

Project Management Differences Practices at Sub-Urban Area Construction Firm

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Abstract

The process of estimating, planning, allocating, and controlling the costs in a project is known as good project management techniques in cost performance. It is largely concerned with the cost of resources required and the manner to be used to perform project operations in the suburbs. The purpose of this research is to investigate the project management characteristics that influence project cost performance in a Malaysian sub-urban construction firm. The purpose of this paper is to identify the factors and management methods that may affect the cost performance in a project on a suburban area local construction firm, to identify the challenges of cost management in local suburban construction firms, and to discover the improvement of cost management in local suburban construction firms through journal and article research and data analysis to support this research study. A total of 120 survey forms will be given to suburban building enterprises. The questionnaires returned by respondents will be analyzed using SPSS software to generate data analysis based on the Likert scale answers provided by the respondents. This research is being carried out to uncover the management method for improving cost performance and to tell more readers about the

information and management method in the suburban region. The usefulness of this research is valuable to current and future researchers who are involved in project management.

Introduction

The construction industry's development process accelerated in the twenty-first century, boosting Malaysia's economy in comparison to the twentieth. According to the Malaysian Ministry of Finance's (MoF) Economic Report 2019, growth in the construction sector is likely to decelerate due to significant projects that are about to be finished and a glut of property in the non-residential sector (LENG, 2018). According to the Malaysian government, growth in the construction sector would decelerate to 4.5 percent in 2018 from 6.7 percent in 2017. While the sector grew by 4.9 percent in 2019, it was predicted to rise by 1.7 percent in 2020 (Brown, 2019). Even though one of the most serious concerns, Coronavirus disease (COVID-19), occurred in 2020 and had an impact on the world, one of the largest mega construction projects, The East Coast Rail Link (ECRL), was unaffected by the coronavirus outbreak, according to their project manager on February 18th, 2020, and their workers returned to work after completing 14 days of self-quarantine at their based camp, as told by the project manager. As a result of the statistics, Malaysia's building industry may be affected by economic growth, but it will not fail.

As a result, the construction industry is crucial since it has an impact on our society and economy. Meanwhile, project management is a significant role in stabilizing a construction company's success in their construction projects. Project management enables organizations to respond promptly and efficiently to difficulties that arise in their company's daily routine in an integrated manner (Carvalho et al., 2017). However, it is difficult to prove its quantitative value because it includes the application of knowledge, skills, tools, and techniques to project activities to achieve their goals in suburban construction firm. However, proving its quantifiable value is difficult because it entails the application of information, skills, tools, and procedures to project operations to fulfill their aims in a suburban construction enterprise. However, there are obstacles to remaining a good project manager. Even though project management processes and tools (various methods, techniques, and tools) have been developed to address all elements of project management from inception to conclusion (Fernandes & Madalena, 2018), project success rates have not grown considerably. Projects frequently fail because management fails to select the appropriate management technique for a certain project. While the same is true for a suburban construction firm, the goal of coordinating project management extends beyond simple project delivery, budget, and technical quality criteria. Its goal is to increase the value of the building enterprise. Organizations in the construction industry that grasp this notion recognize the underlying nature of project management and hence maximize its value. These companies will understand the true, true value of their labor here (Ferreira, 2016). Meanwhile, construction projects necessitated extensive planning and administration in order to finish the project on time, within budget, and to the satisfaction of the client. This is where project management comes into play in any firm. This is especially crucial for construction professionals because many of these projects are expensive, involve significant resources and overhead, and frequently have a deadline to meet. In other words, with proper construction management, these building projects can be completed quickly while generating good results and remaining cost-effective (Coldcrease, 2015).

Furthermore, to put project management results into action, each project planner goes through several phases from start to finish. These phases are planning, cost, time

management, quality control, contract management, and safety to ensure that every step is integrated into a construction project, assuring the smooth functioning of the project, and producing excellent outcomes. For example, time management will guarantee that each stage of the construction process is scheduled within a specific time range, ensuring that deadlines are met. This is critical not just for the overall project, but also for subprojects to be completed on schedule so that future projects can be begun and completed. While safety is vitally important on the construction site, safety management should always be followed. This is because safety management is responsible for ensuring that all applicable safety rules and best practices are followed. This will also ensure that building construction lasts a long time and that employees involved in creating these structures work in a safe environment (Coldcrease, 2015).

