FUTURE DEVELOPMENT OF PROJECT MANAGEMENT

Professor- Dr. Eric Harter

BA 63170 H4 - Group -D

Research by **Nirav Patel**

ABSTRACT

Although there has been much recent research on Project Management (PM), this research field is still relatively very young with many aspects still to be uncovered. Studies of the present literature have documented that, as no surprise, new research topics and emerging knowledge domains within this research field continue to appear at a rapid pace. This study aims to predict, based on a quantitative approach, the potential research areas that could appear in the foreseeable future of PM research. As carriers of PM knowledge entities, this study utilized different keywords that had been extracted from all publications of a reputed PM journal over a period of five years (i.e. 2018-2023). By applying the quantitative approach on this research dataset, this study made a projection about the future potential PM research topics. This projection will bring a competitive advantage to PM stakeholders by choosing a suitable field for investment, help aspiring PM researchers to choose a promising topic, and guide PM funding agencies as well as policy makers in distributing available research funds.

The aim of the study was to provide insight in the expected future development of the project management competences. This goal is relevant for both practitioners and educators.

INTRODUCTION

Interest in project management has grown considerably over the last few years, with academics and practitioners alike demonstrating keen interest in the field. More than just a passing novelty, project management offers organizations the means to be efficient, effective, and competitive in a shifting, complex, and unpredictable environment. The art of Project Management has been in practice for thousands of years. However, only within the

past century has it officially become an internationally recognized professional field, a respected knowledge domain.

The aim of this study is to formulate a means of predicting potential areas of research or emerging knowledge that could arise in the foreseeable future, using two types of journal keywords and unique analysis of these keywords. Project Management nowadays is regarded as a very high priority as all companies or organizations, whether small or large, are at one time or another involved in implementing new undertakings, innovations and changes etc – projects.

The conclusions are that the study shows indications that project management is developing from an "**occupation**" into a true "**profession**". Part of this development is a broader orientation of the project manager in which especially the competences related to the relationship of the project with its environment grow strongly in importance.

Scoping process

Project scope refers to the detailed features of a project, these features are the deliverables and they are derived from the requirements of the project. According to PMBOK, project scope refers to the work which has to be accomplished so that a service, a product or set results may be delivered with the specified functions and features. Three processes of project scope management do exist –controlling, planning and closing (Crawford and England,2006).

Planning

The process of planning involves the definition and the capturing of the work that has to be done.

Controlling

The monitoring and controlling processes focus on tracking of documents, scope creep and approving/disapproving project changes.

Closing

The last step is project closing which includes conducting an audit with regard to the deliverables of the project and a measurement of the outcomes of the project against the original plan.

The scope statement

A projects scope statement is a clear identification of the required work which has to be done in order to successfully deliver the project. One of the responsibilities of the project manager is to ensure that it only the required work is done and that all the deliverables are finished within the stipulated time frame and within the budget.

Steps in scope management

Definition of the needs of the project

Defining the needs of the project is the first step which has to be covered when establishing the timeline of project., setting goals and allocating resources. Only after defining these step will one be able to understand what has to be done, in other words when the project scope is defined it becomes easy to allocate team members specific tasks and provide the way forward to ensure that the project is delivered within the given budget and time (Biedembuch and Muller,2011).

Understand the objectives of the project

To define the scope of the project it is critical that the objectives are established first, such may include the need to develop a new product, a new piece of software, a new service among others. Certain objectives should be central to project, it is the responsibility of the manager to ensure that the results delivered by the team are within the domains of the specified functions or features.The work and the resources that go into the creation of a service or product is essentially what defines the scope of the project. Generally, the scope outlines the objectives that have to be met so that a satisfactory result may be achieved (Biedembuch and Muller,2011).

To define a projects scope the following are identified

Objectives

Goals

Tasks

Sub Phases

Budget

Schedule

Having established these parameters the limitations of the project need to be clearly stated and any aspects that have been left out identified.

Business process analysis

All forms or enterprises whether non-profit, commercial or government entities are operational firms that have to execute hundreds of processes in their routine operations. Every aspect of the enterprise is affected by these processes and they are mostly dynamic. Business process analysis is a concept that involves the examination of processes so that they may be aligned with the objectives of the enterprise. Many reasons exist as to why project managers have to understand the concept of BPA. The discipline of project management is full of processes that have to be improved from time to time. Also, most projects come from BPA, and the improvements are implemented by the project or rather the BPA makes the project itself (Biedembuch and Muller,2011).

