

Identifying and Analyzing the Most Important Fundamentals to Improve Project Management Performance in South Africa

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Abstract

This research paper identifies and analyses the most important fundamentals to improve project management performance in South Africa. Many important factors were identified in this study such over 60% of participants have a certificate to none formal project management education, which compromise the quality of any project, and increases the number of project failures in the country. Furthermore, project managers face many challenges from community participation within the project, project creeps, and political influences to getting the right team members for the project on board. Therefore, it is recommended that a partnership between Project Management South Africa (PMSA), higher education institution, public and private sectors should work together in bringing about standard requirements to practice as project managers and standard performance for practicing project managers. This study can be used in the draft of policies regulating the project management industry as well as when developing project management curriculum at higher education institutions, as it points out the fundamentals to improve project management performance in South Africa.

Keywords

Project management practices and standard, project management competency, competitive advantage

1. Introduction

Over the years Project Management (PM) has industrialized to a profession that is commonly applicable to any organization private and public, like other discipline such finance, and other disciplines (Lappe and Spang, 2013, Mir and Pinnington, 2014, Schwalbe, 2015). Furthermore, Martens and Carvalho (2016) affirm that there is a growing interest in incorporating PM methodologies to the daily organizational functions in multiple organizations all over the world. This interest is supplementary with the fact that organizations are investing in tool and the discipline of PM as a way to remain competitive in today's globalized market place (Carvalho *et al*, 2015).

In her research, Schwalbe (2015) states that organizations that implement PM in their practices claim to have (1) Improved control of financial and human resources, (2) Improved their customer relationships, (3) Shorter cycle – times, (4) Lower costs, (5) Higher quality and increased reliability, (6) Greater profit margins, (7) Improved productivity, (8) Healthier internal coordination and (9) Higher worker morale. However, Conforto *et al* (2014) indicate that organizations need to reach a level of agility to adapt to PM in order to leverage in the benefits it offers. In addition, Golini *et al*. (2014) state that many practitioners in the world have been working tirelessly to institute concrete practices of PM within organizations.

Too and Weaver (2013) cover the benefits of PM in organizations. The two authors note that if PM tools and practices by design are to manage effectively and to complete projects, and projects are hardly completed in time and within budget. Xiong *et al* (2013) point out that the construction industry's poor record in delivering projects as an obvious

example. Mir and Pinnington (2014) follow the same flow of thoughts when they question the benefits that project management provide, despite that fact that it's been used in different industries.

1.1 Background, Rationale and Scope of the Study

South Africa as well as many developing countries are undergoing they fair share unsatisfactory performance of PM (Mukwakungu, Mabasa and Mbohwa, 2018). This maybe because many practicing project managers are not adequately trained to carry such responsibilities (Rwelamila and Ssegawa, 2014). Even though there are suggested benefits of adapting PM in an organization, researchers have not clearly establish a link between project management and organizational performance (Mir and Pinnington, 2014). Silvius and Schipper (2014) indicate that PM has grown to be a discipline that is a must have in any organizations, and can ultimately be a pillar in the economic growth of the country. Consequently, it is important to ensure that PM methodologies that are being implemented in projects or organizations performs to extremely well.

1.2 Aim, Objectives and Value of the Study

The objective of this study is three-faceted specifcally:

- (1) To determine the relationship between the competence of practicing project managers that are certified in project management and those that are uncertified, with the level of performance of the profession;
- (2) To describe qualities of compete project manager(s) and discuss the practices of project managers in South Africa, and;
- (3) To identify and analyze the most important fundamentals to improve project Management performance in South Africa.

Therefore, the purpose of this research paper is to identify and analyze the most important fundamentals that can significantly improve the performance of project management in South Africa.

2. Literature Review

Many developing countries use projects to assist them in as a vehicle to carry out varies texts within their government even in NPO's (Golini *et al.*, 2015). Conforto *et al* (2014) state that even though planning and controlling of projects is a challenge even in private institutions specifically when it comes to product development. Xiong *et al* (2013) note that a typical example would be the construction industry, which play a crucial role in the development of the country, but still have poor success rate when it comes to project. One of the causes might be the fact that the approaches and techniques used to execute projects differ from one project to another (Golini *et al.*, 2015). Mir and Pinnington, (2013) indicate that there is not a clear link between project performance and the role of project management in these projects. This is despite the fact that the used projects as a vehicle for competitive advantage within private sector and governmental institutions has multiplied, which leads to the project management discipline in the spot light (Rwelamila and Ssegawa, 2014).