Then there's cost management, which is important because it ensures that every part of the construction project stays within the established budget, ensuring that a construction project is always adequately funded to be completed on time while still producing great results. Meanwhile, every stage, process, and decision in a building project will always affect the project's cost.

Project management can be taken seriously as a subject implemented from the point of construction design because it will help construction professionals organize everything in sequences in details before the actual project begins and given the entire construction process of any project will not only be more efficient but will also involve less waste. This can assist construction experts in saving more money and time while generating a wonderful project result because all types of management will affect the final cost of the project, which may have an impact on the construction company. As a result, this study discusses how a construction company in this industry in the suburbs might effectively manage costs. In a suburban construction enterprise, one of the critical success factors for a project to sustain strong progress is to rely on the cost performance of the projects. According to (Shah, 2016), the survey discovered that nine out of ten projects in a sample of 258 organizations from 20 countries and five continents were overbudget globally. Most projects experience cost overruns because of miscommunication between contractors, subcontractors, consultants, and clients (JIA, 2015). This is cause for concern because the construction industry has a significant impact on the global economy, affecting GDP and jobs in many countries. As a result, cost overruns are one of the critical concerns that necessitate thorough investigation and exploration to limit or minimize delays and changes in future project budgets. Cost overruns may have more severe repercussions in some affluent countries because the result may occasionally approach 100% of the initial project estimate. When the same circumstance is repeated in a suburban construction company, it can lead to more significant problems. Furthermore, one of the primary areas that stimulates and promotes the country's economic development is construction. Furthermore, there are other risk factors that contribute to cost overruns in the suburban development business. (Shah, 2016) identified four critical elements that are most likely to influence cost overruns. These include design revisions, inadequate planning, unpredictability of weather, and shifting building material pricing.

A proper management is very necessary to carry on a project's advancement enough for any project. As a result, inadequate supervision and project management in a suburban construction firm might expose various hazards that endanger the construction project and the company's operations. These risks have an impact on the project timeline, resulting in repeated delays or cost overruns, a loss of trust in the contractor, and, in certain cases, poor construction quality. According to Khalid, 2019 "A construction project is normally recognized

to be successful when it is finished within its budget, on its planning time and according to its standards and specifications". Meanwhile, poor project management planning is the primary cause of construction delays and has several negative consequences on the duration and completion of projects, which frequently leads to failure. According to (Al-Tmeemy & Wadhah, 2015), poor quality with high cost is significant, and the cost is often much more than the amount stated in accounting reports, and most organizations' quality-related costs vary between 25% and 40% of operational expenses. However, only a few managers understand the consequences of failure, which can have a domino effect on their project and their firm. Furthermore, suburban construction firms have always faced numerous hurdles to satisfy client expectations while being efficient and within budget. According to (Amanuel & Dixit, 2018), "most domestic contractors are characterized by a lack of an appropriate cost management system, and failure to manage these projects will lead to insolvency, weakening their organizational capacity." It is well acknowledged that the number of contractors failing in the suburban construction industry is far higher than should be the case. As a result, the research indicates that business failure rates are high not because contractors lack knowledge of construction procedures, but because they fail to develop suitable management abilities. This has sparked alarm in the construction industry. Although cost management is commonly used in Malaysia, most construction firms are unconcerned about it and use unsystematic methods to manage their projects, such as building cost underestimate. For example, there have been occasions where contractors have overestimated their expenses for a project that the client intends to grant them. This is a major problem and condition that may cause the contractor to be unable to afford owing to a lack of cash flow, resulting in contract termination in the suburbs area.

State-of-the-Art

This chapter offers a review of the literature on this research with several titles that identify the factors and management methods that may affect the cost performance in a project that may impact the construction firm in the sub-urban area.

Project Management

Project management is the process of overseeing building projects from their inception to completion. However, when compared to other sorts of projects, managing a building project is mission-based. This signifies that the project's organization will stop when the project is completed. Although general project management is described as the management of project life cycle resources using a range of tools and methods to regulate scope, cost, time, quality, and so on, a person working in the construction business must have a broader perspective. Construction project management can interact with a range of disciplines, from architecture to engineering, and from public works to urban planning, over the course of a project (Manger, 2020). As a result, excellent project management necessitates a diverse set of talents and the ability to communicate with a wide range of organizations and individuals in order to lead projects from inception to completion while adhering to the following principles:

Initiating and Conceiving the Project

A construction project cannot begin before due diligence is performed to determine whether the project is feasible. Before developing the project charter to begin the building project, a feasibility analysis is required to determine whether there are sufficient resources to

effectively execute the project within limits. Furthermore, identifying potential concerns and risks is critical during this period.

