

An Assessment Of The Effectiveness Of Project Management Skills On Project Performance At A Construction Company In South Africa

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Abstract: The world of industry is fast developing with most tasks performed through projects other than the normal execution of business. The construction company located in South Africa manages a consortium of construction projects. Over the years, the company has enjoyed effective project management that is until recently when it began experiencing challenges and purported delays in project execution and delivery which was also marred by increasing customer complaints. Indications were that the managers lacked basic project management skills, which could impact on project performance. The purpose of the study was to assess the effectiveness of project management skills on project performance at the company. The study employed a quantitative methodology using a questionnaire to collect data from 120 participants selected using the random selection method. The study revealed that company managers lacked leadership, operations, communication, and time management skills, critical for the success and effectiveness of the project. The study also found that benchmarking was a critical determinant of project manager effectiveness. Other critical factors included the effective management of project finances while ensuring that the organisation had adequate resources that contributed to customer satisfaction. Finally, the study recommended that a similar study be conducted within the construction industry to reveal a bigger picture of what prevails in the industry.

Keywords: construction industry; project management; project performance.

I. INTRODUCTION

The civil construction industry among several industries that includes automobile, clothing and textile, food retail, agriculture and tourism is one such industry that significantly contributes to the growth of South Africa's economy through the provision of much needed infrastructure in the form of buildings and road network among other things. The majority of the civil works in the construction industry are run on a project basis with managers taking a key role in ensuring project completion. This study is based on the construction projects of a South African construction company. The purpose of the study is to assess the effectiveness of the current project management skills and effect on organisational performance.

A. BACKGROUND TO THE STUDY

The company is a product of the Black Economic Empowerment aimed at economically empowering the majority, the black population of South Africa. In 2006, the company was established in the KwaZulu-Natal (KZN) province and over the years, the organisation exhibited signs of exponential growth. For example, the organisation started as a small office in Richards' Bay and today has branches across and outside the KZN province. Over the past few years, the construction company managed to increase its capital base by 85%, while at the same time increasing its footprint across the province. In total, the organisation employs approximately 250 employees, the majority being artisans in various civil

engineering disciplines that include building, carpentry, electricians, and painters, just to name a few.

The majority of project managers within the company come from a purely technical background, without either management or leadership backgrounds, training or experience. Project managerial issues were not of concern ten years ago, when the company was still in its infancy. As the company grew over the years, most project managers within the group were put to test. For example, during the three successive years from 2015 to 2017, the company experienced growth and sustainability challenges with the blame being levelled against the lack of project skills as respective project managers' grapple with the respective projects. Indications were that employees and managers faced challenges executing basic project management skills, which negatively affected the overall project performance. An increasing number of projects were delayed with some projects failing to pass quality tests, not meeting customer needs and specifications suggesting that project performance was not being addressed.

B. AIM OF THE STUDY

The study aimed to assess the effectiveness of project management skills at the company and effect on organisational performance plan with a view to improve the project management skills across the entire company and ultimately improving projects completion time.

C. RESEARCH QUESTIONS

The following research questions sought to answer the above objectives:

- ✓ What are the project management skills exhibited at the company?
- ✓ What are the critical project management skill factors at the company?
- ✓ To what extent are the company management skills effective?
- ✓ What recommendations can be made to improve the company's performance?

D. SIGNIFICANCE OF THE STUDY

This study is important for several reasons. The study hopes to improve the project management for the company in terms of equipping the current managers with effective skills towards managing the various projects. If current manager skills are improved, then the company could also improve its project completion times. The study may also add to the existing body of knowledge on specific project management skills. The study will be a revelation to the researcher on matters regarding project management skills, mindful of the fact that the researcher is the CEO and founder of the company desperately needing to apply effective project management skills in order to grow the company.

