal circumstances, the amount of time needed for a project is estimated based on the agreed scope of work and project cost. Time is crucial since it affects the quality as well. The bank must adhere to the project timing and provide a support to the project plan and schedule. Time is needed by the



ISSN: 1992-8645	<u>www.jatit.org</u>	E-ISSN: 1817-3195

solutions [3]. Quality requires intention and synchronization with agreed scope of work. Thus, the following hypothesis is formulated:

H4: Quality management positively predicts project success

### 5.4 People Management

People are internal to the project. Project managers are responsible for achieving project outcomes and planning, organizing and controlling project tasks, while team members are responsible for achieving the project task outcomes. The best project managers are also strong people managers as well as team leaders. He/ She has to recognize the team member and build a strong team belief and relationship as quickly as possible. The managers are also required to assemble the team according to the person maturity, skill and experience, exposure to project and attitude. The project must also be managed by the capable project manager. In banking or in some sectors, the project manager has normally been assigned to senior level management. This action is taken usually with the intention to mitigate the project risk in terms of managing the project [33]. An experience and competent project manager with a people manager behavior gives a positive impact to a project. Project manager not just managing the project and being a team member, him/her also requires to manage the stakeholders' expectation and demand over the period of time until the project is successfully delivered. All these human factors will influence the project success. Thus, the following hypothesis is formulated:

H5: People management positively predicts project success

# 6. RESEARCH METHODOLOGY

There are many ways to study and explore which success factors in the Information Technology project within financial industry in Malaysia that be considered as most essential. As suggested by Bryman and Bel [7], both quantitative and qualitative methods can be used to conduct a research in the business area. In terms of considering more legitimate data into the scope of research, quantitative methods are the best solution for it. This study is about investigating the relationship between the project success and the management of iron triangle artifacts which include quality and people management. Therefore, a quantitative research paradigm will be used as a data collection technique to exploit the area in depth and add alternate knowledge to the existing success factors in the financial industry. The questionnaire will be distributed among projects Project Managers in Malaysia to collect data appropriate for quantitative analysis. Based on the data collected, the research hypothesis will be tested and analyzed accordingly.

The specific group that is significant to this research is identified as the targeted population. Since this research aims for a projectbased department in the financial industry in Malaysia, the population for this study is identified as the projects managed by the Project Managers that are involved in project directly. The survey questions will be distributed to all Project Managers within the financial industries or as a services provider (project vendors) that are involved in most projects implementation in Malaysia financial organizations. This study targets to collect a population size of about 109 projects. The number 109 projects were derived from the average projects conducted or executed by the top 5 financial organization in Malaysia within a year that is about 150 projects. This includes medium and large scale projects that are exposed to project management.

# 7. FINDINGS

Table I: Reliability analysis of research variables

Variables	No. Of Item s	Pilot Cronba ch Alpha	Real Test Cronbach Alpha	Reliability
Success	6	0.712	0.933	High
Cost	4	0.697	0.879	High
Time	4	0.779	0.920	High
Scope	4	0.829	0.947	High
Quality	4	0.867	0.953	High
People	4	0.798	0.870	High

Reliability is a major concern to measure attributes. Therefore, without reliable measures, the data cannot be tested and the output result is not as accurate as needed to help in developing and improving the research objectives [15]. Cronbach's alpha is the most commonly used metric used to evaluate the reliability [16]. Kline

	S 2000 Singsting triffing de 225	TITAL
ISSN: 1992-8645	www.jatit.org	E-ISSN: 1817-3195

[17] stated that the Cronbach alpha value of 0.6 is regarded as a minimum figure for an adequate test.

The study started first with a pilot test. This would allow the researcher to detect the ambiguity or bias in the survey questions. It is important for the questionnaires in each component are tested in the realistic situations. Table II above is the summary of Reliability Statistics Table for All Variables (pilot and real test) which provides the Cronbach alpha value and reflects the high reliability of the measuring instrument. Furthermore, it indicates a high level of internal consistency with respect to the specific sample.

