



Project Resource Management and Performance of Construction Project in Rwanda

A Case Study of Nyamata Hostel Construction Project

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Abstract:

Background: Project Resource management is one of the most important ingredients for competitiveness and profitability in today's construction industry. In order to control costs, equipment and labor should be utilized in the most efficient way possible. This study focused on the effect of project resource management on performance of construction companies in Rwanda with a case study of the Bakat Co Ltd with its project of Nyamata Hostel construction between 2017 and 2019. The specific objectives were to examine the effect of project team incentives, Financial resource planning and material planning on performance of Bakat Co Ltd Nyamata hostel construction Project.

Materials and Methods: The study used planning theory, theory of change and theory of constraint. The researcher used mixed method approach by incorporating both quantitative and qualitative methods because of the numerical and non-numeric/narrative data that was used in analysis of findings. The target population included 85-project team comprising of Bakat Co Ltd with Nyamata hostel construction Project. The study used census where all 85 member Bakat Co Ltd with Nyamata hostel construction Project was sampled. Data was collected by use of questionnaires, coded and inputted in the SPSS. Data was analyzed using quantitative technique including frequency, percentage mean and standard deviation was used multiple regression analysis and correlation analysis where correlation coefficient to assess relationship between the two variables. The findings were presented in tables and chats. The recommendations were directed to Bakat Co Ltd in order to take better decisions in providing incentives to project team members in Nyamata hostel construction Project.

Results: Project team incentives and financial resource planning had no significant effect on project performance of Nyamata Housing Project with $0.001 > 0.05$ while Material resource planning has no significant effect on project performance of Nyamata Housing Project with $p = 0.004 > 0.05$. It can be concluded that construction projects experience various problems and complex factors such as cost, duration, quality and safety. Construction sector is diverse as it contains sub-contractors, contractors, consultants, architects, owners, and others therefore Nyamata Hostel Project management need to identify and analyze resource management issues in construction project. The study suggested that time schedules be created using the previously generated WBS. Similarly, the study suggests that proper activity sequencing be used to create realistic and attainable timetables. Identifying dependencies and logical links between project tasks is part of the activity sequencing process. Because a time schedule without control is useless to the project team, continuous checks and controls should be carried out to detect deviations as soon as possible. The project team will be able to take required actions if deviations are detected early.

Conclusions: *The study concluded that material consumption planning should be a priority for successful construction project planning. This is because accurate material scheduling improves productivity by decreasing the necessary lead-time, giving the construction project owners a higher quality of production and service. Firms should adopt this, as it will give them a competitive advantage.*

Key Words: *Resource Management, Performance of Construction Project, Nyamata Hostel Construction Project, Rwanda.*

i. Introduction

Project resource management is one of the most important criteria for competitiveness and profitability in today's construction industry. Equipment and labor should be used as efficiently as possible to keep costs down. This can be done by lowering the total cost of leased resources while increasing and optimizing the use of owned equipment and contracted employees.

In terms of resources, construction is the second-largest industry after agriculture. Construction projects are high-risk efforts that necessitate a huge number of resources, such as employees, materials, and equipment, to meet established performance goals using management procedures. Resource management, particularly labor management, is one of the challenges that arise on a regular basis in a construction project. Labor is used as a resource in the construction of a gated community that comprises residential buildings in this project (Halpin, Lucko & Senior, 2017). The construction industry was one of the first to arrange itself on a project-by-project basis. The Egyptian pyramids (3rd millennium B.C.) and aqueducts, which provide water to towns and industrial locations such as gold mines, are well-known examples, with the first one being built in Rome in 312 B.C.

As a result, massive buildings with a varied range of construction processes and a heterogeneous mix of materials and components have begun to exhibit Taylorism and specialized features. Aside from recent improvements in construction standardization, such as modular or pre-engineered housing and prefabricated standardized components, both of which are concepts derived from the manufacturing industry, the project-based organizational structure in construction has largely remained unchanged for centuries. However, despite its age, building remains an unsustainable business in terms of the triple bottom line of sustainability, which includes economic, ecological, and social factors. Construction is characterized by time and cost-intensive production processes, which make it vulnerable to project risks and failure, particularly in terms of time and money. Because of the significant demand for infrastructure development, construction projects have expanded in recent years.

Financial, legal, ethical, environmental, and logistical constraints are all imposed by today's rapidly changing circumstances. The construction industry is a significant part of the worldwide economy. They interact with the environment in a variety of ways, including technical, economic, and social interactions, as well as with other organizations, structures, and systems. Even while building projects use many resources, they have challenges, risks, and each task is labor intensive (Al-Mustapha & Olugbenga, 2016). Due to the intricacy of its goods, the construction industry can be regarded as a one-of-a-kind industry, with customer-driven, one-of-a-kind projects accompanied by regionally focused manufacturing and large investments. Construction supply chains are distinct and more sophisticated than those in the manufacturing industries.

This is due to the unique nature of the projects, the highly uncertain planning environment, and the various stakeholders involved in a construction project. As a result, standardized construction processes cannot be leveraged to provide competitive advantages if the focus is on individual construction, such as designer buildings, streets, and tunnels. To sum up, complex project planning and control procedures would be necessary in these so-called design-to-order planning settings. Researchers, on the other hand, are still hesitant to handle the complexities of individuals. In 2006, the European Union's 27 member states invested a total of 1.196 billion Euros in building. The construction sector accounted for 10.4% of GDP and employed 2.7 million people.

There were fewer than 20 operatives in 95 percent of the businesses, and fewer than 10 in 93 percent of construction businesses. While the construction industry employs roughly 26 million people directly or indirectly, the overall number of direct employees is estimated to be 15.2 million. As a result, the construction industry employs 7.2 percent of Europe's overall workforce and up to 30.4 percent of all industrial workers (FIEC 2007). In Germany, the building industry's proportion of national gross value added declined from 7% in 1994 to 3.9 percent in 2006. However, the construction sector's dismal trend appears to be coming to an end, since the 4% gain in gross value added in 2006 is higher than the 2.6 percent increase in gross value added for all sectors (Bundesamt, 2007). Furthermore, the construction industry employed 2.199 million workers out of 39.737 million in 2007. This equates to about 5.5 percent of total employment (Bundesamt, 2008).

The construction industry's large number of SMEs, as well as the enormous investments required for procurement, implementation (including worker installation and training), and maintenance, as well as the essential knowledge transfer, all provide implementation challenges. One of these companies is BAKAT Co Ltd, which was founded in 1987 as an industrial system integrator. The major purpose of BAKAT Co Ltd is to provide stable and dependable sources of automation expertise and local manufacturing help to local firms in order to address the growing demand for advanced plant automation and local support facilities for international investors. Recognizing the importance of industrial automation, BAKAT Co Ltd aims to do more than just sell technology; it also wants to promote awareness about global industrialization. Companies can go forward in line with modern industrial demands with the help of the products and services.

BAKAT Co Ltd has been continuously improving its products over the years in order to provide clients with the most reliable automation solutions. BISB's key responsibilities include paneling, component assembly, product proposal, system integration, installation, site cabling work, testing, commissioning, and maintenance of industrial automation systems. BAKAT Co Ltd's solutions include electrical, control, and instrumentation. Some of the services provided by the industry include PLC Software Programming, SCADA / HMI & Networking System, Cabling & Earthing Works, Installation, Testing & Commissioning, CCTV / PAGA System, Telecommunication System, Control & Instrumentation, and Turnkey Projects. The development of the Nyamata Hostel, which began in 2017 and will be completed in 2022, is one of the projects funded by BAKAT Company Limited.

Lack of human capital, material, and financial resources create delays in construction projects (Kennedy, 2016). Many of project managers focus their financial and time resources on fixing immediate concerns, making it difficult for them to anticipate and plan for future challenges. Projects that are caught off guard may have to invest a significant amount of time and effort to catch up. They devote all of their energy to resolving immediate problems, leaving little time to anticipate and plan for future challenges. As a result of this vicious cycle, many businesses are stuck in a reactive state (Moris, 2014). There is construction boom underway in Rwanda, with revenues from the sector rising by over 60% since 2012. Construction earnings reached \$560.5 million in 2018, equal to 6.2% of GDP and 38.2% of the total industrial sector's income (Rwanda Development Board, 2015).

The research carried out on project resource management and project performance in developed and developing nations and has shown that past researchers explored a linear and significant relationship between project resource management and project performance: Al-Mustapha, & Olugbenga, (2016) studied factors Influencing Human Resource Development strategies adopted by Construction Firms in Northwestern found positive association between planning of HR and project performance, Assaf, and Al-Hejji, (2016) studied Causes of delay in large construction projects and further found that materials management problems in many projects influence project success; Vrijhoef & Koskela, (2010) study in Sweden, found that financial planning and material Planning in construction 35 procurement and delivery, schedule, affect project cost, and quality and study used descriptive survey design in targeted projects.

Kress (2014) used a survey design of selected construction firms in London to explore the effects of material planning on project performance, and discovered that the project management major goal may be to meet or exceed the material usage sponsors' expectations of the project. However, various forces engaging and seeking to sway projects off course were not considered in the study. Although, empirical literature of element of project resource management and project performance no single study that has focused on three project resources (project team incentives, Financial resource planning and material planning). Hence, need to study the effect of project resource management on project performance in Rwanda in relation Nyamata Hostel Construction. The general objective of this study was to examine the effect of project resource management on project performance in Rwanda. The research was guided by the following specific objectives:

- i. To examine the effect of project team incentives on project performance of Nyamata Housing Project
- ii. To assess the effect of Financial resource planning on project performance of Nyamata Housing Project
- iii. To examine the effect of Material resource planning on project performance of Nyamata Housing Project.

ii. Theoretical Literature

Project Resource Management

Project Resource Management is one of the most critical factors for competitiveness and profitability in today's construction business. Equipment and labor should be used as efficiently as possible to keep costs down.