II. LITERATURE REVIEW

The term "project" in its very nature entails any work arrangement that has a temporal dimension in terms of commencement and ending date (Heizer & Render, 2010:90). Thus, any project work is bound to start and end within an estimated duration. According to Clements and Gido (2011:4), a project entails any form of work arrangements schedule to be accomplished within a specified time agreeable to all stakeholders concerned. Heizer and Render (2010:90) argue that a project resembles the interrelated various tasks and activities intended to deliver a specific outcome within a given period. On the other hand, The PMBOK Guide (2013) view a project as a temporary work arrangement aimed at creating or manufacturing a product or service.

A. THE CONCEPT OF PROJECT MANAGEMENT

Having defined the term "project", it is equally important that the term "project management be defined". Thus, Schwabe (2009:222), define project management as the practice of applying the knowledge, techniques, skills and tools towards satisfying stakeholder expectations. In project management, the key activity includes applying and integrating the pertinent project management processes and activities, encompassing initiating the project, planning all the aspects of the project, executing the key functions, controlling the processes from a resource point of view while monitoring aspects that can hinder projects success unto project closure (Heizer & Render, 2010:250). Heizer and Render (2010:250) label these as "process groups" that define and dictate the project life cycle. Besides the process groups' project management encompass the knowledge areas, which play a significant role on as a knowledge base within the project management discipline. The knowledge base areas encompass the integration of the project with other various systems and processes of the organisation, ensuring that the project scope is not lost; operating within periods, ensuring the project operates within the cost limits, providing the best quality, recruiting the most skilled human resources, communicating all project issues to stakeholders, risk minimisation and procurement management Schwabe (2009). Schwabe (2009) argue that these knowledge areas have to be applied to specific parts of the project in varying project environment concurrently to different project areas. Thus, they should not be applied in isolation.

B. PROJECT SKILLS

Lerro, Lacobone and Schiuma (2012:99) defines project skill as the ability by project managers or leaders to turn the conceptualised knowledge into an action that can produced the desired product or service. Lerro et al. (2012:99) argue that project management is a function of diverse skills and abilities within a project manager or leader. According to Clements and Gido (2011:302), project managers ought to exhibit certain skills if they are to succeed in managing construction projects. Burke and Barron (2007:25) identify various project skills project managers ought to exhibit and apply. From a general management perspective, Smit and Cronjé (2007:240)

outline categories of skills basic to all project managers at all levels. The skills encompass the conceptual skills, which entail managerial ability to conceptualise the project, the interpersonal skills, which entail managerial ability to with and through other people and the technical skills, which entail managerial ability to apply their skills towards managing a project with the aim to complete and deliver the project.

Clements and Gido (2012: 324) outline the skills which project managers ought to exhibit. These include:

LEADERSHIP ABILITY: Leadership skills entails the ability of a project manager to get things done through others (Clements & Gido, 2012:324). Thus, leadership means inspiring everyone who works under the project to drive the project forward through hard work. It means pushing the project team towards achieving project deliverables and objectives. To achieve this, project managers ought to empower and involve the project team. Clements and Gido (2012:324) argue that project management leadership play a central and linking function that has a centrifugal effect on other managerial skills.

GENERAL MANAGEMENT SKILLS: In project practice, general management skills simply refer to the generic managerial skills basic to the management discipline. According to Smit, Cronje, Brevis and Vrba (2011:105) such skills encompass financial, marketing, human resources, operations, strategic, logistics, supply chain and procurement management as skills all project managers should exhibit if they are to successfully execute a project.

INTERPERSONAL SKILLS: In project management, the project is driven by people through people, hence the need for the project manager to make use of his/her interpersonal skills by working effectively with followers. The skills also entail the ability to resolve challenges and conflicts as well as negotiating contracts. One of the critical aspect of interpersonal skills includes the ability to provide rational on the allocation of resources as this could lead to conflicts.

COMMUNICATION SKILLS: Project managers ought to exhibit effective communication skills all the time especially when various aspects of the projects are project team driven (Martinell, Rahschulte & Waddell, 2010). Clements and Gido (2012: 324-334) advise that in project communication, the communicate needs ought to be timely, honest and unambiguous in order with a view to persuading the potential buyers.