# 7.1 Demographic

Table II: Demographic profile of respondents

Demographic Variables	Frequ ency	Percen tage
Age		
21-30 31-40 41-50	12 28 22	16.9 39.4 31.0
Above 50 Working Experience	9	12.7
Less 5 years 6-10 years 11-15 years 16-20 years Above 20 years	19 26 11 6 9	26.8 36.6 15.5 8.5 12.7
Project Experience Software Development Hardware Configuration and Installation	16 11	22.5 15.5
Total Solution (Hardware and Software) Enhancement	26 18	36.6 25.4

Table 3 presents the demographic profile of the respondents. The result shows that 39.4 percent respondents were from the age group between 31-40 years old. While the age group above 50 years old was the lower age group that contribute 12.7 percent response to the research. For working experience, a total of 26 respondents which indicate 36.6 percent responded that their working experience was between 6-10 years. The lowest, which is 6 respondents, indicated 8.5 percent responded that their working experience was between 16-20 years. On the respondent's project experience, a total of 26 respondents which indicate 36.6 percent responded that their project experience was implementing the total solution project while their subordinates were under hardware configuration and installation project which indicate 11 respondents or 15.5 percent.

#### 7.2 Descriptive statistics of research variables

Table III: Descriptive statistics	s of	research	
variables			

Variables	Mean	Standard Deviation
Project Success	3.92	0.74
Time	3.83	0.75
Management	3.78	0.77
Scope Management	3.88	0.75 0.87
Quality	3.81	
Management People	3.65	
Management		

Descriptive statistics involving mean and standard deviation were analyzed against the research variables and the results are shown in Table 4. The mean values for all of the research variables are above the neutral value at 3.5, thus, suggesting that respondents were persuaded to agree that cost management, time management, scope management, quality management and people management positively contribute to project success.

#### 7.3 Relationship between research variables

The results of the correlation analysis are shown in Table 5. Statistically, all the values of the Pearson correlation were found to be significant at 0.01 levels, suggesting that that significant correlation exists among research variables. Specifically, the values of the Pearson correlation are above 0.500, hence indicating that the strength of the relationship between research variables is moderate. The highest correlation value is between quality management and project success while the lowest is between people management and project success. Nevertheless, as all the values are significant at 0.01 levels, hence all the formulated hypotheses are fully supported.

#### ISSN: 1992-8645

#### www.jatit.org

Table 5: Relationship between research variables

Hypotheses	Pearson Correlatio n	Results
H1: Cost Management positively predicts Project Success	0.593**	Accept H1
H2: Time Management positively predicts Project Success	0.550**	Accept H2
<i>H3</i> : Scope Management positively predicts Project Success	0.540**	Accept H3
H4: Quality Management positively predicts Project Success	0.626**	Accept H4
H5: People Management positively predicts Project Success Note: **Correlation is significant at 0.01 level (two-tailed)	0.508**	Accept H5

#### 8. DISCUSSION AND CONCLUSION

The theory clearly shows that with proper management of project cost, time, scope, quality and people is possible to help the project success. There is a significant relationship for practitioners who decide to apply this theory. Particularly, the theory related to project cost and quality which both of these variables correspond with the contribution of project success. For example, the project manager must ensure the project cost would always determine the overall project timeline and scope inputs before the project started. This is to help the project manager forecast, budget and plan the project financial adequately. Based on the theoretical framework and obtained results, the following discussion helps to build an understanding regarding this theory.

Cost, time, scope, quality and people over the last few years have become inextricably linked with measuring the success of project management. This is perhaps not surprising, since over the same period those criteria are usually included in the description of project management. Time and costs are at best, only guesses, calculated at a time when least is known about the project. Quality is a phenomenon; it is an emergent property of people's different attitudes and beliefs, which often change over the development life-cycle of a project. Project Management is still important in program approach, this new research agenda helps to highlight that and concerns the management of projects under this new management orthodoxy. The project management process is complex, which usually requires extensive and collective attention to a broad aspect beyond human, budgetary and technical variables. In addition, projects often possess a specialized set of critical success factors in which, if addressed and attention given will improve the likelihood of successful implementation.