Plan and Define the Project

Following approval from the first phase, in order to achieve project success, the task timeline should be developed, identifying project milestones, and the resources required should be planned within the project budget. Meanwhile, all construction project participants should be familiar with and comprehend the entire project plans/drawings. This is especially crucial for the criteria that must be met throughout the project's life cycle, as it encompasses cost, scope, duration, quality, and communication. To manage and successfully complete the project, a team of professional and knowledgeable employees is necessary.

Launch the Project

As soon as the plans/drawings are confirmed, approved, and received, changes and difficulties will begin to emerge. Tasks must be organized and handled, which includes task management and resource allocation, because communication with stakeholders, consumers, and teams is critical. Meanwhile, holding meetings and writing progress reports on a regular basis is a critical step at this stage.

Track Project Performance

When there is no one to manage a project, it will not run smoothly. Setting up a key performance indicator for time, money, and quality is a good approach to keep track of progress since the more information received, the higher the efficiency, the fewer delays and issues, and the lower the likelihood of the project failing. Always be adaptable and communicate so that when variation occurs, action may be taken quickly because variation is prevalent in construction projects.

Suburban Construction Firm Project Cost

No construction project can begin without a budget. A construction project cost is the cost of acquiring all the elements required to properly finish the project, such as materials, services, labour, and resources. To begin a construction project, for example, the cost estimation flow will be represented in Figure 2.1 below (Ganesan, 2018)

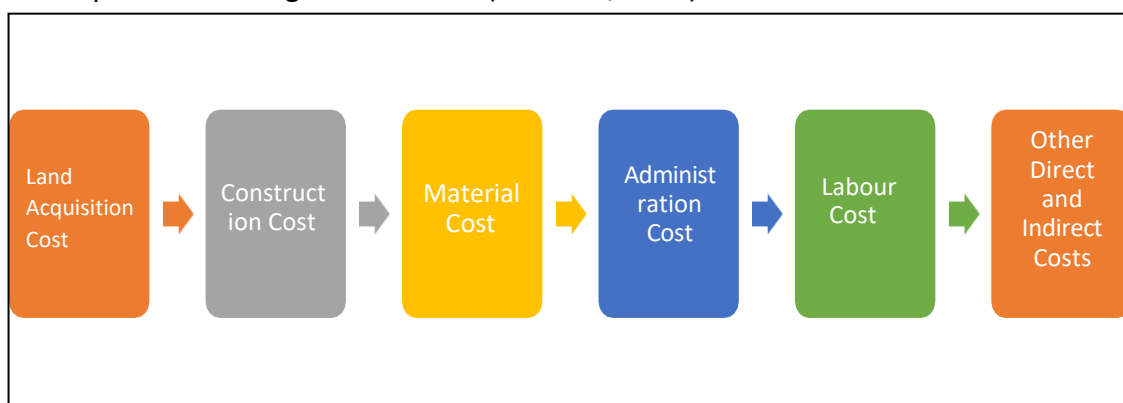


Figure 2.1: Flow of Cost Estimation

The costs of suburban and urban growth vary greatly in terms of land acquisition, development costs, and construction. Although land supply is fixed, growing demand for land due to economic expansion can raise its value. Developers are sometimes hesitant to release

development knowledge for fear of competitors gaining access to it, according to (Brian, 2015). Thus, comparing the capital costs of urban versus suburban growth can lead to novel development ideas. Furthermore, the success of a suburban project is always determined by how well the project cost can be handled through good cost management. Many projects may not be finished within the project budget due to insufficient cost estimation at the start of the project, which may create project delays. One of the most serious problems that arises in construction projects is when the project's cost surpasses the project's profit. Meanwhile, it is critical to develop a proper and accurate cost estimation for each building project. To provide an accurate cost estimate, it is vital to understand the types of project costs that will be involved in the project (Ganesan, 2018).

Definition of Cost Management

Cost management is not the same as financial management. According to Simanjuntak (2018), cost management is defined as "the process of controlling expenses on construction projects at every stage, from feasibility to handover, and ensuring that the cost plan remains in place." Project cost management is a professional skill and knowledge in planning and controlling the costs of construction projects, as well as analyzing potential hazards that may result in inflated construction prices. As a result, the cost management process includes each work step from the beginning to the end, including the planning, implementation, control, and completion stages.