ABLE TO HANDLE STRESS: Mindful of the fact that a project manager works with people who work in environments that could cause stress, the project managers must demonstrate stress handling skills (Martinell et al., 2010:105). In the project management environment, stress can arise when the project workforce is under pressure to perform towards meeting project timeline (Clements & Gido., 2012: 324-334).

PROBLEM-SOLVING SKILLS: Clements and Gido (2012: 324-334) argue that a project manager is one capable of resolving problems by spotting the problems at an early stage.

NEGOTIATING SKILLS: Regarding project negotiating skills, Clements and Gido (2012:334) emphasise that negotiating skills formed a key element of project skills as project managers without the skill are destined to fail.

TIME MANAGEMENT SKILLS: Clements and Gido (2012:333) highlight that project managers ought to exhibit

time management skills as project execution is by definition time-framed. To effectively manage project time, project managers ought to have self-discipline particularly towards the prioritisation of activities and tasks (Clements & Gido, 2012:333)

C. PROJECT PERFORMANCE

According to Martinelli (2010:107) project performance in the construction industry is ascertained when a specific project is delivered on time. Meridith and Mantel (2012:107) highlight that project performance entails sticking to the budget and the technical specification of the client. Hedges (2015:88) argue that the criteria towards the success of a project is much wider as it incorporates key stakeholders as well as assessing their contributions. According to Bolman and Gallons (2011:66), the success of any construction depends on the extent to which stakeholders are collectively involved. In doing so stakeholders need to understand the Key Performance Indicators (KPI) of each construction project (Brown, 2010:100).

Wang Gafy and Zha (2010:41) identifies 10 KPI indicators towards the benchmarking of projects in the construction industry with a view to enhance project performance. The indicators include cost of construction, construction time, defects, satisfaction, service, profitability and productivity (Wang, Gafy & Zha, 2010:41). According to Stapenhurst (2009:103), these KPI indicators advance a result-orientated thinking as opposed to promoting the predictability of design cost and time and construction cost and time.

According to Lerro et al. (2012:574), the indicators are applicable to industry-wide performance as well as other companies. Unfortunately, the KPI do not show an explicit relationship between the performance factors measures based at various phases such as selection and execution. It is clear that there are no key factors linking the different phases to each other. Further, the various groups do not provide the indicators towards performance in view of stakeholders involved (Ley, Kump & Albert, 2010:185).

D. PROJECT PERFORMANCE MEASUREMENT

In pursuit of identifying performance indicators, the motive is to measure the performance of a project. Hedges (2015:90) identified the distinction between performance indicators, performance measures and performance measurement. According to Hedges (2015:100), performance indicators entails the measurable aspects basic to prove that planned effort achieved the intended outcome. Gido and Clements (2015:457) define performance measures as the numerical indicators whereas performance measurement refers to the continuous process of assessing the inputs and outputs in the construction activity.

III. RESEARCH METHODOLOGY

The end product of a research design is a plan or blueprint for conducting the intended research (Babbie & Mouton, 2009). According to Wiid and Diggins (2010) such a blueprint

or plan is used to guide data collection and analysis. This study was descriptive and quantitative in nature approached from a positivist philosophy, with the purpose of assessing the effectiveness of project management skills on project performance at the construction company. Since the purpose of the study is to assess the effectiveness of project management skills at the company gathering data from a relatively large sample size of 250 employees, the quantitative method was selected for the study. The study employed the survey research strategy as it offered more control over the research process. Questionnaires were employed as the only method of data collection.

A. TARGET POPULATION

Barbie and Mouton (2009:220) define a population as the total number of elements, subjects, individuals that fall or reside in the organisation under study. Barbie and Mouton (2009:220) highlight that a very large population is often too large for the researcher to collect data and proceed to analyse it. The population for this study included all the company's employees totalling approximately 250.

The study employed probability sampling to select 120.