This can be done by lowering the total cost of leased resources while increasing and optimizing the use of owned equipment and contracted employees. In terms of resources, construction is the second-largest industry after agriculture. Construction projects are high-risk efforts that necessitate a huge number of resources, such as

employees, materials, and equipment, to meet established performance goals through the use of management procedures. One of the issues that arise on a daily basis in a construction project is resource management, particularly labor management. Labor is used as a resource in the construction of a gated community that comprises residential buildings in this project (Halpin, Lucko & Senior, 2017).

Project team Incentives

The general contractor undertakes some of the construction work directly under the 'at-risk' CM, while subcontractors do the remainder of the work. Although the 'at-risk' CM contracts directly with subcontractors, the contracts are usually in the name of the client, thus subcontractors may demand payment from the owner (Bennett, 2013). Project team incentives is not only important to motivate workers but also a great determinant of organization financial performance, according to Rosenfeld, *et al.*, (2014) reported that a test of 478 enormous US organizations from 2010 to 2013, researchers obtained comparative outcomes as the remainder of the observational writing with respects to the affectability of pay (project team incentives & bonus) to performance but conclude that the driving force behind this relationship is stock and stock options.

When they incorporate stock and investment opportunities than the mean flexibility, Murphy (2005), Coughlin and Schmidt (2015), Barro, and Barro (2010) from their numerous studies found pay performance elasticity. High engagement methods, according to Batt (2002), can have an impact on organizational performance, and employee participation in problem-solving and self-directed teams can increase autonomy and pleasure. General managers face a difficult and challenging challenge in motivating employees through a good compensation system, which can positively alter employees' behavior toward their jobs, boost their dedication, and therefore their performance. According to Armstrong and Murlis (2007), incentives are an important aspect of an organization's HRM strategy and should be used in conjunction with other HR strategies to complement and reinforce each other. A good reward system, according to Bratton & Gold (2007), can help boost employee productivity.

Some kinds of remuneration, such as profit sharing, are used as a strategic variable to boost corporate competitiveness, according to Kalleberg and Moody (1994), since it connects workers' interests more closely to the organization's, enhancing their efforts and resulting to higher performance. Addition sharing is a type of pay for execution. In increase, sharing workers get a bit of the benefit accomplished from their endeavors. The amount they receives controlled by their presentation against the plan (Brown, 2010). Increase sharing fills in as follows; the association must quantify the authentic or standard presentation. At that point if representatives help improve the association's exhibition on those measures, they share in the money related prizes accomplished.

The adequacy of an addition sharing arrangement relies upon workers seeing a connection between what they do and how well the association performs. The bigger the size of the association, the harder it is for employees to see the impact of their work. Increase sharing plans are thusly more powerful in organizations with less than 1,000 individuals. Increase sharing achievement additionally requires the organization to have great execution measurements set up with the goal that representatives can follow their process. The increase sharing arrangement must be fruitful if workers accept and see that in the event that they perform better, they will be paid more.

The compensation ought to be given at the earliest opportunity after the exhibition with the goal that the tie between the two is built up (Kleiner *et al.*, 2011). Extra Schemes are based on the Balance Score Card, a key planning and executive's framework that is widely used in business and industry, government, and non-profit organizations around the world to align business activities with the organization's vision and methodology, improve internal and external communications, and monitor association execution against key objectives (Gomez, 2007). Rewards, which will in general be bigger than merit pay increments, include lower hazard to the business since the business does not make a lasting money related responsibility. The associations set approaches with respect to the rewards. Normally rewards are given toward the finish of an assigned period (Armstrong, 2011).

A portion of the criteria for the achievement of such extra installments are bunch over individual execution, the presence of target criteria for conveyance, and the way that such criteria are fit for estimation to guarantee that what is paid is identified with it (Allan, 2017). A reward is an unwarranted installment by the business that is not legitimately earned by the worker. The representative has no qualification to the installment because of an agreement of work and cannot be guaranteed of getting it as an end-result of a particular presentation.

The fact of the matter is that the degree of the advantage can't be straightforwardly connected to the exhibition of the individual rather to the presentation of the business (Hall, 2018). Allowance because of Profit sharing is another impetus plan finished with pre-charge money. A corporation sets aside a percentage of its pre-tax income and distributes it to its employees, according to the Chron (2015). In most circumstances, an employee must achieve company performance measures and have a certain amount of service with the company to be eligible for profit sharing. Some employers will put the pre-tax money into their employees' business retirement plans,

allowing the funds to grow in the future. Companies may also develop a benefit sharing rate dependent on the measure of time worked for the organization, the position held inside the organization or a mix of the two conditions.

Motivating force pay is commonly given for explicit execution results as opposed to just for time worked. Motivations incorporate benefit sharing, increase sharing and worker stock possession plans. Crease Sharing includes offering to representatives more prominent than anticipated gains in benefits and for productivity (Lazear, 2010). The additions can be estimated monetarily, by efficiency and quality quantifies and can be paid month to month, quarterly, semiannually or every yearly. Increase sharing pay plans incorporate Scanlon Plan will be associated office boards of trustees are set to assess cost of project recommendations and the investment funds coming about because of the projects are put in a reward reserve and motivator rewards are given to representatives from this store. The reserve is part among workers and the association. Representatives get the motivations remuneration for decreasing work costs whether or not the association makes a benefit; Runcker set in place system utilizes laborer the board advisory groups to request and screen thoughts.

The cost sparing computation right now to be increasingly intricate in light of the fact that the equation incorporates work costs as well as different costs associated with the creation procedure; improved profitability through cost sharing arrangement. Right now, standard is created dependent on look into by a modern designing gathering or some arrangement of base period experience information that distinguishes the normal number of hours required delivering an adequate degree of yield. Any investment money emerging from creation right now yield in less than anticipated hours are shared between the firm and the laborers (Gomez & Balkin, 2007).

Financial Resource Planning

The impact of public-private partnerships (PPPs) has grown dramatically in recent years, owing to inefficiencies in government-funded infrastructure projects and budget deficits, as well as an aging infrastructure and rising demand for public services. As a result, in many nations, public-private partnerships have become the preferred method of delivering public services. "A public-private partnership (PPP) is an agreement between the government and private sector investors and businesses under which the private sector provides a service for a set period under a concession that would otherwise be provided by the government on a non-recourse or inadequate recourse financial basis" (Leiringer, 2016).

The risk is transferred to the private sector, that may be supposed to manage project risks more effectively and proficiently as a result of its superior managerial and technical skills. As a result, infrastructure services could be provided at a reduced cost while maintaining a higher level of quality (Ahadzi and Bowles 2014; Jin & Doloi 2008). PPPs include the most common contractual arrangements between the private and public sectors, in addition to the BOOT system, such as build-operate-transfer (BOT), build-transfer-operate (BTO), design-build-operate-finance (DBOF), and design-construct-manage-finance (DCMF) (Leiringer, 2006). Finally, and perhaps most crucially, the force account approach can be used to build incredibly short, simple projects for the owner's use. The owner performs the work using his or her own employees, providing field supervision; materials, equipment, and labor (Bennett 2013). Cost budgeting and cost estimation are part of the financial planning process of a project. The goal of cost planning is to complete the project within the allocated budget (PMBOK, 2004). Budgets are critical in projects because they affect every aspect of planning and execution.

All expenses are critical and should be tracked, as well as the costs of the various task packages inside a project (Guoli, 2010). When a project budget is set professionally, project costs are controlled, and a sound and efficient cash flow is established. Insufficient cash flow due to poor budgeting, according to Antvik & Sjöholm (2010), causes delays in completion and large additional costs, putting the project at risk of being temporarily halted. Cost estimates should be based on the scope of the project, the work breakdown structure, and the project plan. According to Olawale and Sun, a reserve cost may have been given to operations with a low work package level or accurate information with possible high financial risks due to the presence of multiple causes of uncertainty in a project (2010).

Material Resource Planning

In the broadest sense, the project manager is the person most responsible for the project's success or failure. The project manager is in charge of the project's planning, organization, and control. In turn, the project manager is given power by the organization's management to mobilize the resources needed to finish a project. Despite the fact that construction materials account for a major portion of overall construction expenditures, non-availability of material on site has been acknowledged as one of the most significant and prevalent reasons of project delays (Ibn-Homaid 2002). Without good material planning, disruptions in project cost, schedule, and quality are likely to happen as a result of insufficient preparation in construction 35 procurement and delivery (Vrijhoef & Koskela, 2010).

As a result, it's important to remember that material orders are based on the first timeline. As a result, the more appropriate the original timeline is, the better organized the materials procurement, and management procedure is, the more likely material will be available on site when needed. As a result, factors connected to project planning, hence scheduling and materials management, are well-known concerns in many projects and have a considerable impact on project success (Faridi & ElSayegh 2016). Finally, in addition to the project planner's experience, project organization, and suitable information stream between project partners during project scheduling, as well as proper materials management, efficient project planning, which necessitates resource differentiation based on risk exposure, is a critical factor in project success.

Renewable resources are limited-quantity resources, such as machinery or labor, that are available in a finite number at any given time, and the amount of renewable resources available varies over time. During the whole planning horizon or project length, on-renewable resources are limited, for example: budgetary restrictions. On-renewable resources, on the other hand, are those that deplete over time without being replenished. Finally, resources with a double limitation are those that are restricted both per period and over the full planning prospect, such as the budget, which may be 'renewed' at the start of each month but has a total amount limit for the project (Slowinski 2009; Weglarz *et al.*, 2016). Project planning, which leads to scheduling and materials management, is a common problem in many projects and has a significant impact on their performance (Assaf & Al-Hejji, 2006).