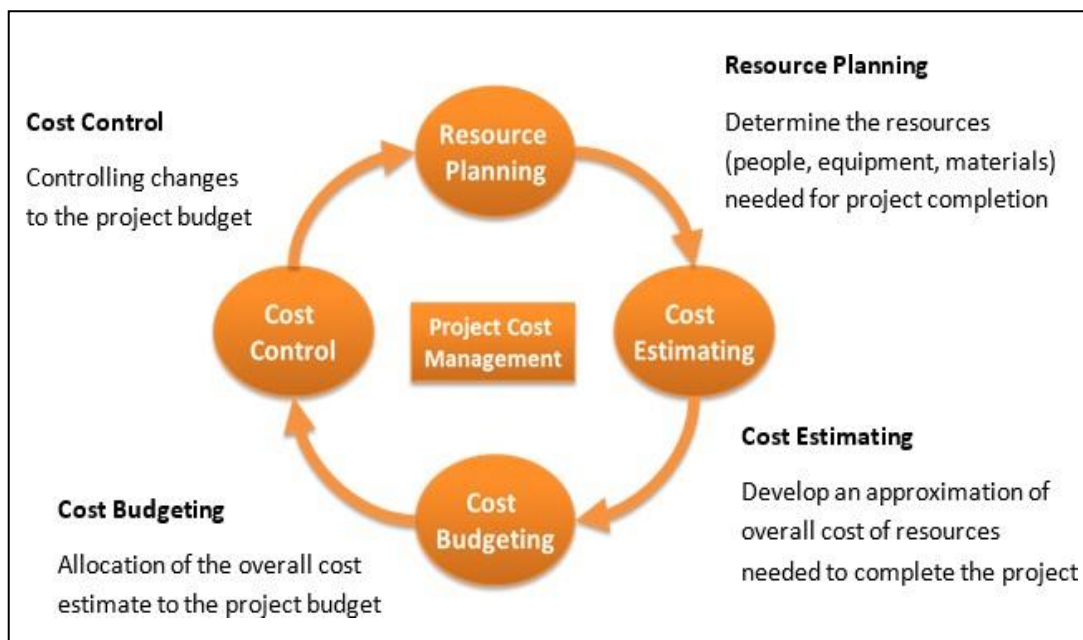


Figure 2.2: Project Cost Management (CostEngineering, 2019)

Difference between cost management and financial management

Table 2.1

Difference Between Cost and Financial Management

Differences	Cost Management	Financial Management
Definition	Cost management, often known as cost control, is the act of planning, predicting, and regulating a construction project's budget (McConnell, 2018).	Financial management is concerned with a construction firm's financial resources, which include the utilization of cash and other assets to fulfill financial goals (Management, 2020).
Example	Cost management is essential for estimating the cost of supplies, equipment, worker salaries, and so on (TowerEight, 2017).	Financial management is the decision to bid on a project, which can have a significant impact on a company's finances (Management, 2020).
Responsibility	Cost management is the process of identifying where to minimize costs to boost profitability for financial experts such as quantity surveyors, contractors, or clients (Finance, 2016).	The owner or general manager is often in charge of financial management in a construction company, recording all transactions and providing an accurate report on the construction firm's profitability (Management, 2020).
Process	<p>According to the 6th edition of PMBOK, there are four stages in cost management, which are as follows (Institute, 2017):</p> <p><i>Cost Planning:</i> During this stage, building expenditures will be estimated, budgeted, managed, supervised, and controlled.</p> <p><i>Estimated Cost:</i> At this step, the cost estimations will be analyzed based on the existing building method and resources.</p> <p><i>Determined Cost:</i> At this stage, the construction cost estimate will be run through and compared to the existing cost planning.</p>	Financial management ensures that adequate funds are available to meet customer needs or to provide short- and long-term capital to monitor actual performance and govern the financial aspects of building projects (D.Shinde & Prof.M.D.Mata, 2016).

Control Costs:

At this point, the projected expenses will be compared to the actual expenditures as part of the process of managing and analyzing outgoing costs.