A semi-structured questionnaire was employed for the study using the following categories:

- ✓ Section A: Biographical information;
- ✓ Section B: The company's managers skills;
- ✓ Section C: The company's critical success factors and;
- ✓ Section D: The effectiveness of the current company's manager skills;

B. PILOT STUDY

Saunders et al. (2012) warn that participants who participate in the pilot study should be excluded from the main study. In this study 10 project employees who were not part of the 120 participants, participated in the pilot study revealing quite a few areas that needed corrections. Revisions were done. In addition, some questions were out of focus and not aligned with the objective of assessing the effectiveness of company projects. Thus, fresh statements were then designed.

C. VALIDITY AND RELIABILITY

According to Leedy and Ormond (2005:29), a study that lacks validity and reliability is no of no scientific relevance. Validity and reliability of a questionnaire is critical towards influencing the extent researchers learn about the situation or subject under study as well as the likelihood that there would be a statistical significance in the analysed data whereby a meaningful conclusion can be derived, state Leedy et al. (2005:29).

According to Saunders et al. (2012:367), questionnaire reliability is about the consistency in terms of repeating the measurement. Saunders et al. (2012:367) explain the three forms of reliability in which consistency matters in research. These includes test – retest reliability, internal consistency and alternative form. In summary, reliability is concerned with how well a research instrument gives the same or similar answers if administered several times to participants in the

same environment (Wagner, Davidson, Pollini, Strathdee, Washburn, & Palinkas, 2012:81).

D. LIMITATIONS OF THE STUDY

According to Marshall and Rossman (2007:42), all empirical studies have some limitations of some sort, which need to be approached carefully. In this the study limitations were:

- ✓ Timeframe to collect and presented results: participants were allowed 15 days to populate the questionnaires taking into account that the sample size was relatively large (120);
- ✓ Participants' numbers: The population for the study was 250, with 120 as a sample minimum to accommodate the time factor and number of questionnaire which the researcher would be able to process and;
- ✓ The study also focussed on a single construction project organisation.

E. ELIMINATION OF BIAS

Throughout the study, every effort was made to ensure objectivity by:

- ✓ Carefully using gender-neutral terms such as participants/respondents as opposed to using he/she, male and female;
- ✓ Employees of all races formed part of the sample with no data gathered on race and ethnicity and;
- ✓ Inclusion of employees from all departments.

F. ETHICAL CONSIDERATIONS

According to Saunders et al. (2012:202), ethics means the degree to which empirical studies harm or respect research participants, the public, organisation under study and the environment. The company issued permission for the study to be performed using the company as the organisation. Besides, the following ethical issues were taken care off:

OBTAINING PARTICIPANTS CONSENT: According to Saunders et al. (2012:390), participant consent entails the voluntary participation in the study by the research participants. Participants who voluntary agreed to partake in the study signed the consent form.

PARTICIPANTS' CONFIDENTIALITY AND ANONYMITY: Saunders et al. (2012:390) define confidentiality as the extent to which the researcher protects the identity of research participants. Each questionnaire had a participant letter that explained issues related to confidentiality and anonymity. Regarding anonymity, names of the participants were not used. Instead, code names were used.

PARTICIPANTS HARM: Questions forming the whole questionnaire were did not include statements that would expose participants to psychological harm. In addition, the non-inclusion of names on the questionnaire meant that the data could not traced to individuals casting away the suspicion that senior managers at the company take punitive measures on employees that provide negative feedback on the manager in which projects were managed.

ENSURING THAT PERMISSION IS OBTAINED: Wagner et al. (2012:81) highlights that researchers must always seek permission to conduct the study from the organisation. In this study, permission was granted by the company.

IV. RESULTS

Out of the 120 questionnaires distributed, 118 were returned by the expiry of the two weeks given to complete and return the questionnaire giving a response rate of 98.33%. Saunders et al. (2012:390) highlight the importance of a good response rate. According to Saunders et al. (2012:390), a response rate of above 50% is regarded good enough to allow a valid study. Taking into account that this study has 98.33% response rate, which is deemed excellent, the possibility of a validity study is very high.