As construction material suppliers, we may apply mass manufacturing by taking into account the construction industry's variable demand patterns and, as a result, dealing with shorter planning horizons. Some SCM concepts from the manufacturing industries have previously been applied, according to the evaluation of SCM concepts for building. Nonetheless, a substantial number of restrictions and inconsistencies (Saad *et al.*, 2012) characterizes the implementation of SCM in the construction industry. Engineering and design firms, suppliers, and construction managers frequently overlook the building site employees' specific matching problem, which necessitates precise and timely material and resource distribution. Furthermore, despite the fact that contractors are held responsible for meeting completion dates, they typically arrive too late in the delivery process to have an impact on upstream site operations. To reduce on-site congestion and inventory, contractors force the earliest possible delivery of items to the site rather than a delivery method that corresponds to the anticipated installation dates (Walsh *et al.*, 2004).

Performance of Construction Projects

The construction industry, more than any other, has a negative reputation, with low-quality goods and projects that are routinely over budget and late (Fenn 2006). Contractual conflicts, often known as adversarial attitudes of project participants, are also common in the construction business, and their prevalence has recently increased, negatively affecting the industry. Construction disputes have a long history, and a number of empirical studies on the causes of disagreements among construction project participants have been conducted and published. This essay will provide you with a comprehensive overview (Fenn 2006). While some authors point to risk allocation, design revisions, and project execution management as important reasons of conflicts (Lewis *et al.*, 2012), others emphasize the importance of contractual fairness and clarity. The most typical causes of construction disputes are planning in construction 33 agreements, payment, and construction delays (Al-Momani 2010; Assaf & Al-Hejji 2016; Kumaraswamy 2017). Both late deliveries and cost overruns risk project success, leaving the construction project's client dissatisfied and the contractor facing costly and time-consuming dispute resolution and lengthy claim management operations. As a result, despite the meticulous structure of contractual agreements and the formation of solid partnerships, delays in construction projects may be prevented if success criteria were considered. It is referred to for a more comprehensive overview (Fenn, 2006). When a building project is delayed, both the owners and the contractors lose money. Contractors suffer increased overhead costs as a result of longer work times, higher material costs owing to inflation, and increases in labor costs (Assaf & Al-Hejji 2016), not to mention the damage to the company's reputation and missed opportunities in future bids (Assaf & Al-Hejji 2016), while owners lose revenue due to a lack of production facilities, reliance on existing facilities, or a loss of income from rentable space. Project delays can be classified into three groups: those caused by the owner, those caused by the contractor, and those caused by a third party. However, the contractor is still responsible for presenting evidence for the cause of one party's delay (Lee, 2003). As a result, owners may create delays at any point during the project life cycle, whereas contractors' liability is limited to the phases in which they conduct work.

Several research on the reasons of construction project delays have been conducted, and it has been shown that roughly one-third of all construction projects are over budget and on schedule, despite the fact that these are critical competitive elements (Yeo & Ning 2002). Constant changes in project requirements, the development of multiple projects simultaneously while deferring less critical projects, poor communication among project partners, and a lack of available resources are just a few of the reasons, according to surveys of construction practitioners. A scarcity of site workers and technical personnel, late supply of building supplies, insufficient equipment and equipment allocation issues, and a hazy budget and timeline specification (Ogunlana *et al.*, 2016;

Yates & Eskander 2012; Yeo & Ning 2012). In this context, several parties, such as the military, could be blamed for the delays (Assaf & Al-Hejji 2016; Sambasivan & Soon 2007).

Both the owners and the contractors lose money when a construction project is delayed. Contractors suffer greater overhead costs as a result of extended work durations, rising material costs owing to inflation, and rising labor costs (Assaf, 2006), not to indicate the harm to the organization's image and reduced chances in future bids, while owners lose money due to a lack of production facilities, reliance on existing facilities, or a loss of income from rentable space. When it comes to project delays, they can be divided into three categories: those brought on by the owner, those brought on by the contractor, and those brought on by a third party.

However, the contractor is still responsible for presenting evidence for the cause of one party's delay (Lee, 2003). As a result, owners have the ability to cause delays at any point during the project's life cycle, whereas contractors' responsibility is limited to the periods in which they work. According to several studies on the causes of construction project delays, approximately one-third of all construction projects are completed on time and within budget, despite the fact that these are critical competitive characteristics (Yeo & Ning, 2012).

iii. Empirical Review

Effect of Project Team Incentives on Performance

Al-Mustapha and Olugbenga (2016) studied factors influencing Project Team Incentives strategies adopted by Construction Firms in Northwestern, Nigeria. Belout and Gauvreau (2004) investigated the factors that influence labor productivity in project outcomes. The study employed descriptive analysis and targeted personnel from diverse projects. The researchers discovered a link between HR planning and project success. According to the report, businesses should implement a worker involvement program that will help employees understand their roles and aspirations for the future. Because this study focused primarily on human contributions, non-human parts of a project, such as money and material planning, were not explored.

At 190 US petrochemical refineries, the impact of different Human Resources practices (selection, training, technical expertise, leadership and management style) on project performance was investigated (Wright *et al.*, 2009). Employee motivation and selection, training, leadership, and management styles all have a direct link, according to the findings of this study. Nonetheless, the researchers discovered that HR practices (selection, training, leadership, and management styles) are only favorably related to a firm's project performance in highly participative systems.

Armstrong and Murlis (2014) investigated the impacts of Project Team Incentives on organizational performance. The findings were evaluated using descriptive, correlation, and inferential analysis in this study, which followed a descriptive research technique. Incentives, according to the findings, are an important part of an organization's HRM and should be used in conjunction with other HR practices to achieve the goal.

The findings, on the other hand, contradicted a study by Bratton and Gold (2007) on the impact of human resource planning approaches on organizational performance. Employee productivity may increase as a result of motivation through a good reward system, according to the research. In their study titled "Exploring the Effectiveness of Monetary Rewards to Employees," Daly *et al.* (2013) sought to determine how monetary rewards obtained by employees increase the transformation process within enterprises in Northern Ireland. Daly and the research fellows concluded that management's responses to change differed depending on the size and kind of organization, and those softer variables such as culture and management style had benefited the companies' growth because of the success of its personnel. Bebchuk and Fried (2014) reported that a test of 478 enormous US organizations from 2010 to 2014, researchers obtained comparative outcomes as the remainder of the observational writing with respect to the affectability of pay (project team incentives & bonus) to performance but conclude that the driving force behind this relationship is stock and stock options. Baker *et al.* (2015) through using company sales as the yardstick of performance and analyzing the relationship with executive compensation found out that the flexibility of official yearly compensation in addition to reward and is generally similarly all project, ventures and timeframes.

In these findings may be consistent with value maximization of large firms, which employ better qualified and paid CEOs, the leadership might not be acting in an ideal. Waylambert and Larcker (2017) examined the connection between supervisors' money remuneration and project execution. They found that the overall extents of bookkeeping based and showcase based pay shift as the hypothesis predicts. Specifically, they discovered that Return on equity was more profoundly identified with money pay than return on shares and the above relationship was fortified when total compensation was less boisterous comparative with return on shares because thus net gain better mirrored director's exertion.

The above relationship for development projects would in general be lower in light of the fact that the explanation being recorded price based overall gain tends specially to fall behind the genuine financial exhibition of a development project. Considerably, this investigation furnishes exact proof predictable with organization hypothesis Rosen (2010) directed a few autonomous experimental examinations on CEO pay for execution and presumed that the proof from these examinations recommends that the impact of stock profits for log pay is in the 0.10-0.15 territory. He further outlined an assortment of scholastic compensation for firm size flexibility works for various timeframes in the U.S. what's more, the UK and discovered some variety in CEO pay for firm size versatilities, however inferred that the assessed flexibilities for all organizations are not altogether unique in relation to $\beta = 0.3$. Jensen & Murphy (1990b) reported in their studies that between 1974 and 1980, median CEOs of 1300 companies listed in the Forbes survey experienced changes in wealth of \$3.25 for every \$1000 change in shareholder wealth however project team incentives and bonus changed at 2.2 cents per \$1000 change in shareholder value.

They also reported that there is little evidence that relative execution to different projects in a similar projects went about as a measuring stick to administrative impetuses. Ogoye (2012) done an exact examination on the 41 open organizations in Kenya between 1994-1998 and set up that pay, stipends, annuities and advances represented 70%,14%,7% and 6% of administration remuneration separately. He additionally found that the connection between the board remuneration and firm execution was negative and measurably inconsequential Deals were seen as emphatically and fundamentally identified with the executives remuneration. Muriithi (2014) found no significant relationship between corporate governance and firm performance.

He looked at 44 companies listed on the Nairobi Stock Exchange between 2009 and 2013, and discovered that no measure of firm performance shows a meaningful association with executive board member incentives. Mululu (2015) did an investigation on the connection between board movement and projects execution of the recorded project at the NSE and showed that administration structures are dependent upon more impact from the leadership and are related with more significant levels of top-level management remuneration. Additionally, the sheets' action is decidedly identified with the monetary exhibition of project proposing that sheets' action is a worth significant to property in corporate administration.

The CEO can decide his /her benefits through obstruction on the arrangement of non-official chiefs and furthermore individuals from the compensation board of trustees. Andrea *et al.*, (2004) link human resource-based performance to executive compensation. They claim that considerable compensation are required to motivate less productive managers to announce that capital should be reallocated when they have private information about how productive assets are under their control and earn private benefits.

According to them, the requirement to give annual bonus incentives for managers to surrender power is linked to executive salary and turnover across the business cycle. Maksimovic and Phillips (2011), who show that the fraction of plants which change hands per year is higher in expansion years than in recession years term the performance of firms under managerial motivation of annual bonuses as indeterminate, subject to the manipulation of reports in what could be called innovative accounting to reflect what is not the reality, besides the fact that it leads to managers developing biases towards productive and against less productive workers.

In their research titled "Managerial incentives in Hierarchies: Evidence from a field experiment", Bandiera, Iwan and Imran (2005) study European and American firms. They present proof from a project level analysis in which they built an exogenous change in administrative motivating forces from unchanged payments to execution pay dependent on the normal efficiency of lower-level laborers. They find that while at the total level normal profitability expanded by 21% at the individual laborer level, the impacts were extremely heterogeneous.