The Importance of Cost Management in the Suburban Construction Industry

Cost management is an important aspect in suburban building firms, and contractors are aware of it. Cost management will be carried out throughout the project's lifespan. As a result, the primary goal of cost management is to maximize profit within the budget during the project's set time frame, and development shall also include the relationship between taxes and the cost of providing services (Brian, 2015). This allows for a better monitoring and management of actual expenditure vs the expected project budget, which is represented by the tender price or contract sum. According to (UKEssays, 2016), "cost control of a project entails measuring and collecting the cost record of a project as well as the work progress." To get a successful outcome in collecting vital data for estimating and controlling costs, the comparison between actual progress and anticipated progress must include a systematic cost control approach. According to (Brian, 2015), determining the cost of capital and possible profitability of suburban development can help us determine which route to take in future planning. As a result, the true cost of the project must be included in the reports. The remaining budget must be allocated for future periods, and the cost of unfinished work must be estimated or re-estimated. Any new information must be considered beginning with the contract's effective date. It is critical to guarantee that no claims for insufficient or excessive work are filed. This is vital to maintain a consistent cash flow to assist clients and contractors in appropriately managing their expenses and revenues (Kokate & Milind, 2018). Furthermore, when choosing a suburban development, it is critical to follow the traditional suburban trend. According to (UKEssays, 2016), the cost record must be measured and collected at every stage of the activity by a suitable cost management system because it involves the actual progress vs the planning. The following cost management criteria in suburban building were important:

- i. To maximize profit while staying within the budget during the allotted time period.
- ii. To maintain total expenditure within the amount agreed upon by the client based on an approximate cost estimate.
- iii. To ensure that the building constructed is cost effective.
- iv. The available finances will be distributed in a balanced and logical manner across the various parts of the structure.

The Benefits and Drawbacks of Using Systematic Cost Management in a Suburban Construction Firm

A solid cost management strategy in a suburban construction firm is about more than just profit growth because excellent management is dependent on the economy (myABCM, 2020). As a result, cost management is used to monitor and regulate a project's expected construction cost to receive correct information about the project's expenditure and schedule at each step (Editorialteam, 2018).

Cost management benefits in a suburban construction firm

- i. Lowering construction hazards
- ii. Early cost checking ensures more accurate preliminary estimates.
- iii. Improve your understanding of market conditions. Quantity surveyors have a thorough awareness of the real estate market and access to historical data to help clients analyze the feasibility of individual sites or projects.
- iv. You will save more time and money if the architect redraws the drawing plan, the quantity surveyor sets a budget, and the contractor agrees to the changes.
- v. A more reasonable design can come from a more balanced distribution of expenditure.
- vi. Throughout the design process to obtain a realistic spending allocation
- vii. Close collaboration among design teams promotes mutual understanding.
- viii. Close collaboration among design teams promotes mutual understanding.
- ix. Quantity surveyors may have a better understanding of design from the beginning.
- x. Better opportunity to compare various projects.
- xi. Working drawings may be available sooner.
- xii. Cost considerations will receive more attention when quantity surveyors are involved in the early phases of the design process.
- xiii. Because there is a cost verification system, less changes to BQ are conceivable. Prior to the final design, designers can have discussions. This will undoubtedly save you time when it comes to adjusting your pricing and appearance.
- xiv. Cost management provides basic information on cost comparisons between various projects.

Cost management disadvantages in a suburban construction firm

- i. More planning is required in the early stages of design.
- ii. Architects' working methods may be more limited.
- iii. Quantity surveyors must have a more in-depth awareness of the pricing of design variables that affect cost.
- iv. Architects and quantity surveyors endure significant workloads at the start of the project.
- v. Designers' work styles may be constrained.
- vi. Quantity surveyors must have prior experience and awareness of costs as well as cost-influencing factors.
- vii. When the cost plan is not used, both the designer and the quantity surveyor put in a lot of labour throughout the design phase.

Factors Influencing Cost Performance in a Suburban Construction Firm

Cost overruns are not uncommon in the building sector. Cost overruns, also known as cost hikes, underestimates, or budget overruns, are unanticipated costs that exceed the projected amount owing to miscalculation of actual costs during the budgeting process. Internal and external factors influence cost overruns in construction projects (Simanjuntak, 2018). The cost overrun is divided into three parts

- i. Cost Overruns in the Early Stages of Construction
- ii. Cost Overruns During Construction
- iii. Post-construction Cost Overrun

Cost overruns always occur when the final cost of a project or expenditure exceeds the initial predicted cost, according to the three elements above. As a result, cost overruns are one of the most serious issues in the construction sector. This issue could affect both emerging and developed countries (Shah, 2016). When the same concerns arise in a suburban construction firm, it is a major problem that requires additional research to address. The following are the primary sources of cost overruns in suburban areas.