A. BIOGRAPHICAL INFORMATION

This section reports on the biographical data, which include age, gender, race and experience. About 45.98% were in the range 30-39 years old followed by 34.43%, who were in the age range 40-49 years old. Those in the 25-29 range were 16.39% with the above 50 years showing the least percentage of 3.28%. In the overall, company employees working are in the 30-49 age range, which is regarded as being youthful.

The company employs more males than females with males reflecting 55.74% of the participants while the females were 44.26%. This does not come as a surprise because, the construction industry is predominantly male due to the physical requirement expected when executing duties in the construction industry.

Africans constitute 73.77% of the participants, 13.11% Indians, 11.48% White and 1.64% Coloureds. The KwaZulu-Natal Province has more of the black population who outnumber other races followed by the Indians, which seem to translate to employment on ethnicity.

B. EXPERIENCE

32.79% of the participants' were employed by the company for 5-10 years. Followed by 24.59% who had served between 10-15 years. About 19.67% of the participants were employed for a period of 15-25 years, while 16.39% served between with 6.56% for 0-5 years with 6.56% having served for more than 25 years.

C. RESULTS BASED ON OBJECTIVES

a. RESULTS BASED ON OBJECTIVES 1: TO ESTABLISH THE CURRENT PROJECT MANAGEMENT SKILLS EXHIBITED

Project management skills are critical towards the success of project execution. The first objective of the study sought to establish the current project management skills exhibited at the company. To address the objective six questions were developed with data gathered under each question presented,

analysed and interpreted. The following sections presented the results under the respective questions

Question 1: The Company Has Effective Leadership Skills

The purpose of the first question was to establish participant perceptions on whether the company had effective project leadership skills. The results show that 63.93% of the participants disagreed with the statement that the company had effective project leadership skills while 14.75% agreed with 21.31% giving a neutral 14.75% response. It is therefore clear under this question that participants perceived lack of project leadership skills. It therefore means that at the company, leadership was as good as absent.

Question 2: Company Managers Have Effective Financial Management Skills

57.48% of the participants agreed with the statement that the company has effective financial management skills while 21.39% of the participants disagreed with 21.32% providing a neutral response. The findings under this question thus suggests that the company had effective financial management skills.

Question 3: Company Managers Have Effective Operation Management Skills

44.27% of participants disagreed with the statement that company managers have effective operation management skills while 26.23% of the participants took a neutral position with 29.51% agreeing to the statement. The main finding on the question suggests that the company was operationally ineffective.

Question 4: Company Managers Have Effective Supply Chain Management Skills

49.18% of the participants disagreed with the statement that company managers have effective supply chain management followed by 24.59% who disagreed with the statement while 26.23% gave a neutral response. The main finding under the question, thus suggest that managers were not effective on handling the supply management function. Company project managers were found to lack supply chain management skills, and there is a potential resource shortage or wastage in the future, which could affect project performance and effectiveness.

Question 5: Company Managers Have Time Management Skills

45% of the respondents disagreed with the statement that company managers have time management skills while 28.33% agreed with the statement with 26.67% taking a neutral position. In the overall, the findings under the question show that managers were not effective in project time management.

Question 6: Company Managers Have Effective Communication Skills

Project communication is a critical management function, which all project managers need to pay attention to. Thus, the purpose of question six was to establish if managers were effective in communicating critical information towards project success.

85.25% of the respondents disagreed with the statement that managers had effective communication skills while 6.56% disagreed with the statement with 8.20% giving a neutral response. The main finding under the question shows that managers were poor in project communication, as they did not have the relevant skills to address the project communication needs.

b. RESULTS BASED ON OBJECTIVES 2: TO ESTABLISH THE CRITICAL PROJECT MANAGEMENT SKILL FACTORS

The second objective of the study sought to establish the important or critical project management factors that could affect the project management skills. There are various project management skills, which include stakeholder management, budget, prevailing client needs, training on project management and availability of funding. Five questions were included in the main questionnaire tapping into the critical skills with the findings under the respective questions presented, discussed, interpreted and linked to the literature.