What is a quality process?

Many project management managers are familiar with the traditional traits of a project. Most projects create unique services and products.This kind of uniqueness comes with some uncertainty to the project which has to be managed. Uncertainty is at its highest when the project is starting and reduces as time goes by. To manage the uncertainty, assumptions can be made but the outcome of these assumptions may not be known till later on (Winter et al., 2006). Generally, project managers have to reevaluate constantly the project plan, manage stakeholder expectations and make changes. This kind of planning is referred to as progressive elaboration. Since processes are things that keep on repeating themselves, they have to be engineered to ensure that they are of high quality. A high-quality process can be described as one that balances timing, efficiency and outcome quality (Winter et al., 2006).

Business process analysis is the concept that documents, improves and creates business processes. Process improvement is needed when quality objectives are no longer met by processes. These processes could be taking too much time, inefficient, cause defects and deficiencies in many ways. The common though not exclusive areas that may need improvement include,

-The process itself-the steps, process compliance, ownership and accountability and proper balances and checks.

-The tools-Tools can include software and hardware among others.

-Process inputs

-People

The steps of business process analysis involve,

1.) The determination of processes which should be targeted for improvement.

2.) Formulation of a process action team.

3.) Stakeholder identification

4.) Collecting information from stakeholders.

5.) Identification of metrics and documenting the process goals.

6.) Modeling the current process.

7.) Identification of causes of process problems.

8.) Determining options for improvements.

9.) Feedback and validating of information with the various project stakeholders.

10.) Model the intended plan.

11.) Make the corporate case for improvements.

12.) Planning and implementing improvements.

A business project analysis applies to project management in the following ways.

Technology analysis

The most difficult and complicated aspect of the technology part of a project is hardly the technology itself but ensuring that people are held accountable, the success and progress of the project are measured and that people are held together. This can set the difference between a successful and an unsuccessful project, even if there is the technical expertise that may help see a given project through there needs to be a comprehensive blueprint of how to utilize the technology package.Recent technological development has opened doors to a brighter horizon for the facilitation of projects. With the right equipment and tools available, projects are likely to be successful. Wide

arrays of worthwhile tools have been availed that previous generations could just dream about (Mon,2013). These tools come in the form of project management technology which increases efficiencies, make operation smoother and ensure better overall collaboration. Some of the technology tools for project management include,

Data backup

The traditional filing cabinets have become obsolete, through technology it is possible now to back up data on a continual basis and file records in the event the computer crashes. Cloud computing helps to keep information secured and in a different location from the computer storage thereby making the manager be certain that the project will not fail due to loss of information.

Instant communication

Through telecommunication, all kinds of capabilities have been enabling, it is possible to work from any location.

Keeping up with deadlines

The new technological software has made it possible to keep up with deadlines, It easy for collaborators to be on schedule and to be able to complete tasks on time.

Budget tracking

Present time project management software has made it easy to keep project budgets on track, they are simple to use and save time in the long run. Each of the above technological tools is amazing in their own ways but they are even more effective when they are integrated to work together in an interactive program to help manage projects (Mon,2013).

Objectives and Deliverables

When a project takes longer than expected and experiences cost overruns yet the result becomes unexpected in terms of quality and quantity, there is no doubt that the closeout meeting will be confrontational and feisty. The key to ensuring that unwelcome project results, as well as awkward final meeting, do not happen is to ensure that the goals and objectives of the project are aligned with the deliverables.

Project goals and objectives

Goal and objectives are statements that describe the things which should be accomplished by the project, goals can be taken to mean the high-level statements which provide general context with regard to what the project should achieve. A project generally is considered successful if the objectives are successfully met.

Project deliverables

Deliverables are used to describe intangible or tangible services or products produced by the project process and that should b be delivered to the customer. A deliverable could be a document, report, a software, server upgrade software product etc. Having formulated the deliverables and objectives, the next thing is to ensure that they are aligned throughout the timeline of the project. Sometimes what causes unpleasant surprises is the lack of ongoing verification which causes problems because the team deliverables and objectives are not aligned together. Alignment must always exist and verification should be done on a continual basis to ensure that the team is producing the things that they are tasked to produce.If in any case there does not seem to be an alignment in the objectives and the deliverables, the following should be done to bring them together.