Efficiency expanded essentially for the most capable and spurred laborers, while it diminished for the least capable specialists. Likewise, the most capable laborers were bound to be held in the workforce after the presentation of administrative exhibition pay, and this determination impact represented at any rate half of the profitability gains, making the presentation inspiration ineffectual. The study's conclusion is that providing financial incentives to employees, such as money, is the driving force behind any company's success (Covington, 2001).The research of Welch and Jackson (2007), titled "Rethinking About Organizational Development: a Stakeholder Approach," aimed to help organizations improve their productivity by proposing the concept of providing some attractions to employees so that they can think about the organization all of the time and contribute their creativity to help the organization increase its efficiency and effectiveness.

Effect of Financial Resource Planning on Performance

Guoli (2010) looked into the effect of budgeting on project success. The study used a descriptive research design and focused on efforts that had come to a halt. According to the findings, a professionally created budget keeps

project expenditures under control and produces favorable cash-flow conditions. The study also discovered that a project's insufficient cash flow result is commonly related with delays and considerable additional expenditures, as there is a significant risk of the project being temporarily halted. The impact of budget planning on project performance was not completely investigated throughout this study.

Koskela *et al.*, (2011), explored the impact of financial planning upon project success. The study used a descriptive survey design and concentrated on Swedish initiatives. Education, culture, and financial standing are all factors that influence project management methodologies and approaches, according to the study. On the other hand, several middle-level managers lack authority. This is because managers are in charge of a certain area over which they have decision-making authority, which could be an issue because it was not taken into account in this study. Several building firms are more flat, with middle management wielding significant power. This is also linked to the organization's higher levels of authority and may have an impact on how funds are allocated. Antvik (2013) investigated the role of cost on project success. The investigation was carried out using a census. According to the study, cost projection should be based on the project's scope, WBS, and be related to the project's plan. The study also showed that the cost of particular activities must be appraised based on the individual activity conditions in order for the project to arrive at an accurate estimate.

Due to the different sources of uncertainty in a project, it is prudent to set aside certain funds for tasks with a high level of risk and a lack of specific knowledge. The impact of cost planning on project performance was explored by PMBOK (2014). A descriptive research design was used in this study. Participants in the study were project managers. Project cost planning approaches such as cost budgeting and cost estimate, according to the findings, have an impact on project performance. Cost-planning procedures, according to the study, are required to complete a project within the agreed-upon budget. The budget for a project is critical, because it has an impact on all aspects of project planning and execution. The study concluded that keeping track of charges for individual job packages as well as total project costs is critical. The study, however, failed to demonstrate the strength of the link between project performance and cost planning.

Effect Material Resource Planning on Performance

Plenert and Best (2012) investigated how material level affects project success. A survey of construction companies was conducted as part of the study. The majority of the JIT cost benefits happened when inflation surged, resulting in considerable increases in the cost of carrying inventory, according to the study. According to the report, businesses must be able to focus their planning solely on the supplies required and when they are required. The study was unable to demonstrate a clear link between material utilization and project success. Kress (2014) used a survey design of chosen construction businesses to investigate the influence of material planning on project performance. The study focused on construction projects in London that were not completed on time. According to the findings, project management's primary purpose is to meet or surpass the material consumption sponsors' expectations for the project. These expectations are typically articulated in three groups, according to the research: A project creates the best product with the fewest defects. The anticipated cost determines the ideal outcome of a project. Schedule: A project's goal is to achieve the intended result in the time allotted. Various factors engaged in and aiming to steer projects off course, on the other hand, were not taken into account in the study. Telsang (2014) investigated the project planning process and its impact on project performance. The study employed a descriptive research design. This research focused on initiatives in India. According to the findings, planning defines the actions and activities, as well as cost and time targets and performance milestones, all of which contribute to successful project implementation and accomplishment of project objectives. According to the findings, the plan must specify the human resources, equipment, materials, and facilities, as well as any other resources, needed to complete the project. Investing resources and planning ahead of time does not necessarily ensure a favorable outcome. It rarely works that way because, no matter how precise the planning process was, the unexpected happens more often than not.

According to Ibn-Homaid (2012), who conducted a comparative analysis of construction and manufacturing materials management, the project manager is responsible for the project's planning, organization, and supervision. In turn, the project manager is given power by the organization's management to mobilize the resources needed to finish a project. In terms of material management, the lack of material on site has been highlighted as one of the most common and significant causes of construction project delays. Vrijhoef studied the four functions of supply chain management in construction, while Koskela (2010) discovered that operations management consists of centralized plan design, revision, and implementation. This management paradigm assumes a strong causal link between management activities and organizational outcomes. Plan formulation becomes synonymous with action when people believe that putting a plan into action is just a question of issuing "orders."

Performance of Construction Projects

The factors that cause delays in the UAE construction industry were investigated by Faridi and El-Sayegh (2016), they established that the better the original schedule is prepared, and the better the materials procurement and management process is prepared, the more likely material will be accessible on site when needed. As a result, factors connected to project planning, hence scheduling and materials management, are well-known concerns in several projects and have a considerable impact on project success.

Assaf and Al-Hejji (2016) investigated the causes of delays in large construction projects and discovered that the owner's delay in progress payments, design specifications, and late material procurement are among the causes, while consultants point to factors such as the type of project bidding and award, a labor shortage, and the contractor's ineffective project planning and scheduling as factors that affect the project's performance. Project planning, which leads to scheduling and materials management, is a well-known difficulty in many projects, according to the study, and has a significant impact on project success. Sambasivan and Soon (2007) investigated the causes and impacts of delays in the Malaysian construction industry and discovered that the most common reasons of delays in building projects were bad planning, followed by a scarcity of materials, among other things. In addition, the results revealed that there are two significant causes for delays, inadequate scheduling and the lack of material and resources on-site generate delays, both of which are related to project planning and materials management. Akpan and Chizea (2012) investigated the determinants of time planning systems in construction firms. A case study of failing Nigerian initiatives was chosen. The study discovered that a time planning system involves a rational examination of actual implementation against pre-established standards, and that if execution differs from the traditional objectives, corrective action is taken quickly. Execution of a project, on the other hand, refers to the actualization of a project plan while also measuring the plan's efficacy in achieving the established goals, which could be defined as project control in action. The impacts of time planning on project performance were not investigated in this study.

Lloyd (2013) looked into the impact of time management functions on project outcomes. A survey of construction projects was used to conduct the investigation. The respondents were project managers and sponsors, and the study focused on projects that were not completed on time. The study discovered that function is defined as the project's prior planning at any time based on current certainty and revised prospects. This is also logical, according to the study, because project restrictions and even objectives might change during the execution phase. It is difficult, if not impossible, to discover deviations from plans. It may be stated in this prologue that planning should be detailed in order to achieve control, because nonconformity from it loses its value quickly if it cannot be discovered and corrected quickly. Telsang and Raymond (2014) investigated the impact of project plans on project performance. A descriptive research design was used in this study. The study's participants were the owners of a number of construction firms in New Delhi, India.

Completing alternate project plans on schedule, according to the study, as well as mitigating or preventing negative effects before they arise during the project's implementation stage, can improve the control system mechanism. The study also discovered that project monitoring is critical, with the primary purpose of ensuring that various time and cost targets are fulfilled, as well as that the network and operational plans made for project implementation are followed. It's possible that it's too late to avoid the cost and time overruns that come with corrective action. The study was unable to assess the extent of the relationship between project performance and schedule.

iv. Critical Review and Research Gap Identification

In analyzing the knowledge gap in the effect of project resource management on project performance and providing strategies to close it, we will look at what is missing from some of the researchers' studies and then find solutions to close the gap (Al-Momani 2000; Assaf and Soon 2007). Telsang (2014) carried out the effects of project plans on project performance and discovered that project monitoring is critical, with the primary purpose of monitoring being to verify that various time and cost targets are reached. Descriptive research design, on the other hand, was used. Akpan investigated the drivers of time planning systems in construction enterprises and Chizea (2012), who discovered that time planning systems need the reasonable evaluation of real execution with pre-established criteria.

The study was conducted in Nigeria, but the results presented here are from Rwanda. Plenert and Best (2012) investigated how material level affects project success. A survey of construction companies was conducted as part of the study. The majority of the JIT cost benefits happened when inflation surged, resulting in considerable increases in the cost of carrying inventory, according to the study.

Theory of Change

Huey Chen, Peter Rossi, Michael Quinn Patton, and Carol Weiss created the idea of change in 1995. The focus of this idea is on how to bring about change and who should be held accountable for it. The general logic is employed in an intervention using logical models, which are frequently used to illustrate program theory. The theory belongs to the field of applied development evaluation and theory of change. For numerous years, the proponents of this idea focused on how to connect program theories to evaluation, according to Weiss. For many years, program theory has been a useful instrument in monitoring evaluations; the theory is known for its conclusive mechanism for resolving difficulties, and it addresses the need to supplement the findings with our assessments.

It also gives you the tools you need to keep an eye on the most important aspects of your evaluation (Sethi and Philippines, 2012). Human service programs are created to build societal demands, and they are dynamic and subject to change based on predetermined scenarios in a number of organizations' transactions. As a result, logical framework technique is used in the program theory. A more complete form of the logic model is the program theory. To link to the logical concept, it was given as a pictorial scale. The logical model aids stakeholder interaction, senior management, and outcome evaluation (Hosley, 2009). The theory is expected, as is a realistic example of how a hypothetical program would work (Bickman, 2007). It is a proposition, according to Lipsey (2011), in terms of input to output transformation. The transformation is measured by comparing the input and predicted output. It depicts how the program's components are meant to influence the outcomes.

According to Rossi (2012), the theory comprises of an organizational plan on how to deploy resources and arrange program activities in order to ensure that the planned service system is developed and maintained. The idea also helps with budgeting and analyzing how the target folks receive the necessary assistance. The interconnectivity of service delivery systems allows this to happen. Finally, the theory explains how specific target people's intended activities match to expected social gains. Uitto (2010) demonstrates the benefits of using a theory-based framework in monitoring and assessment. It requires being able to link project outcomes to specific projects or activities, as well as identifying expected and undesired program outcomes. As a result, theory-based evaluations enable the evaluator to have a deeper understanding of why and how the program is working (Rossi, 2012).