Question 7: The Success Of The Company Depends On Effective Stakeholder Management

49.18% of the participants agreed with the statement that the success of the company depends on effective stakeholder management while 26.23% disagreed with the statement. About 24.59% gave a neutral response. The main finding under the question suggests that stakeholder management was viewed positively, hence it was important towards project success.

Question 8: The Success Of The Company Depends On The Budget Sufficiency

44.27 % of the respondents disagreed with the statement that the success of the company depended on the budget sufficiency or adequacy while 25.73% agreed with the statement with 29.51% of the respondents providing a neutral response. Under this question, the main finding was that project successes did not depend on budget adequacy or sufficiency. However, the disagreement does not mean that understanding of the budget was not critical for the company, but rather the managers do not value the budget as an important aspect of project management.

Question 9: The Success Of The Company Depends On Meeting Client Needs

80.33% of the participants disagreed with the statement that the success of the company largely depended on meeting

client needs while 11.48% agreed with 8.2% providing a neutral response. The main finding under the question suggests that the success of company projects did not depend on meeting client needs. If the company does not take seriously meeting client needs, this serves as a potential for disaster or project failure as clients/customers are the reason for the project.

Question 10: The Success Of The Company Depends On Project Management Training

65.57% of the participants disagreed with the statement that the success of the company depended on project management training offered across all the employee while 6.56% agreed with the statement with 26.23% providing a neutral response. Under this question, the main finding suggests that company success does not depend on project management training across the workforce.

a. RESULTS BASED ON OBJECTIVES 3: TO ASSESS THE EFFECTIVENESS OF THE CURRENT MANAGEMENT SKILLS

The third objective aimed at assessing the effectiveness of the current management skills with a view to determine if the skills possessed by the managers assisted the project towards performance and growth. Seven questions were developed to address the objective.

Question 11: Benchmarking Ensures The Success Of The Company

The question sought to assess if the project managers had benchmarking skills that would allow the company to perform and grow. Benchmarking skill is critical in any projects as it helps to compare costs or expenses at various stages of project execution. Benchmarking can also assist by comparing project A to project B allowing the project to consolidate those aspects the project would be doing right while improving on the weaknesses.

36.07% of the respondents to a neutral position to the statement that benchmarking ensured the success of the company with 36.07% disagreeing with the statement. A total of 27.87% of the participants agreed with the statement that benchmarking ensured success of the company. The finding suggests that participants were not aware or unconcerned of benchmarking as there was no outright response – above 50%, the highest being the neutral response of 36.07%. Thus, benchmarking was not taken seriously by the company as a factor that can influence project success. It would appear that participants might not be familiar with the practice of benchmarking, as it was a relatively new concept in project management. Thus, according to the finding, benchmarking was a non– event within company projects.

Question 12: The Company Has Less Defects

Defects in project delivery are a hindrance to project success, hence they must be minimised before customers notice them. The question sought to assess if the company

projects experienced less defects. 49.18% of the respondents agreed with the statement that the company has less defects while 32.79% disagreed with the statement with about 18.03% giving a neutral response. The main finding under the question suggests that the delivered projects had minor or less defects meaning that to an extent, customers were happy with the final product delivered.

Question 13: The Company Is Sustainable

The focus of the question was to assess if the company is sustainable to the extent of operating efficiently and effectively in a manner that would enable the projects to have a balance between its finances and expenses. In other words, the question sought to assess if the projects were being run on a profit basis. 47.48% of the participants agreed with the statement that the company is sustainable while 24.59% disagreed with 27.87% giving a neutral response to the statement. The main finding under the question indicate that company was operating at a profit, as they were able to sustain themselves.

Question 14: Company Projects Are Delivered On Time

Timeous delivery of projects is viewed positively by customers and thus remains a critical success factor in project management. 49.18% of the participants agreed with the statement that the company delivered on time while 26.18% of the participants disagreed with 24.59% giving a neutral response. It is clear from the findings that most of projects were behind schedule.