1.) One should not have an objective that does not seem to be aligned to the project deliverables, whether one or many.

The question worth asking is which of the deliverables will help meet the set objectives? An objective must be accompanied by a deliverable and if there does not seem to be a deliverable one must validate if the objective is of any importance.If all the deliverables have been defined and aligned with other objectives, the hanging ones should be removed immediately.

2.) There should not be deliverables which do not support the achievement of the desired objectives

Since the objective describes the purpose of the project, there is no need to include a deliverable that does not support the objectives. If the deliverable is important then it should be aligned with the project and if it hangs then it should be scrapped off. Crosschecking the deliverables and the objectives help to identify the validity of the alignment of the two.

Participants

A Project is successful if it achieves the set objectives and meets or exceeds the Team Members expectations. Team Members are people who have vested interest in a given project. They take an active role in the activities or management of the project and have something to lose or gain as a result of the success or failure of the project.

The Team members could be as summarized in the diagram below.

Project Roles

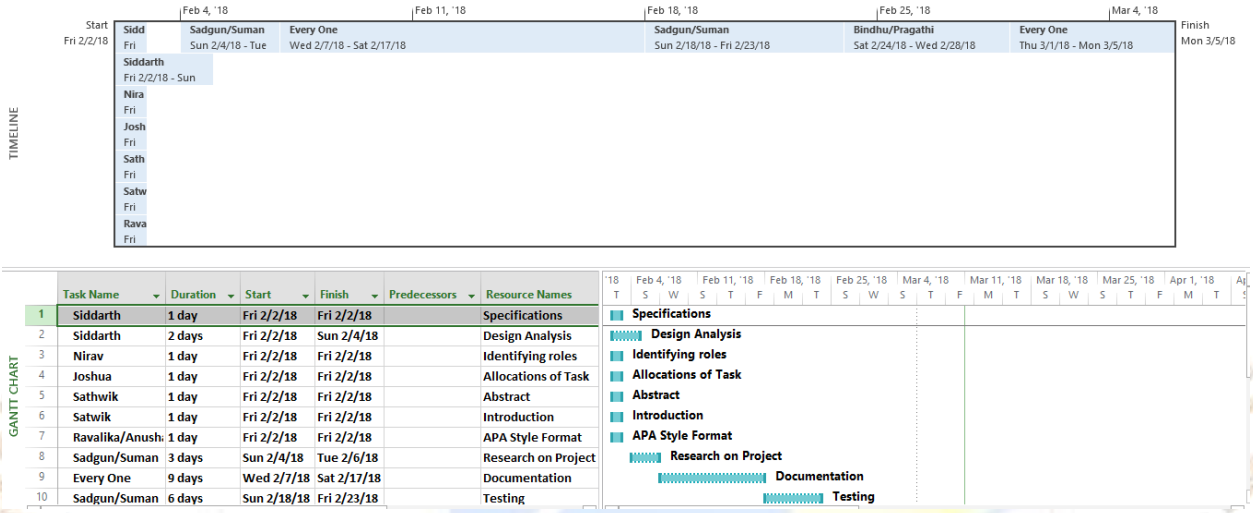
Role	Names
Project Manager	Siddarth
Business Analyst	Nirav
System Analyst	Satwik
System Analyst	Joshua
Research Analyst	Ravalika
Research Analyst	Anusha
Technical Resources	Sadgun
Technical Resources	Suman
Co-Ordinators	Bindu
Co-Ordinators	Pragathi

Project Activities

Project Activites	Effort (In Days)
Specifications	1
Design Analysis	2
Identifying Roles	1
Allocation of Task	1
Abstract	1
Introduction	1
APA Style Format	1
Research on Project	3
Documentation	9
Graphs & Gant Charts	3
Testing	6
Delivery	3
Support	4

Team Members must be identified, if someone is important to the organization it does not mean they are important to your project, just because they feel important does not mean that they are. Know who matters in the project and why then know the power they are holding and their intentions towards the project. Do they oppose or support you? Los try to understand the relationship between the different team.