Price and Material Fluctuations

Today's raw material prices are more variable than ever, even in Malaysia. Prices are being influenced by tight supply markets, and there is little indication that this trend will change anytime soon. Clymer (2020) remarked that "in today's raw material prices had been mastered." Most manufacturing companies use volatility to boost returns by 2 to 5 percentage points, increase supply security, and improve supply chain operations. As a result, many welding and manufacturing companies are hiking their prices, losing their customers. As a result, suburban construction firms would suffer greatly because it is difficult for corporations to accurately assess the danger of sharp swings in raw material costs (Sebastian & Andrea, 2020). The company's prosperity can be jeopardized by highly fluctuating raw material costs and inefficient price management.

Contractors' cash flow and financial difficulties

Managing cash flow is challenging for any company in their field, but contractors have the most difficulty, especially in suburban areas. Every payment for construction work in progress must be made within 30 days of receipt of the invoice, delivery of materials, or provision of services (Mah, 2016). Cash flows from the contractor to the lowest level of subcontractors and suppliers in a building project. Subsequent payments are paid at each step away from the top of the payment chain. Contracts often shift the risk of late payments down the payment chain rather than up. As a result, contractors struggle to pay their staff and lose money (Levelset, 2019). Furthermore, learning where a building company's money is coming from and where it is being spent might be eye-opening. Most contractors are only concerned with the company's commercial operations. They may fail to recognize how decisions such as financing the acquisition and sale of assets affect the amount of cash accessible each day.

Site employees are in short supply

Because the construction sector is flourishing and there is a high demand for new construction such as residential, commercial, public works, and institutional construction projects, there has been a serious labour shortage. The quantity of projects has increased, but the number of competent people required to perform these critical projects has greatly decreased. There is no remedy for this problem, but the good news is that it is not impossible to ameliorate the challenges produced by the continuously dwindling workforce (Giatec, 2019).

Parties' Failure to Communicate

According to the research of Yaser & Ismail (2018), unsuccessful communication leads to failed outcomes. The project management research institute did a survey on construction project organization and communication and discovered that efficient communication methods in the project construction process help to meet the project's goals and objectives.

As a result, effective communication can result in better time and cost management in the production of successful projects.

Changes in Design Occur Frequently

Frequently, design adjustments will have an impact on the construction project's performance. These changes relate to any increase, decrease, or adjustment made to the initial scope of work after the contract is signed, and may result in contract price or contract time adjustment, which is common in construction projects. As a result, changes in design will necessitate rework. Rework has emerged as one of the most pressing concerns in construction projects. Rework is defined as revising a superfluous part of an activity or procedure that was done incorrectly from the start. Most rework situations are the result of alterations, damages, flaws, errors, omissions, and other nonconformities (Jeffrey, 2015).

Underestimating the project's duration, resulting in scheduling delays

Projects may range in length, size, environment, complexity, aims, conditions, organizational structure, deadlines, financial strength, unpredictability, and other factors. Time management and planning are critical in a construction project when time equals money. Construction project delays, projects that are not completed or completed inside the projected construction contract period, are among the most common recurring challenges in the construction business. The main causes of the delay were poor planning prior to construction and poor project management at various stages (Khalid, 2019).

Decisions are made at a slow pace

The project manager ensures that each subcontractor understands his or her responsibilities and function. The project manager is the principal decision maker and the one who motivates everyone engaged. As a result, if a leader delays the decision-making process, he will also delay the project. Schedules, plans, expenses, and deadlines must all be successfully conveyed. Employees know where and when they need to be when communication is clear and succinct (Hook, 2016).

Contractors' poor planning and scheduling

Poor planning leads to poor execution. The more time and effort put into project preparation, the better off you will be when the job begins. The first stage is to go over the drawing plan, specifications, scope of work, and customer expectations thoroughly. Working with customers, architects, subcontractors, and suppliers to establish construction and project plans is part of good planning (Jones, 2018).

Poor site management and oversight by the contractor

Because many supervisors are unable to appropriately plan work, communicate with workers, and direct operations, which is fundamentally tied to increased rework quantity and expense, as well as other quality difficulties, construction site supervision is a critical link. Formal training can help to improve these abilities. Most project managers believe that formal training can help their supervisors enhance their skills. However, most managers learn their professions the hard way, by making mistakes and correcting them. While trial and error are an important aspect of training, it must be supplemented by formal training to establish a solid foundation for employment (Dalibi, 2016).