In their research, Rwelamila and Ssegawa, (2014) recognized that there is not enough PM knowledge in PM courses offering to shape and equip future project managers in their quest to be successful in the Southern Africa Development Community (SADC) countries (Tanzania, Zambia, Malawi, South Africa, Zambia, Zimbabwe, Namibia, Botswana, Democratic Republic of Congo, Mauritius, Lesotho, Swaziland, Angola, Mozambique, and Seychelle). However, Pollack and Adler (2016) state that there have been significant researches that are focused in finding the link between project manager's competency and the success or failure of projects. Furthermore, Mir and Pinnington (2013) points out that researchers have attempted to model ways on how to best improve project management performance, this is mainly due to the fact that the critical success factors require PM methodologies to be carried out successfully. As a result, the subject of project management have increasingly been apprehended by many researchers around the world (Hornstein, 2014, Rwelamila and Ssegawa, 2014).

Joslin and Müller (2015) note that over four decades ago Project Management Methodologies (PPM) were set up by government agencies, aimed at controlling budgets, planning activities and ensuring quality of work done. Svejvig and Andersen (2014) introduce to us two categories of PM namely: (1) Classical PM which focuses on the executability, straightforwardness, short timelessness, linearity, controllability and instrumentality of the project and (2) Rethinking PM which deals with the learnability, diversity, momentarily, complexity, improbability and openness of the project. Todorović *et al.*, (2014) state that it is crucial as project manager(s) to view and analyze the impact that

a project has in the environment in which the project is implemented. It is important to mention that Todorović *et al.*, (2014), in their research eludes the challenges that project manager's faces when it comes to managing projects and they include:

- The lack appropriate learning apparatuses, routines to follow and reports of the past projects that lessons can be drawn from.
- The lack of documentation of project operations, the recording processes do not fully reflect the activities and procedures followed.
- The lack of efficient and effective estimates, improper documentations leads to inefficient and ineffective communication of lessons learned from past endeavors which causes improper predictions of the present and future projects.
- The individuality and uniqueness of project to project and different time frames that projects needs to be completed
- In most cases project team members are not prepared to learn different approaches to different projects, therefore become inflexible.

However, Too and Weaver (2013) maintain that PM Methodologies have been applied to the employed in planning and implementing operational modifications. Hornstein (2014) further state that the success of PM processes involves the engagement of employees from start to end of any PM activities rather than tell them what to do. On the other hand, many researchers have examined different ways in which PM can be enhanced, industrialized and cultured so to have effective delivery of results (Pollack and Adler, 2016).

Rwelamila and Ssegawa (2014) define PM competence as the efficient performance by an individual in successfully carrying out project goals. Smith (200) and Schwalbe (2015) state that PM brings about significant changes and benefits in varies organizations, which include: (1) less individuals to do more tasks, (2) projects and services have grown larger and more complex, (3) global competitiveness, (4) access to data using communications networks, (5) meeting ever-changing customers' demands with higher quality goods and services, and (5) technological growth. Schwalbe (2015) suggests that project managers and their team members must cultivate their acquaintance and abilities in the following areas: (1) the ten project management knowledge areas (Project integration management, Project scope management, Project time management, Project quality management, Project human resource management, Project communications management, Project risk management, Project procurement management and Project stakeholder management), (2) The application of project management in their respective industries, (3) The project surroundings, (4) General business information and lastly (5) Human relationships.

3. Methodology

The approach for this study that was used is qualitative, mainly because the study is based on identifying and analyzing the key factors that can improve the performance of project management in South Africa. A questionnaire was designed and distributed to 20 participates who are currently practicing as project managers, a low number of participates was due to time constraints and lack of participation. However to ensure that data is collected from verity and types of products the type of projects participates who completed the questionnaires included: (1) Implementing a new or improved business process or procedure, (2) Running a political campaign, (3) Building a water system for a community in a developing country, (4) Constructing or renovating a building, (5) Developing or procuring a new or modified information system, (6) Designing a new transportation vehicle, (7) Effecting a change in structure, staffing, or style of an organization, (8) Developing a new product or service and Other.