The input output model uses this idea to track performance, disseminate findings, and enhance project outcomes. The M&E techniques are the basic inputs that, when used correctly, equate to input processing and, finally, measurable output. The impacts of altering the input and processes to obtain improved output and yield good results are explained by program theory. The variables that influence the outcome, which is performance, are referred to as inputs to the process; in this example, the variables are the planning process, technical expertise, stakeholder involvement, and managerial participation. The logical model identifies projected casual links in the result chain, which comprises inputs, processes, outputs, and the overall outcome, and clarifies the program's objectives. It ties the identification of performance measurements to each level of the logical model. It manages project uncertainty by keeping track of progress and intervening when deviations arise, ensuring that the project's objectives are met. A program theory depicts a single immediate result that the program has produced, and it aids in determining whether there has been progress toward the intended performance level. Complex programs, which are most commonly seen in complex projects, produce a series of rapid results.

vi. Conceptual Framework

The conceptual framework depicts the relationships between the various factors. Project team incentives, financial resource planning, time planning, and material planning are the independent factors, while project performance is the dependent variable. As seen in the figure below, the conceptual framework connects independent and dependent variables:

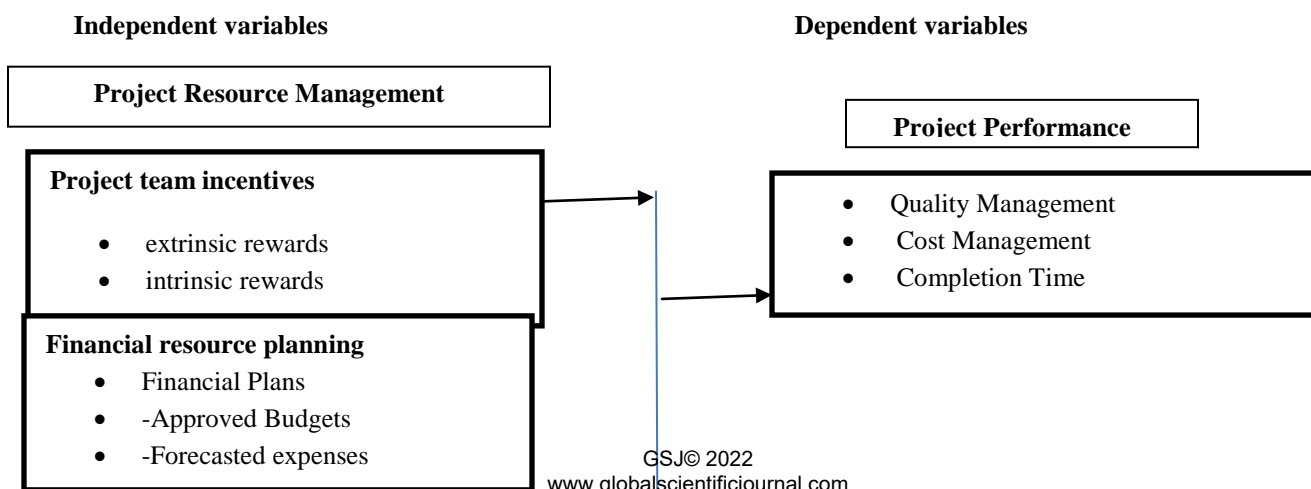
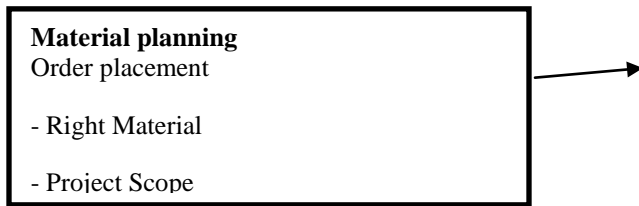


Figure 2.1: Conceptual Framework



The researcher concept is that project team incentive like basic project team incentives, Insurance scheme and Material resource planning improves on project performance of an organization inform of time taken to finish the project, cost of the project and quality of the project.

vii. Research Materials and Methods

Research Design

The research design is a blueprint for how to respond to the study's objectives (Bryman and Bell, 2007). It refers to the design of the study as well as the methodology employed to conduct the research. The study is a cross-sectional design that use a quantitative technique to demonstrate the impacts and correlations between the dependent and independent variables through descriptive and inferential analysis. The method is related to the deductive method of theory testing, which is distinguished by inductive testing (Saunders, *et al.*, 2003).

Target Population

A 'universe' or 'population' is made up of all the elements under examination in any subject of inquiry. It is assumed that when all of the things are covered, there is no element of chance left, and the highest accuracy is reached (Kothari, 2004). Because of their direct relevance to the study aims, the following types of respondents will be included in this study. Nyamata Hostel Project Ltd has 85 employees.

Table 1: Target Population

Categories of employees	Population	Percentage%
Senior Management	8	9
Middle Management/ Supervisors)	34	40
Lower Junior (Operators/ Doers)	43	51
Total	85	100

Source: Nyamata Hostel Project Ltd, (2021)

Sampling Procedures and Techniques

Sampling Technique

A sample design is a method for selecting a representative sample from a population. It is the method or approach that the researcher will use to choose things for the sample (Kothari, 2004). According to Kothari (2004), sampling is the process of selecting and analyzing a small number of individuals, things, or events in order to learn more about the complete population from which the sample was taken.

The target of 85, which was small using census technique because Mugenda and Mugenda (2003) say if target population is small census technique, was adopted. The study used census technique because target population is small. The study used stratified sampling technique to select 85 respondents because target population is three categories of employees i.e. senior Management, Middle Management and Junior (Operators/ Doers) Supervisors.

Table 2: Sample Frame

Categories of Employees	Population	Sample Representative	Percentage%
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Senior Management	8	8	9
Middle Management/ Supervisors)	34	34	40
Lower/ Junior (Operators/ Doers)	43	43	51
Total	85	85	100

Data Collection Methods

From the book of Williams *et al.*, (2010), the main techniques of collecting fresh and secondary data are questionnaire, interview, observation and documentation. In this research, questionnaire and interviews will be used for the collection of fresh data and the available documents will be reviewed to get secondary data. Thus, this study used the following data collection instruments.

The main sources of primary data was questionnaire, which distributed to the employees and management, interviews and documentary. Primary data consisted of original information specifically collected for the problem under study. That was collected by the use of questionnaires, observation, interview method, and survey research. This was mainly collected from external sources, which included periodicals, textbooks, research reports and the internet. These sources enabled the researcher to obtain the necessary data for research to be successful. An online database, often known as an Internet database, is a database that can be accessed over a local network or the Internet rather than being stored locally on a computer or its associated storage (such as a CD). Online databases were hosted on websites and offered as software as a service items that could be accessed through a web browser.

Data Collection Instruments

This is the major data collection instrument, which required respondents to attempt questions at their own free choice, and to be in a format that both respondents and the researcher could understand. To acquire data, the researcher employed both structured and semi-structured questions. This had a significant strategy for information assortment. Judd (1991) said that a survey was legitimate in information assortment principally in light of the fact that; it empowered the specialist to gather huge measure of information inside a brief timeframe period; it likewise gave chance to respondents to give plain, unknown answers. One lot of survey intended for the staff of undertaking; it included both open and shut finished arrangement of inquiries that to be replied. The poll was written in a basic and clear language for the respondent to feel free while replying. Notwithstanding that the utilization of was viewed as imperative to the exploration since it gave precise data with respect to the investigation.

Procedure of Data Collection

The researcher reviewed how transaction recorded into books of account to know whether they following contract and accounting procedures. This exploration audit writing got from the contextual investigation association. This writing incorporates yearly reports and different reports. This technique was picked on the grounds that; it was essential in giving foundation data and realities about responsibility and execution before essential information was gathered. To be sure, before field information was gathered, a wide assortment of information had been gathered and this was utilized to cross check with the essential information that was got from the field.

Reliability and Validity of the Instrument

The validity of instruments used to test the validity of the instruments to be utilized, according to Grawitz (2012). To determine the content validity, the researcher interviewed specialists, including the supervisor, who provided content ideas. This involves item analysis, which is done with the help of the supervisor and research professionals who are familiar with the study's themes.

Reliability, like validity, is a technique for assessing the quality of the data collection procedure used in a dissertation. A study's results must first be based on a reliable measurement process in order to be considered valid. A reliable instrument is one that consistently produces the desired results/outcome when used multiple times in data collection from two samples drawn from the same population. Cronbach's alpha coefficient was used to assess the instrument's appropriateness, as indicated below:

Table 3: Reliability Test

Variable	Items	Alpha coefficient	Remark
Project Team Incentives	5	0.717	acceptable Above 0.7
Financial Resource Planning	5	0.912	acceptable Above 0.7

Material Resource Planning	6	0.825	acceptable Above 0.7
Project Performance of construction firms	3	0.892	acceptable Above 0.7

A score of at least 0.7 in the study's criterion, which Hair (1998) considers acceptable on an overall scale of at least 0.7.

Data Analysis

For easier analysis and interpretation of results, the obtained data was fed into computer programs (using specifically the statistical package for social scientists with the assistance of an expert). Statistical and narrative analysis methods were used to examine the data. The association between project resource management and project performance was assessed using a regression model. Qualitative and quantitative approach used for analysis. The link between the dependent and independent variables is determined using a multivariate regression analysis. The qualitative results of the survey were explained using narrative analysis. The algebraic representation of the regression model was as follows:

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \dots\dots\dots \text{Eq. (1)}$$

Where:

- y = Project Performance of construction firms
- β_0 = Constant
- β_1, β_3 = Model Coefficients
- X_1 : Project Team Incentives
- X_2 : Financial Resource Planning
- X_3 : Material Resource Planning
- ε_1 = The unknown random error assumed as normally distributed

viii. Results Response Rate

There were a Total of 85 questionnaires distributed. Seventy of these questionnaires were duly completed and returned. This equates to a response rate of 82.3 percent. According to Mugenda & Mugenda (2003), a rate of 50% and above is deemed a representative sample for further studies.