On the other hand, if these factors are not taken seriously, it might lead to the failure of the project management. As projects are being used widely in the financial institution industry, it is therefore, vital to identify factors that contribute to the successful implementation of a project and to identify the factors' relative importance as the project goes through its life cycle. This paper, therefore, provides and identifies what are the influencing factors for the success of a project, particularly in the Malaysian context. Furthermore, being an empirical paper, this paper provides a framework that identifies the factors for the project success.



Figure 2: Adopted Framework

This framework has been statically analyzed and tested empirically using data from the financial institution industry in Malaysia. This empirical model of management factors that influences a project success have been considered as implementing a holistic view on the complex topic of project success. This paper presents a fraction of the results obtained from a questionnaire survey on the management factors that influences project success and project success factors which provide valuable insights on a range of issues related to this topic. There is still much to be done in order to improve and refine the

		_
	·	
ISSN: 1992-8645	www.lafit.org	



E-ISSN: 1817-3195

instrument and methodology of the study as well as to utilize many options for further analyses.

Project managers in the financial institution industry still develop their competence in management of project artifacts, planning, executing, monitoring and controlling of project activities as far as this is a professional area requiring high level of specialized knowledge and expertise. A proper understanding of the concepts and the issues related to project success and failure is indispensable for them. Having this in mind, the current study provides helpful information in respect of the identification of management factors that influences a project success which should be focused on by both researchers and practitioners in the field.

# 8.1 Limitation of the Study

There is also a necessity for further research which arises from certain limitations of the study and these said limitations are that this study focuses only on five (5) management factors that contribute to project success. First, it is fair to admit that there can be other management factors that contribute to project success. For instance, vendor management, process management and stakeholder management. These factors are also playing a crucial part in ensuring the project success. Second, to set the limitation on the project scale. It has been recognized by few literatures in the present study that the project scale can a factor that contribute to a project success.

# 8.2 Future Research

First of all, in order to build a more detailed understanding and justify recent findings, additional research should be run on a larger number of samples. It could give possibilities to correlations between find additional the appropriate selections of Management factors, proven by project success and specific organizational size, organizational structure and so on. Secondly, further research should investigate management factors that have not been covered in this study. Particular processes and integration with other technique like Knowledge Management practice seems to be an interesting area for investigation. Finally, more deep and detailed investigation of those practices that showed the most significant correlation with project success would be appropriate.

#### **REFERENCES:**

- [1] A guide to Project Management Body of Knowledge (PMBOK Guide) (2004). Project Management Institute
- [2] Ahmad, A., Younis, M. S., Ahmad, N., and Anwar, N. (2015). Critical Factors Influencing the Project Success in Pakistan. Mediterranean Journal of Social Sciences, 6(3), 815
- Badiru, S. S. a. A. B. (1992). Project management for successful implementation of continuous quality improvement. International Journal of Project Management 10 (2): 89-101
- [4] Beleiu, I., Crisan, E., and Nistor, R. (2015). Main Factors Influencing Project Success. Interdisciplinary Management Research, 11, 59-72
- [5] Bredillet, C. N. (2005). Reconciling Uncertainty and responsibility in the management of project. Project Management Journal, 36(3), 3–4
- [6] Browser, F. (2008). The Triple Constraint. 1 of 5
- [7] Bryman, A. and Bell, E. (2003) Business research methods. Oxford: Oxford University Press
- [8] Chow, T., and Cao, D. B. (2008). A survey study of critical success factors in agile software projects. Journal of Systems and Software, 81(6), 961-971
- [9] Crisan C. S., Borza A. (2014). Strategic entrepreneurship, Managerial Challenges of the Contemporary Society, Ed. Risoprint, 170-174
- [10] Cleland, D., Gareis, R. (2006). Global Project Management Handbook, 2nd Edition, McGraw-Hill Print
- [11] Duncan, W. R. (2000). A Guide to the Project Management Body of Knowledge, 2000 Edition, Newton Square, Project Management Institute
- [12] Dvir D., Lipovetsky S., ShenharA., TishlerA.
   (1998). In search of project classification: a non-universal approach to project success factors, Research Policy 27, 915–935
- [13] Davis, K. (2014). Different stakeholder groups and their perceptions of project success, International Journal of Project Management 32, 189–201
- [14] Demarco, A. (2008). Estimating is not just about cost, it is about respecting the Project Management Triangle.: 1-2

www.jatit.org

JITAL

E-ISSN: 1817-3195

[15] DeVellis, R. F. (2012). Scale development:	
Theory and applications (3rd Ed.) Thousand	
Theory and applications (51d Ed.). Thousand	