In additionally, the questionnaire asked about the challenges the project manager faces and how he/she deals with them. Finally, it enquired about the importance of formal PM education in carrying out a successful project and if the PM techniques that are in place are sufficient to complete a project successfully through the project life cycle. A Likert scale (e.g 1 – 5, 1 = the lowest and 5 = the highest) was developed to help analyze the collected data of participants and compared to each other. Table 1 summarizes the questions that participates were asked to response to.

Tables 1. Survey Questionnaire

Questions	Responses			
What level of Project Management education do you have?	None (1), Certificate (2), Diploma (3), BTech/degree (4), Honors (5), Masters (6) and PhD (7)			
How long have you been working as a Project Management?	0 – 2 years (1), 3 – 5 years (2), 5 – 10 years (3), 10 – 15 years (4) and Over 15 years (5)			
How many project have you been involved in?	1 – 10 projects (1), 10 – 20 projects (2), 20 – 30 projects (3), 40 – 50 projects (4) and 50 – more projects (5)			
How many projects, I under your supervision were completed successfully?	1 – 10 projects (1), 10 – 20 projects (2), 20 – 30 projects (3), 40 – 50 projects (4) and 50 – more projects (5)			
The biggest scale of the project I worked in?	R0 – R1 000 000 (1), R1 000 000 – R 5 000 000 (2), R 5 000 000 – R 10 000 000 (3), R 10 000 000 – R 20 500 000 (4), R 20 500 000 – R 50 000 000 (5) and R 50 000 000 and more (6)			
What type of projects have I been involved in?	Implementing a new or improved business process or procedure (1), Running a political campaign (2), Building a water system for a community in a developing country (3), Constructing or renovating a building (4), Developing or procuring a new or modified information system (5), Designing a new transportation vehicle (6), Effecting a change in structure, staffing, or style of an organization (7), and Developing a new product or service (8)			
How important are the following in the project life cycle?		Not important	Important	Very important
	Defining project specification Planning the level of effort Execution the work of the project Closing/ delivering the project			
What was the biggest challenge in the project I was involved and was I did I deal with it?				
How helpful were Project Management techniques and why?				
How important is formal Project Management formal education?	Not important (1), Important (2) and Very important (3)			
Project management techniques in place are sufficient to carry out a project successfully	Not important (1), Important (2) and Very important (3)			

The collected data was allocated scales per answer in each question, question 1 to 5 were allocated scales from the lowest (1) to the highest (7), question 6 was allocated scale 1 – 9 in relation to the type of projects participates are involved in, the scale allocation of question 7 was 1- not important, 2- important and 3 – very important based on the stages of the project lifecycle, a data of question 8 and 9 of participates was compared and analyzed to determine the similarities of the participates from different types of challenges and how they find PM techniques useful in dealing with these challenges and the scale of question 10 and 11 was 1- not important, 2- important and 3 – very important. The data of each question was then represented in a graph to deplete the percentage in question.

4. DISCUSSIONS

This section discusses the survey results using descriptive statistics. Each section of the survey questionnaire is presented below. Out of 20 questionnaires that were distributed to currently practicing project managers 11 responded which is 55% respond rate.

4.1 Respondents Education Level

The data related to the education level of respondents is depicted in Figure 1 below. It shows that 9.09% of the respondents who are practicing as project managers have Honour's degrees, 27.27% have BTech (Technical qualification) 4-year degrees, none have Diplomas (3-year technical qualification), Master's degrees or PhD, while 36.36% have a certificate related to PM and 27.27% don't have any for formal qualification.

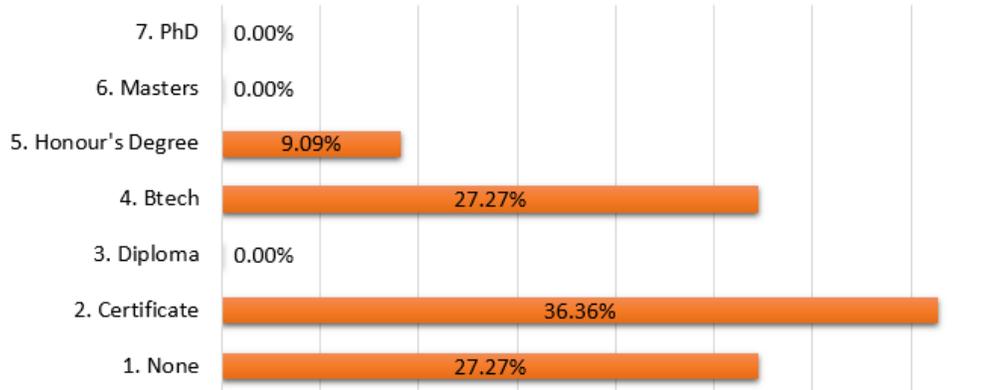


Figure 1. Qualification Level Percentage Response

4.2 Respondents Years of Experience as Project Manager

Figure 2 depicts the survey percentage response related to the years of experience of respondents as project managers.