Demographic Characteristics of Respondents

The goal of this section was to figure out what the demographic characteristics of the respondents were. The study looked at age, gender, education, and experience as well as other demographic factors.

Distribution of Respondents by Gender

The objective of the study was to assess the gender makeup of the respondents in order to determine the amount of gender disparity and ensure that the sample was representative. The results are presented in Table 4.1:

Table 4. Distribution of Respondents by Gender

Gender	Frequency	Percent
Male	38	54.3
Female	32	45.7
Total	70	100.0

Source; Primary Data, (2021)

According to Table 4.1, males account for 54.3 percent of respondents, while females account for 45.7 percent. As a result, the viewpoints collected in the study are reasonably devoid of gender bias, as views from both males and females were chosen. This meant that the bulk of the people who responded were men.

Respondent Educational Background

The researcher was curious about the respondents' level of education. By looking at the respondents' educational levels, which comprised knowledge and talents, the researcher was able to assess their perception levels. Table 4.2 summarizes the findings:

Table 5 Respondent Level of Education

Level of Education	Frequency	Percent
Secondary	14	20.0
Diploma	17	24.3
Degree	35	50.0
Masters	4	5.7
Total	70	100.0

Source: Primary data, (2021)

From the Table 4.3 above, 50% of the respondents have under graduate's degree, 44% of the respondents have diploma, 20% secondary and 14% have master. This meant that the respondents were able to understand and react intelligently to the questions.

Distribution of Respondents according to Working Experience

The purpose of the study was to ascertain the duration of employment of the respondents in order to determine whether they had enough expertise to provide accurate and reliable data. Table 4.4 summarizes the findings:

Table 6: Respondents Working Experience

Working Experience	Frequency	Percent
1 - 2 years	9	12.9
2 - 3 Years	14	20.0
3 - 4 Years	24	34.3
5 years and above	23	32.9
Total	70	100.0

Source: Primary data, (2021)

Table 4.3 above shows, 34.3% of the respondents have experienced between 3 to 4 years, 32.9% have experience 5 years and above, 20% are between 2 -3 years and 12.9% have experience between 1 to 2 years. This indicates that the respondents are knowledgeable about the Nyamata Housing Project and that the information they provided can be trusted.

Presentation of Findings

To examine the role of project team incentives on project performance of Nyamata Housing Project

Concerning their performance, the respondents were asked to select the rating statement on the influence of project team incentives on project performance of the Nyamata Housing Project. On a 5-point scale ranging from 5 = Strongly Agree to 1 = Strongly Disagree, the Likert-type scale was employed to score their responses. Ascertaining role project team incentives on project performance of Nyamata Housing Project:

Table 7: Project Team Incentives on Project Performance

Role project team incentives on project performance of Nyamata Housing Project	Strongly agree	Agree	Un certain	Disagree	Strongly disagree	Mean	SD	
	%	%	%	%	%			
All resources allocated (qualified personnel and infrastructure) facilitate the change project performance In Nyamata Hostel Construction	-	10	18	20	40	28	2.88	0.89
project team incentives such bonus changed project performance In Nyamata Hostel Construction	-	66.7	-	-	33.3	-	3.48	0.62
There is execution to different financial incentives of Nyamata Hostel Construction Team	-	-	9	10	20	64	3.14	0.89
project team incentives enable workers with opportunities to reflect their own work experiences and attitudes	40	43.3	-	-	16.7	-	3.50	0.77
Project team incentives are flexibility official yearly is generally similarly all project, ventures and timeframes.	-	3.3	3	1.3	16.7	61	3.45	0.68
Overall								

Source: Primary data, (2021)

Finding on whether All resources allocated (qualified personnel and infrastructure) facilitate the change project performance In Nyamata Hostel Construction the research showed that the majority of the respondents agreed represented by 40%, 30% strongly agree, 20% Of the respondents were uncertain while 10% disagreed, and none strongly disagreed that there isn't resources allocated (qualified personnel and infrastructure) facilitate the change project performance In Nyamata Hostel Construction.

Findings on whether the project team incentives such bonus changed project performance In Nyamata Hostel Construction research indicated that over 50% of the respondents, which is 66.7% agreed that organization has fixed pay and 33.3% disagreed and this meant that project team incentives such bonus changed project performance. In Nyamata Hostel Construction. Findings on the statement that there is execution to different financial incentives of Nyamata Hostel Construction Team, research showed that more than 50% of the respondents that is 70% strongly disagree which represented the majority, only 20% of the respondents disagreed while 10% were uncertain.

The majority of the respondents strongly disagreed with statement. This according there is execution to different financial incentives of Nyamata Hostel Construction Team. Findings on the project team incentives enable workers with opportunities to reflect their own work experiences and attitudes, research indicated that 40% of the respondents strongly agreed, 43.3% agree while 16.7% disagree. Since those who agree represent the majority, that is 43.3% of the respondents, meant that project team incentives facilitate workers with opportunities to reflect their own work experiences and attitudes.

Findings on whether Project team incentives are flexibility official yearly is generally similarly all project, ventures and timeframes from the above table indicated that more than 50% that is 66.6% strongly disagreed and these

constituted the majority. 16.7% of the respondents disagreed, 13.3% agreed while 3.3% of the respondents were uncertain. The majority disagreed with statement because motivation is not Project team incentives are flexibility official yearly is generally similarly all project, ventures and timeframes.

Assessing effect financial Resource planning on project performance of Nyamata Hostel Construction Project

The respondents were asked to select the rate statement on the assessing effect financial resource planning on project performance of Nyamata Hostel Construction Project in relation to their performance. The Likert-type scale was used to rate their responses on a 5– point scale ranging from 5 = Strongly Agree to 1 = Strongly Disagree.

Table 8: Assessing Effect Financial Resource planning on Project Performance

Effect Financial resource planning on project performance of Nyamata Hostel Construction Project	Strongly agree	Agree	Un certain	Disagree	Strongly disagree	Mean	SD
	%	%	%	%	%		
Project completion was done without struggle	16.7	57	20	6.6	-	3.38	0.62
	3.3	27	3.3	66.7	-	2.92	0.92
To develop an allowed cost baseline, the project budget is appropriately determined projected costs of specific activities or work packages.	56.7	33	10	-	-	3.27	0.94
The project manager has the ability to forecast costs.	60	33	6.7	-	-	3.4	0.64
The project budget is properly determined by estimating the costs of individual activities or work packages in order to establish an authorized cost baseline.	20	43	33	3.3	-	2	0.88
Accurate consumption of external and internal financial resources is obligatory, for the construction project	40	43.3	-	-	16.7	3.50	0.77
Inadequate cash flow in a project is frequently associated with delays and significant additional costs.							

Findings on whether Project completion was done without struggle, the research indicated that 56.7% agreed, 16.7% strongly agree, 20% uncertain while 6.6% disagreed. The majority of respondents agreed that the project was completed without difficulty. This implied that the Nyamata Housing Project was completed without difficulty. On whether the project budget is adequately determined estimated costs of individual activities or task packages to produce an authorized cost baseline, the majority of respondents (66.7 percent) disagreed, 33 percent were skeptical, 26.7 percent agreed, and 3.3 percent strongly agreed. This meant that the Nyamata Housing Project's budget was properly determined estimated costs of individual activities or work packages to establish an authorized cost baseline.

Findings on whether the project manager is able to forecast expenses, research showed that the majority represented by 56.7% strongly agreed with the statement because recognize work performed by employee's motivation indicators. Therefore, this meant that Nyamata Housing Project manager is able to forecast expenses. Findings on whether the project's budget is appropriately established the projected costs of individual activities or work packages to generate a permitted cost baseline revealed that the majority strongly agreed, with 60% agreeing, 33.3 percent agreeing, and 3.3 percent disagreeing.

As a result, the Nyamata Housing Project Budget was accurately established the expected costs of specific activities or work packages to generate a permitted cost baseline. Findings on whether Accurate consumption of external and internal financial resources is obligatory, for the construction project the research showed that 43.3% agree and these represented the majority, 20% of the respondents strongly agreed, 33.3% were uncertain and 3.3% disagreed.

Majority of the respondents agreed because accurate consumption of external and internal financial resources is obligatory, for the construction project. This meant that accurate consumption of external and internal financial resources is obligatory, for the construction project has a positive impact on performance in Nyamata Housing Project.

Findings on the consequences of insufficient cash flow in a project are frequently associated with delays and large extra costs. According to the findings, 40 percent of those polled strongly agreed, 43.3 percent agreed, and 16.7 percent disagreed. Because those who agree constitute the majority, 43.3 percent of those polled, it follows that a lack of cash flow in a project is frequently associated with delays and large extra costs.

To examine effect of Material resource planning of Project Team in Nyamata Hostel Construction Project

The respondents were asked to rate the impact of material resource planning on the Nyamata Housing Project's performance in comparison to their own. On a 5-point scale, the Likert-type scale was used to rate their responses, with 5 representing Strongly Agree and 1 representing Strongly Disagreed.

Table 9: Effect of Material Resource Planning of Project Performance

Effect of Material resource planning of Project performance	% Strongly agree	% Agree	% Un certain	% Disagree	% Strongly disagree	Mean	SD
The characteristics of the construction material have an impact on inventory management for both the supplier and the construction contractor.	17	57	20	7	-	2.08	0.67
Efficiency of materials management improves performance of construction projects.	3	27	3	67	-	3.18	0.70
Project material and organization was well communicated during planning phase	57	33	10	-	-	3.45	0.68
Materials management is a well-known issue in many projects that has a significant impact on project success.	60	33	7	-	-	3.31	0.61
All material resources allocated were used	20	43	33	3.3	-	3.25	0.86
JIT cost benefits occurred when inflation increased, causing significant increases in the cost of carrying inventory.	20	43	33	3.3	-	2	0.88

Findings on whether characteristics of the construction material influence inventory management both for the supplier as well as for the construction contractor, research indicated that 17% strongly agree, 57% agreed, 20% uncertain while 7% disagreed. The majority of respondents agreed that the characteristics of the construction material have an impact on inventory management for both the supplier and the construction contractor. This meant that the characteristics of the construction material affected inventory management for both the supplier and the construction contractor in the Nyamata Housing Project.