Gantt Chart



GANTT CHART

	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1	Siddarth	1 day	Fri 2/2/18	Fri 2/2/18		Specifications
2	Siddarth	2 days	Fri 2/2/18	Sun 2/4/18		Design Analysis
3	Nirav	1 day	Fri 2/2/18	Fri 2/2/18		Identifying roles
4	Joshua	1 day	Fri 2/2/18	Fri 2/2/18		Allocations of Task
5	Sathwik	1 day	Fri 2/2/18	Fri 2/2/18		Abstract
6	Satwik	1 day	Fri 2/2/18	Fri 2/2/18		Introduction
7	Ravalika/Anush	1 day	Fri 2/2/18	Fri 2/2/18		APA Style Format
8	Sadgun/Suman	3 days	Sun 2/4/18	Tue 2/6/18		Research on Project
9	Every One	9 days	Wed 2/7/18	Sat 2/17/18		Documentation
10	Sadgun/Suman	6 days	Sun 2/18/18	Fri 2/23/18		Testing

Project Estimation

Project Activites	Start Date	End Date	Effort (In Days)
Specifications	2/2/2018	2/2/2018	1
Design Analysis	2/2/2018	2/4/2018	2
Identifying Roles	2/2/2018	2/2/2018	1
Allocation of Task	2/2/2018	2/2/2018	1
Abstract	2/2/2018	2/2/2018	1
Introduction	2/2/2018	2/2/2018	1
APA Style Format	2/2/2018	2/2/2018	1
Research on Project	2/4/2018	2/6/2018	3
Documentation	2/7/2018	2/16/2018	9
Graphs & Gant Charts	2/17/2018	2/20/2018	3
Testing	2/21/2018	2/26/2018	6
Delivery	2/27/2018	3/5/2018	7
Support	3/6/2018	3/11/2018	5

Methods

Research design

This paper is part of a continual process that seeks to critically analyze the underlying challenges and barriers in project management. Also, the paper identifies current as well as projects possible future trends in project management. The paper offers a professional rather than an occupational approach to project management (Silvius, 2009).

The project management process flow is summarized by the flow chart below which can be sued to control a given project. The chart offers a clear picture of the relevant steps and the logical order for the whole process.

Project Flow Chart

Functionality

Business benefits

The value of effective project management in the broader context of organizational and corporate performance is demonstrated clearly in this paper. This research seeks to change the culture of project management from being an occupation to more of a profession thereby contributing to the existing literature of project management and helping businesses adopt the best practices of PM to avoid frequent failures. The research draws insights from PMBOK guide and adds more to the aspects suggested for adoption. The paper highlights certain mistakes that managers make in the routine process of project management and offers suggestions to make improvements (Morris et al.,2000).

Future PMO objectives and goals

Future goals of professional project management include ensuring that the rate of project failures is significantly reduced. To ensure that projects adopt sustainable management measures, to ensure that project managers adopt the best practices needed to initiate a paradigm shift in thought and operations for project success.

Conclusions and improvements

Despite the large numbers of projects that can be said to be successfully delivered the rate of failure remains unacceptably high. Much research has been done on project related practice for so many years and there exists a significant program to increase focus on bets standards, support practitioners, aligning organizational strategy as well as high levels of awareness of behavioral aspects but the rate of failure has worsened. There is the need for a paradigm shift and there is the necessity of alternative approaches to achieve the shift. New forms of thinking may help drive such changes which then should be geared towards foundations of the professional discipline. A range of talented thinkers, technology, and sustainability aspects will have to be considered, new organizational strategies like process orientation and project orientation should also be considered to help companies gain competitive advantage and place themselves strategically across various industries.

References

Biedenbach, T., & Müller, R. (2011). Paradigms in project management research: examples from 15 years of IRNOP conferences. *International Journal of Managing Projects in Business*, *4*(1), 82-104.

Crawford, L., Pollack, J., & England, D. (2006). Uncovering the trends in project management: Journal emphases over the last 10 years. *International journal of project management*, *24*(2), 175-184.

Moon, J. A. (2013). *Reflection in learning and professional development: Theory and practice*. Routledge.

Morris, P. W. G., Patel, M. B., & Wearne, S. H. (2000). Research into revising the APM project management body of knowledge. *International Journal of Project Management*, *18*(3), 155-164.

Silvius, A. J. (2009). Project Management 2027: The future of project management. *Handbook of research on technology Project management, planning and Operations, Capt. II*, 17-36.

Winter, M., Smith, C., Morris, P., & Cicmil, S. (2006). Directions for future research in project management: The main findings of a UK government-funded research network. *International journal of project management*, *24*(8), 638-649.