Question 15: The Company Meets Project Milestones

Project milestones are an indicator of project success as they demonstrate project success at strategic phases of project execution. 45% of the participants disagreed with the statement that the company met project milestones while 28.33% of respondents agreed with 26.67% of the participants providing a neutral response. It is also clear under the question that most of the company do not meet project milestones.

Question 16: Company Productivity Is Predictable

The purpose of the question sought to assess is it was possible to predict productivity within the respective projects' units or departments. 63.93% were not agreeable with the statement that productivity was predictable whereas 14.75% agreed with 21.31% providing a neutral response. The main finding under the question suggests that it is not possible to predict productivity at the company.

Question 17: Company Construction Time Is Predictable

80.33% of the participants disagreed with the statement that company construction time was predictable while 11.48% of the participants agreed with 8.2% providing a neutral response. The findings under the question show that it was not possible to predict project completion times at the company.

Question 18: The Company Meets Customer Satisfaction

Although the ultimate goal of the project is to provide a return on investment on the part of investors, the secondary goals would be to ensure that customers' needs are addressed. Thus, the purpose of the study was to assess if the company met customer satisfaction – from an employee's position. 49.18% of the respondents disagreed with the statement that the company met customer satisfaction while 24.59% agreed with the statement with 26.23% providing a neutral.24.59 response. The findings under the question show that most customers were perceived as unsatisfied with the final product delivered.

Question 19: The Company Has Adequate Material Resources

Most projects fail due to lack of material resources. Thus, the purpose of the question was to assess if the company had adequate material resources. 65.57% of respondents disagreed with the statement that the company had adequate material resources while 8.2% agreed with 26.23% taking a neutral position. The main finding under the question suggests that the company had a material resource limitation.

V. RECOMMENDATIONS

- ✓ The study recommends an overall commitment to project execution across the company workforce by implementing project teamwork. Through teamwork, projects are able to meet targets
- ✓ Mindful of the fact that project management training was identified by literature as a cornerstone towards a speedy execution of projects augmented by the primary study findings which identified training as lacking, all the company workforce should undergo training on project management with a view to gain a deeper understanding of what goes around within the project management discipline
- ✓ Emphasis on the training should largely focus on imparting project leadership skills drawing from the primary findings, which found that the company lacked on project leadership. To articulate the leadership function, there is a need for key project workforce to undergo leadership attachment with some successful projects within the construction industry in order to learn from the experienced
- ✓ It is also recommended that the chief executive officer of the company should find alternative ways of raising more funding for the projects upon which more training on budgeting and financial management should be provided to certain key project officers that include the project finance manager and the CEO.
- ✓ It is also recommended that project managers should effectively apply common project management tools and techniques, such as Work Breakdown Structures, Gantt charts, Network diagrams and Critical Path Method, to manage project scope and time.

A. SCOPE FOR FURTHER RESEARCH

Mindful of the fact that the study focussed on this particular company only, the study recommends that a study is conducted on similar construction projects within the province of KwaZulu-Natal with a view to having a balanced view on what prevails in the industries of a comparable setting.

VI. CONCLUSION

The purpose of this study was to assess the effectiveness of project management skills at the company and the effect on project performance by surveying participant's perception regarding the prevailing project management skills.

The study found out that the company lacked project leadership, operations management, and communication and time management skills. There is, however, a green light at the end provided the project workforce undergo intensive training on project management.

Finally, the study recommended an overall organisational commitment to project work through the creation of teams. The ultimate recommendation was that a similar study on construction projects with KwaZulu-Natal Province be conducted in order to have a balanced view of project management.

Despite successfully achieving the purpose and objectives, the study merely provided the basis and recommendations for assessing the effectiveness of project management skills on the company and effect on performance. Based on this, there is need to come up with a more scientifically proven framework on the effectiveness of project management skills on project performance.

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