Findings on whether Efficiency of materials management improves performance of construction projects, research showed that majority of the respondents disagreed represented by 67%, 33% uncertain, 27% agree, while 3% strongly agreed. The majority from the findings disagreed because improved merit pay every year. This meant whether Efficiency of materials management improves performance of construction projects in Nyamata Housing Project. Findings on whether Project material and organization was well communicated during planning phase, research showed that the majority represented by 57% strongly agreed, 33% agreed with the statement, 10% uncertain.

This implies Project material and organization was well communicated during planning phase in Nyamata Housing Project. The research found that 60 percent strongly agreed that materials management is a well-known problem in many projects that significantly influences project success, 33 percent agreed, and 3 percent were uncertain. This means that materials management is a well-known issue in many projects, and it has a significant impact on project success in the Nyamata Housing Project. Findings on the all-material resources allocated were used research indicated that 40% of the respondents strongly agreed, 43.3% agree while 16.7% disagree. Since those who agree represent the majority, that is 43.3% of the respondents, meant all material resources allocated were used.

Findings on whether JIT cost benefits occurred when inflation increased, causing significant increases in the cost of carrying inventor revealed that 43.3% agreed and represented the majority, 20% strongly agreed, 33.3% were uncertain, and 3.3% disagree. The majority of respondents agreed that JIT cost benefits occurred when inflation increased, causing significant increases in the cost of carrying inventory. This meant that JIT cost benefits occurred when inflation increased, causing significant increases in the cost of carrying inventory, which had a positive impact on Nyamata Housing Project performance.

Performance Of Nyamata Hostel Construction Project

The respondents were asked to select the rate statement on the project performance of Nyamata Hostel Construction Project in relation to their performance. The Likert-type scale was used to rate their responses on a 5– point scale ranging from 5 = Strongly Agree to 1 = Strongly Disagree.

Table 10: Project Performance of Nyamata Hostel Construction Project

Statements on Performance of Nyamata Hostel Construction Project	% Strongly agree	% Agree	Un certain	Disagree	Strongly disagree	Mean	SD
Nyamata Hostel Construction Project faces two main factors are scheduling and budget	16.7	57	20	6.6	-	3.38	0.62
Nyamata Hostel Construction Project will be finished within the required time schedule	3.3	27	3.3	66.7	-	2.92	0.92
Nyamata Hostel Construction Project are Project cost is well estimated	56.7	33	10	-	-	3.27	0.94
Nyamata Hostel Construction output/delivered product met the specifications in the planning stage	60	33	6.7	-	-	3.4	0.64
Accurate consumption of external and internal financial resources is obligatory, for the construction project	20	43	33	3.3	-	2	0.88
Delays and significant additional costs are frequently associated with insufficient cash flow in a project.	40	43.3	-	-	16.7	3.50	0.77

Findings on whether Nyamata Hostel Construction Project faces two main factors are scheduling and budget, the research indicated that 56.7% agreed, 16.7% strongly agree, 20% uncertain while 6.6% disagreed. The majority of the respondents agreed Nyamata Hostel Construction Project faces two main factors are scheduling and budget. This implied that Nyamata Hostel Construction Project faces two main factors are scheduling and budget. Findings on whether Nyamata Hostel Construction Project will be finished within the required time schedule, showed that majority of the respondents disagreed represented by 66.7%, 33% uncertain, 26.7% agree, while 3.3% strongly agreed. This meant that Nyamata Hostel Construction Project would be finished within the required time schedule in Nyamata Housing Project. Findings on whether Nyamata Hostel Construction Project are Project cost is well estimated, research showed that the majority represented by 56.7% strongly agreed with the statement Nyamata Hostel Construction Project are Project cost is well estimated. Therefore, this meant that Nyamata Hostel Construction Project are Project cost is well estimated. The research found that the majority strongly agreed (60 percent), 33.3 agreed, and 3.3 percent were uncertain on whether the budget for the project is properly determined the estimated costs of individual activities or work packages to establish an authorized cost baseline. As a result, the project budget in Nyamata Housing Project is properly determined the estimated costs of individual activities or work packages to establish an authorized cost baseline.

Findings on whether Nyamata Hostel Construction output/delivered product met the specifications in the planning stage the research showed that 43.3% agree and these represented the majority, 20% of the respondents strongly agreed, 33.3% were uncertain and 3.3% disagreed. The majority of respondents agreed that Nyamata Hostel Construction output/delivered product met specifications in the planning stage, which meant that Nyamata Hostel Construction output/delivered product met specifications in the planning stage. Findings on the Accurate consumption of external and internal financial resources is obligatory, for the construction project research indicated that 40% of the respondents strongly agreed, 43.3% agree while 16.7% disagree. Since those who agree represent the majority, that is 43.3% of the respondents, meant that accurate consumption of external and internal financial resources is obligatory, for the construction project.

Inferential Statistic

Table 4.7 shows the summary of project resource management (project team incentives, financial resource planning and material planning) on Performance of construction projects with specific reference to Bakat Co Ltd with Nyamata hostel construction Project.

Table 11: Regression Analysis Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.725 ^a	.7105	.671	.78600

a. Predictors: (Constant), project team incentives, Financial resource planning and material planning
Source: primary data (2021)

The findings in Table 4.7 revealed that project resource management (project team incentives, Financial resource planning, and material planning) affect the Performance of construction projects; thus, a regression analysis (R²) of 0.7105 indicates that the findings are strong linear, positive, statistically significant, and good for the Performance of construction projects because the regression analysis is greater than 0.005. The study further reveals that project team incentives, financial resource planning and material planning contribute 71.05% Performance of construction projects 28.95% is contributed by other factor.

Table 12:: ANOVA Table

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	6.837	4	1.709	102.767	.002 ^b
Residual	58.073	66	.618		
Total	64.909	70			

a. Dependent Variable: Performance of construction projects
b. Predictors: (Constant), Project team incentives, Financial resource planning and material planning.

Source: Primary Data (2021)

The researcher also conducted the analysis of variance to determine the significance of the model. Table 4.8 shows the overall significance of the predictors in explaining Performance of construction projects. The model predictors are significant in explaining changes in Performance of construction projects with a 0.000 level of significance. The researcher was interested in establishing the amount of variance accounted for in model. The model between project resource Management and Performance of construction projects shows that model was significant since the p-value was less than 0.05 without the interaction term, $F(4, 66) = 102.767, p < .002$.

Regression Analysis Results

Multiple regression analysis was utilized to determine the nature of the relationship between the study's independent and dependent variables, as well as the statistical significance of the hypothesized associations. This was done with field data and tested at a level of significance of 5%. Table 4.12 summarizes the results of the multiple regression analyses.

Table 13: Regression of Dependent variable and independent Variables

Model	Coefficients ^a			t	Sig.	
	Unstandardized Coefficients		Standardized Coefficients			
	B	Std. Error	Beta			
(Constant)	8.991	2.031		4.428	.000	
1	Project team incentives	.227	.068	.346	3.322	.001
	Financial resource planning	.652	.077	-.086	-.844	.001
	Material planning	.576	.084	-.083	-.784	.004

Source: Primary data (2021)

$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon_1$ Became Performance of construction projects = $8.991 + 0.227 \text{Project team incentives} + 0.652 \text{Financial resource planning} + 0.576 \text{Material planning} + \text{error}$. The interpretation of this is that When Project team incentives, financial resource planning and material planning are held constant Performance of construction projects is 8.991. Unit in Project team incentives will lead increase of Performance of construction projects with 0.227; unit of financial resource planning will lead increase 0.652 while unit of 576Material planning will lead increase of Performance of construction projects with 0.576.

The outcomes of a study conducted by Armstrong and Murlis (2014) on the influence of project team incentives on organizational performance. The study discovered that reward systems are an important and positive component of building project performance. The findings, however, contradicted Bratton and Gold's (2007) study on the impact of human resource planning techniques on organizational performance. According to the findings, project team incentives do not have a major impact on performance, but a good reward system can lead to an increase in staff productivity.

Furthermore, the findings show that improving financial resource planning will greatly improve project performance. This study backs up Antvik and Sjöholm's (2013) findings on the impact of financial planning on project performance. According to the findings of the study, cost estimation should be based on the scope of the project, and financial planning has a significant and positive impact on project performance. This study's findings back up the findings of the PMBOK (2014) study on the impact of cost planning on project performance. According to the findings, project cost planning procedures such as cost budgeting and cost estimation improve project performance. Table 4.12 shows that increasing material usage planning leads to better project performance. The findings of Plenert and Best (2012) on the impact of material level on project performance are consistent with those of this study. According to the findings of the study, material consumption planning improves project performance by significantly lowering the cost of carrying and maintaining inventory. The findings are consistent with those of Kress (2014), who discovered that proper material use improves project performance in his study on the impact of material planning on project performance.