ISSN: 1992-8645

- Oaks, Calif: Sage Publications [16] Gliem J.A. and Gliem R.R. (2003) Calculating, Interpreting, and Reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales. 2003 Midwest Research to Practice Conference in Adult, Continuing, and Community Education, Columbus, 82-88.
- [17] Kline, P. (2013). Handbook of psychological testing: Routledge
- [18] Kuen, C. W., and Zailani, S. (2012). Critical new successful factors in product an empirical studv development: of Malavsian Manufacturing Companies. International Journal of management, 29(2), 429
- [19] Lambropoulos, S. (2007). The use of time and cost utility for construction contract award under European Union Legislation. Building and Environment 42 (1): 452-463
- [20] Meskendahl, S., 2010. The influence of business strategy on project portfolio management and its success —a conceptual framework. Int. J. Proj. Manag. 28 (8), 807–817.
- [21] Mir, F.A., and Pinnington, A.H. (2014). Exploring the value of project management: Linking Project Management Performance and Project Success, International Journal of Project Management 32, 202–217
- [22] Muller, R., and Turner, R. (2007). The influence of project managers on project success criteria and project success by type of project. European Management Journal 25 (4), 298–309
- [23] Nicholas, J. M. (2001). Project Management for Business and Technology
- [24] Project Management Institute (2008). A Guide to the Project Management Body of Knowledge (PMBOK)
- [25] Project Management Institute (2013). A Guide to Project Management Body of Knowledge (PMBOK); 4th Edition
- [26] Project Management Institute (2013). Pulse of the Profession In-Depth Report: The Impact of PMOs on Strategy Implementation
- [27] Project Management. (2016). Project pathology: Causes and symptoms of project failure
- [28] Robbins-G. (2001). Survey on Project Management in ER Implementation. Robbins-Giona LLC.

- [29] Ramos, P. & Mota, C.M. de M, (2014). Perceptions of Success and Failure Factors in Information Technology Projects: A Study from Brazilian Companies. Procedia-Social and Behavioral Sciences. 119: 349-357
- [30] Salanta I., and Popa, M. (2014). An Empirical Investigation into the Outsourcing Logistics Contract, Proceedings of the 8th International Management Conference "Management Challenges for Sustainable Development", Bucharest, Romania, 350-357
- [31] Savolainen P., Ahonen, J.J., Richardson, I. (2012). Software development project success and failure from the supplier's perspective: A systematic literature review, International Journal of Project Management 30, 458–469
- [32] Shenhar, A. J., Dvir, D., Levy, O., Maltz, A.
   C. (2001). Project Success: A Multidimensional Strategic Concept, Long Range Planning 34, 699–725
- [33] Sudhakar, G.P. (2016). Understanding the Meaning of "Project Success". Binus Business Review, 7(2), 163-169
- [34] Sylvester, D. C., Rani, N. S. A., and Shima, N. (2010). Theoretical Framework: Factors for Project Success in Oil & Gas Companies & Contractors in Miri, Sarawak, Malaysia
- [35] Toor, S and Ofori, G (2007). Leadership for future construction industry: Agenda for Authentic leadership. International Journal of Project Management, Vol. 26, Issue 6, 620-630
- [36] Turner, J.R., Muller, R. (2005). The project manager's leadership style as a success factor on projects: a review, Project Management Journal 36 (2), 49–61
- [37] Wakefield, L. C. P. (2008). Project Management Principles for Unit Logisticians. 40 (6): 1-5
- [38] Westerveld E. (2003). The Project Excellence Model: linking success criteria and critical success factors, International Journal of Project Management 21, 411–418
- [39] Bodicha, H. H. (2015). How to Measure the Effect of Project Risk Management Process on the Success of Construction Projects: A Critical Literature Review. The International Journal of Business & Management, 3(12), 99-112.
- [40] Kaiser, M. J. (2009). Modeling the time and cost to drill an offshore well. Energy 34