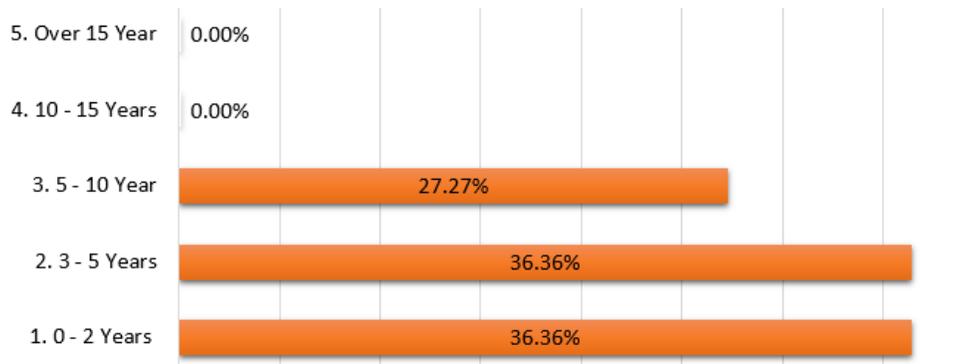


Figure 2. Years of Experience Percentage Response

Figure 2 above shows that 36.36% of respondents practicing as project managers have between 0 to 2 years work experience, 36.36% have between 3 and 5 years work experience, while 27.27% have between 5 – 10 years' work experience.

4.3 Respondents Involvement in Projects

The survey extracted information regarding the number of projects that the respondents have been involved in. Figure 3 below depicts the respondents percentage reply in terms of respondents' involvement in projects.

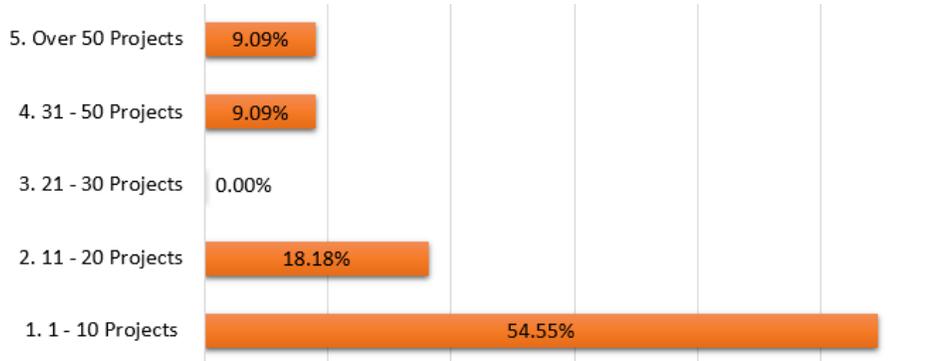


Figure 3. Years of Experience Percentage Response

The above figure shows that 54.55% of respondents have been involved 1 – 10 projects, 18.18% have been involved in 10 – 20 projects, none have been involved in 20 – 30 projects while 9.09% have been involved in 31 – 50 projects as well as over 50 projects.

4.4 Completed Projects

As part of the survey, respondents were asked to indicate the number of completed projects under their supervisions as project managers. Figure 4 below provides a depiction of the data collected from respondents.