Cost Management Issues in a Suburban Construction Firm

More and more businesses are requesting greater transparency into the execution of construction projects. Most construction businesses are simply concerned with whether the project will make money and go as planned. As a result, many suburban construction firms fail to incorporate systematic project planning into their projects. As a result, project managers must produce accurate and timely cost and revenue predictions to help influence business choices.

Inexperience with Existing Tools and Procedures

Knowledge is essential for suburban construction companies to succeed and compete in the construction sector (Adjei et al., 2018). Cost-control "knowledge" can be divided into technical and managerial knowledge. Surprisingly, most today's graduates are site managers, quantity surveyors, or cost engineers who primarily use calculators and laptop computers for project cost control analyses rather than existing technologies and advanced cost control processes. Using the correct tools to study and understand complex cost management processes and steps can be difficult for some experts.

Abandonment of Difficult Strategies

Most site managers, quantity surveyors, and cost engineers find it challenging to merge residual knowledge and previous job experience. Some professionals struggle with the systematic method of employing mathematics on a computerized basis in their day-to-day activities of cost management (Adjei et al., 2018).

Managers' Inconsistency in Cost Management

Most construction managers face this problem. The organization will instead only carry out or deliver the building project as planned. Managers are typically not practitioners of cost control rather practitioners of cost control during the execution of a building project (Adjei et al., 2018).

Serious Decision-Making Failure, Exorbitant Marketing Costs

Project quantity surveyors or cost engineers must use cost-cutting techniques to create a range of possibilities for other project members to review and choose the best solution within the agreed budget limitations. As a result, corrective action is viewed as a choice notion to handle variances in building costs. To solve the indicated costs, other solutions must be implemented. Failure to make good decisions and take remedial actions can have a negative influence on the organization and lead to high project expenses. Decision failure, including misallocation of cash or loss of opportunities because of decision delay, will have an indirect impact on the organization's cost. The organization will eventually make up for managers' minor initial judgment errors (Adjei et al., 2018).

It is challenging to keep track of daily cost data from several sources

A precise and reasonable estimate allows a company to secure a new contract in the sector. The procedure may be the most difficult function to do when considering construction expenses. It is the responsibility of the construction site workers who handle the key cost data to monitor the data during the daily dynamic construction operation. As construction work advances, the earned value of each work element must be tracked to determine the cost

profile at any given time. The monitoring procedure may necessitate the collection of huge amounts of data from numerous sources or parties (Adjei et al., 2018).

Projects Suffer from a Lack of Financial Commitment

The opportunity to stay in business by taking on some building projects is the most crucial issue that every contractor considers. Before taking on a new construction project, most contractors are only concerned with profit or turnover, not with the requirement to maintain cash flow in the day-to-day activities of project delivery and for the company to survive (Adjei et al., 2018). Furthermore, several contractors have gone bankrupt or liquidated not because their building work was unprofitable, but because of short-term cash flow issues during the execution of construction projects.

Contractual Modifications

Preliminary contract modification estimates may be budgetary in nature, and it is critical that such estimates be continuously updated as more specific information is provided in the form of metrological quotations or daily work records (Adjei et al., 2018). Furthermore, by focusing on the most critical subset of performance data, exception reporting can boost administrative productivity. Customer satisfaction in the construction industry nowadays is achieved through efficient production and execution of building projects. As a result, if contractors' cost managers perform their jobs efficiently, the organization may benefit from cost-effective construction project delivery.

Failure to Identify Areas for Improvement

Many estimators in the suburbs are more concerned with having the project funded and built than with producing accurate estimates (Hanid & Mohan, 2015). Furthermore, early commitments to design solutions impact the cost at the start-up stage. Locking in costs and designs diminishes the opportunity to save money during the construction phase. It is also crucial to highlight that making the wrong option at this point is extremely costly later in the development phase, where product and process changes are more expensive. This circumstance has the potential to greatly increase resource consumption and waste while also reducing product flexibility.