Hypotheses Testing

The first null hypothesis was to H_{01} Project team incentives has no significant effect on project performance of Nyamata Housing Project. According to Table 4.9, the results show that Project team incentives had $p = 0.001 > 0.05$, so we fail to reject the null hypothesis and conclude that Project team incentives have no significant effect on the project performance of the Nyamata Housing Project. The Second null hypothesis was to H_{02} There's no significant relationship between financial resource planning and project performance of Nyamata Housing

Project. According to Table 4.11 the results shows that financial resource planning had $p = 0.001 > 0.05$ hence we fail to reject null hypothesis and conclude that findings reveal that there's no significant relationship between Financial resource planning and project performance of Nyamata Housing. The third null hypothesis was H_{03} Material resource planning has no significant effect on project performance of Nyamata Housing Project. According to Table 4.11, the results show that Material resource planning had $p = 0.004 > 0.05$, as a result, we are unable to reject the null hypothesis and conclude that there is no significant relationship between Material resource planning and Nyamata Housing project performance.

ix. Discussion of Findings

To examine the effect of project team incentives on project performance of Nyamata Housing Project

Finding on whether All resources allocated (qualified personnel and infrastructure) facilitate the change project performance In Nyamata Hostel Construction the research showed that the majority of the respondents agreed represented by 40%, 30% strongly agree, 20% Of the respondents were uncertain while 10% disagreed, and none strongly disagreed that there isn't resources allocated (qualified personnel and infrastructure) facilitate the change project performance In Nyamata Hostel Construction.

Findings on whether the project team incentives such bonus changed project performance In Nyamata Hostel Construction research indicated that over 50% of the respondents, which is 66.7% agreed that organization has fixed pay and 33.3% disagreed and this meant that project team incentives such bonus changed project performance In Nyamata Hostel Construction. Findings on the statement that there is execution to different financial incentives of Nyamata Hostel Construction Team, research showed that more than 50% of the respondents that is 70% strongly disagree which represented the majority, only 20% of the respondents disagreed while 10% were uncertain.

The majority of the respondents strongly disagreed with statement. This according there is execution to different financial incentives of Nyamata Hostel Construction Team. Findings on the project team incentives enable workers with opportunities to reflect their own work experiences and attitudes, research indicated that 40% of the respondents strongly agreed, 43.3% agree while 16.7% disagree. Because those who agree constitute the majority (43.3 percent of respondents), project team incentives provide workers with opportunities to reflect on their own work experiences and attitudes.

Findings on whether Project team incentives are flexibility official yearly is generally similarly all project, ventures and timeframes from the above table indicated that more than 50% that is 66.6% strongly disagreed and these constituted the majority. 16.7% of the respondents disagreed, 13.3% agreed while 3.3% of the respondents were uncertain. The majority disagreed with statement because motivation is not Project team incentives are flexibility official yearly is generally similarly all project, ventures and timeframes. Project. According to table 4.11, the results show that Project team incentives had $p = 0.001 > 0.05$, so we fail to reject the null hypothesis and conclude that Project team incentives have no significant effect on the project performance of the Nyamata Housing Project.

To assess the effect of financial resource planning on project performance of Nyamata Housing Project

Findings on whether Project completion was done without struggle, the research indicated that 56.7% agreed, 16.7% strongly agree, 20% uncertain while 6.6% disagreed. The majority of the respondents agreed Project completion was done without struggle. This implied that Project completion was done without struggle in Nyamata Housing Project. According to the findings on whether the project budget is properly determined estimated costs of individual activities or work packages to establish an authorized cost baseline, 66.7% of respondents disagreed, 33% were uncertain, 26.7% agreed, and 3.3% strongly agreed. This meant that the Nyamata Housing Project's project budget was properly determined estimated costs of individual activities or work packages to establish an authorized cost baseline.

Findings on whether the project manager is able to forecast expenses, research showed that the majority represented by 56.7% strongly agreed with the statement because recognize work performed by employee's motivation indicators. Therefore, this meant that Nyamata Housing Project manager is able to forecast expenses. The research found that the majority strongly agreed (60%), 33.3% agreed, and 3.3% were uncertain on whether the budget for the project is properly determined the estimated costs of individual activities or work packages to establish an authorized cost baseline.

As a result, the project budget in Nyamata Housing Project is properly determined the estimated costs of individual activities or work packages to establish an authorized cost baseline. Findings on whether Accurate consumption of external and internal financial resources is obligatory, for the construction project the research showed that 43.3% agree and these represented the majority, 20% of the respondents strongly agreed, 33.3% were uncertain and 3.3% disagreed. Majority of the respondents agreed because accurate consumption of external and

internal financial resources is obligatory, for the construction project. This meant that accurate consumption of external and internal financial resources is obligatory, for the construction project has a positive impact on performance in Nyamata Housing Project. Findings on the insufficient cash flow consequence in a project is frequently associated with delays and large extra costs research indicated that 40% of the respondents strongly agreed, 43.3% agree while 16.7% disagree. Because those who agree constitute the majority, 43.3 percent of those polled, it follows that a lack of cash flow in a project is frequently associated with delays and large extra costs. According to Table 4.11, the results show that financial resource planning had $p = 0.001 > 0.05$, so we fail to reject the null hypothesis and conclude that there is no significant relationship between financial resource planning and Nyamata Housing project performance.

To examine the effect of Material resource planning on project performance of Nyamata Housing Project.

Findings on whether characteristics of the construction material influence inventory management both for the supplier as well as for the construction contractor, research indicated that 17% strongly agree, 57% agreed, 20% uncertain while 7% disagreed. The majority of respondents agreed that the characteristics of the construction material have an impact on inventory management for both the supplier and the construction contractor. This meant that the characteristics of the construction material affected inventory management for both the supplier and the construction contractor in the Nyamata Housing Project.

Findings on whether Efficiency of materials management improves performance of construction projects, research showed that majority of the respondents disagreed represented by 67%, 33% uncertain, 27% agree, while 3% strongly agreed. The majority from the findings disagreed because improved merit pay every year. This meant whether Efficiency of materials management improves performance of construction projects in Nyamata Housing Project. Findings on whether Project material and organization was well communicated during planning phase, research showed that the majority represented by 57% strongly agreed, 33% agreed with the statement, 10% uncertain. This indicates that the project material and organization were well communicated during the planning phase of the Nyamata Housing Project. Findings on whether materials management is a well-known issue in many projects that has a significant impact on project success, the research indicated that the majority strongly agreed represented by 60%, 33% agreed while 3% were uncertain.

This means that materials management is a well-known issue in many projects, and it has a significant impact on project success in the Nyamata Housing Project. According to table 4.11, the results show that Material resource planning had $p = 0.004 > 0.05$, so we fail to reject the null hypothesis and conclude that the findings show that there is no significant relationship between Material resource planning and Nyamata Housing project performance.

x. Conclusions

The study aimed examining the effect of project resource management on project performance in Rwanda. Based on the findings, the study came to the following conclusion: all respondents indicated that different resource practices should be established to facilitate construction project performance; research revealed that more use of resource management makes project performance easier and faster; and the third objective revealed a strong positive correlation between resource management and construction project performance; therefore, any organization should use resource management to facilitate construction project performance. The first research objective assessed effect of project team incentives on project performance at Nyamata Housing Project. A quantitative analysis was done using coefficient correlation test at 95% indicates that project team incentives has no project performance at Nyamata Housing Project. The most important resource for an organization is the human resources who are the employees.

They make sufficient contribution to project performance; attention should therefore be paid to them. Therefore it can be concluded that motivation has a great impact on performance of organization in form of improving profitability, return on investment, cash flow and productivity of organization performance, increasing efficiency and effectiveness in the organization. Efficiency in form of quality of services and products, reduction of cost in the organization and timely delivery of services. Effectiveness in form of promoting organizational goals and objectives. This was justified by the study conducted in Nyamata Housing Project, which gave the relationship between motivation and performance. This means that there is a significant relationship between motivation and performance of the Nyamata Housing Project. As conclusion, motivation has a positive impact on performance of the projects in Rwanda.

The second research objective was to assess the effect of financial resource planning on project performance of Nyamata Housing Project. Estimation cost on performance of construction project at Nyamata Housing Project. The researcher argued that in most of cases, contractor's effort in managing costs were relied on managing resources. A quantitative analysis was done using coefficient correlation test at 95% indicates that Financial resource planning

has no significant effect on project performance of Nyamata Housing Project. Furthermore, cost reports, cost estimation and budgeting, and resource management were important elements used by contractors to copy with cost on construction projects. The study concludes that the project's budget was properly calculated and that the funds budgeted were adequate to complete the project. The third research goal was to look into the effect of material resource planning on the Nyamata Housing Project's performance. The findings revealed the existence of a positive relationship between material resource planning and construction project performance. This meant that through Material resource planning, a company can attain the profit of adequate utilization of employees, affording system flexibility, enhancing production, reducing lead time, reducing wastes, reducing production expense, enhancing product quality were attained. Scores from the study indicated that Material resource planning contribute more to the success of construction project, and like companies should know that Material resource planning will be strongly accepted in material management actions related to the attaining of higher level of success for construction project. Findings indicated that coefficient correlation between Material resource planning and performance of construction project Material resource planning has influence on project performance. It was clear that material usage planning was effective, as evidenced by the quality of the materials used, the correct materials used, and the indication that all materials required for the projects were available.

xi. Recommendations

According to the study, Nyamata Hostel Project Management should pay a close attention to the supply of construction materials in order to ensure the project's productivity and financial performance. According to the study, the project budget is an important component of the overall budget and has a significant impact on both the planning and execution phases of a project. Create total and individual costs of the project's various work packages should be kept on track to ensure efficient resource utilization. The study suggested that time schedules using the previously generated WBS. Similarly, the study suggests that proper activity sequencing be used to create realistic and attainable timetables. Identifying dependencies and logical links between project tasks is part of the activity sequencing process. Because a time schedule without control is useless to the project team, the project team should conduct continuous checks and controls to detect deviations as soon as possible. The project team will be able to take required actions if deviations are detected early.

According to the study, material usage planning should be a priority for successful construction project planning. This is because accurate material scheduling improves productivity by decreasing the necessary lead-time, giving the construction project owners a higher quality of production and service. Firms should adopt this, as it will give them a competitive advantage. Construction projects are plagued by a slew of issues and complexities, including cost, duration, quality, and safety. Because the construction industry is so diversified, with subcontractors, contractors, consultants, architects, and other stakeholders, Nyamata Hostel Project Management must identify and analyze resource management challenges in building projects.

xii. REFERENCES

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