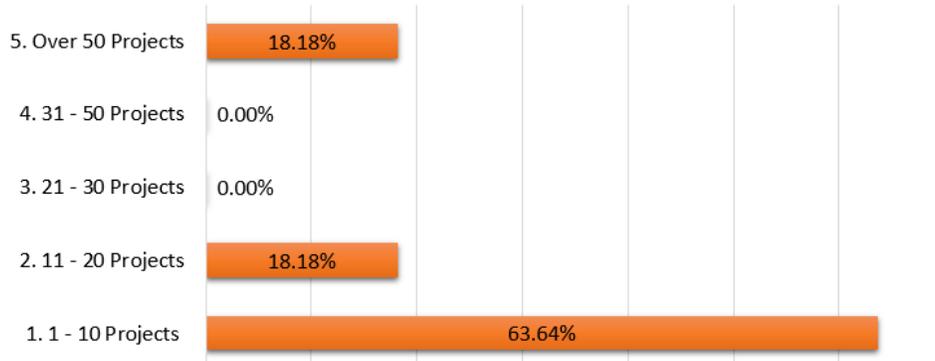


Figure 4. Completed Projects Percentage Response

Figure 4 above depicts that 63.64% of participants successfully completed 1 – 10 projects that were under their supervision, 18.18% successfully completed 10 – 20 projects, 0% successfully completed 20 – 30 projects and 18.18% successfully completed over 50 projects.

4.5 Project Scale

Project scale refers to the project’s financial implication as to the size of the project. Respondents were asked about the biggest financial scale of the project he/she worked in. Figure 5 shows that 18.18% of respondents worked on projects worth at most R1 million, 27.27% work on projects worth between R1.1 million and R5 million, 9.09% worked on projects worth between R5.1 million and R10 million, as well as on projects worth between R10.1 million and R25 million, while 36.36% worked projects worth above on R25.1 million and above,.

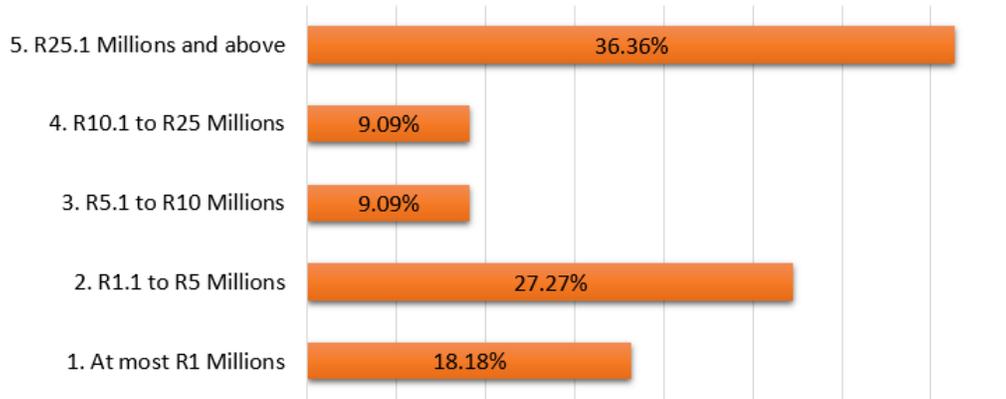


Figure 5. Project Scale Percentage Response

5. Recommendations, Conclusion and the Way Forward

In conclusion, this paper presents data collected and analyses of practicing project managers from various industries. Technical knowledge and experience in fields such as Engineering, Construction, Marketing atc does not necessarily guarantees that an individual will be an effective project manager (Rwelamila and Ssegawa, 2014). Though Pollack and Adler (2016) argue that there is a link between project management skills and information technology skills in organizational performance. PM has a significant contribution in different industries and organizations, whether provide or public (Smith, 2000). For project management techniques to be implementation successful does not only project managers to be skilled in traditional PM techniques but also to be multi-skilled in areas such as IT to improve performance. (Hornstein, 2015). Therefore future study can involve how project management courses remodeled to include to include variety of techniques, outside the traditional PM techniques.

The data has shown that over 35% of participates have a certificate in project management, 36.36% of participates are involved in projects that are over 25.1 million and above, 72.72 % have PM work experience that is 5 years and below, and 63.64% on completed 1 – 10 projects. Rwelamila and Ssegawa (2014) stated that many practicing project manager in South Africa do not adequate knowledge and experience to carry out PM techniques in projects or within organizations effectively.

The deduction from this research work supports continuous learning in the profession of PM. Therefore, it is recommended that:

- (1) As a developing country, it is crucial for South African institutions, public and private to collaborate with the PMSA in developing world class course content of project management courses which include experiential training for newly growing project managers in the country.
- (2) Project managers need to be empowered to act like entrepreneurs by being able to identify and exploit market opportunities

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