Method for Improving Cost Management in a Suburban Construction Firm

Reevaluate your demand for integrated software solutions such as Glodon or BIM, which enable more collaborative, automated, and successful working methods

Glodon and BIM are two examples of technologies and software used to improve job accuracy and productivity in the twenty-first century. Most suburban construction companies want to cut costs, but they never investigate the benefits that software may offer to their business (Taylor, 2017). As a result, a competent construction management software will keep work organized, free up paperwork clutter, and allow users to focus on the real construction task. For example, BIM allows for the calculation of how many people may enter and exit the building, as well as the calculation of the most efficient and acceptable pump sizes, water heater sizes, and so on.

Improve your planning by allocating time before the project begins to determine the available resources

Many building efficiency mistakes are committed during the planning stage. "Measure twice, cut once" is an old saying. Most project failures arise during the planning phase; therefore, it is critical to complete your homework before the project begins (Taylor, 2017). Set a budget, organize work schedules, prioritize tasks, set project deadlines, and convey your expectations to your team during the planning stage. Force the project manager to see all project steps before the project begins. Create a plan for the rest of the team and set benchmarks for the team at the same time (Proehl, 2019).

Simplify the project progress measurement process while retaining the credibility and accuracy of progress figures

The two most important aspects of efficient project cost control are the timetable and performance metrics. When there is only one task to complete in a project, it is simple to obtain reliable progress statistics. When there are hundreds of jobs to do and data must be extracted from numerous sources, this can be a difficult task. Most project managers in a suburban construction firm will naturally object to merely entering a value for the completion percentage. Instead, each project activity necessitates a well-thought-out formula to be certain in its accuracy. As a result, without an exact estimate for the proportion finished, most projects and earned value management (EVM) KPIs are meaningless (4castplus, 2020). Invest in a technology that allows you to automate progress input and completion percentage calculations. By automating progress can input, you may minimize friction, enhance accuracy, and standardize your progress measures.

Establish systems for measuring progress and forecasting at regular, incremental points during the project's life cycle

Project forecasting is gathering project status information and extrapolating the current project's performance to the end of the project. Project length, overall project cost, project deliverable performance/quality level, or any combination of these can be forecast. A critical component of prediction is reviewing the risk events that have occurred as well as the remaining risk triggers. When creating forecasts, make sure you have adequate data to accurately estimate performance. Before making a prediction, the typical rule of thumb is to wait until an activity, phase, or deliverable is at least 25-40% complete. The original assessment should then be maintained and modified in light of any suitable risk reduction efforts that have happened (Shaikh, 2017).

Enhancing your Communication Abilities

Communication is always the most critical aspect of any project. If a person fails to communicate effectively with his team, it will result in a significant loss of productivity owing to misconceptions (Taylor, 2017). While efficient communication is essential for the successful completion of any project. When communicating with the team, information must be communicated in a clear and simple manner. Meanwhile, the flow of communication may affect the flow of the entire construction project process. As a result, make it a daily practice to communicate with more people and solicit input on your concerns to develop your communication skills.

Set up Performance Appraisals and Hold People Accountable

According to (Taylor, 2017), performance reports from supervisors or bosses are an excellent motivator for employees, especially if there is a monetary incentive. As a result, establish clear performance metrics and consider a little bonus for each employee's performance when it is satisfied. This strategy will assist you in communicating with your team and making it more productive. You can set performance measures such as timeliness at work, assistance to colleagues and clients, timely completion of tasks, proactive problem solutions, and overall job quality.

Invest in training to enhance techniques and keep projects on track

Training a staff is one means of boosting project efficiency, particularly for positions that require sound management on principles and practices to keep project development flowing smoothly, such as construction supervisors (Taylor, 2017). Except for suburban construction firms, many organizations affect to spend their staff in training to develop their abilities, resulting in poor service to clients (Edwards, 2017). The fundamental emphasis of all construction organizations' everyday activities is the quality of services as the work progresses. When a construction company does not invest in its staff, it not only provides bad service but also loses the potential to bid on new projects. As a result, providing opportunities for staff to improve important skills would boost project efficiency. A supervisor, for example, could tell workers to install partitions more efficiently by utilizing his new skills and knowledge to complete the work faster and progress to the next stage.

Listen to your Coworkers or Staff about their Difficulties

Staff on the ground will provide the greatest insights to the boss to speed the process. While experienced personnel from other organizations can provide the company with a wealth of knowledge and influence in best practices (Taylor, 2017). A new manufacturing process, working method, or piece of equipment will emerge.

Theoretical Framework

A theoretical framework incorporates concepts, definitions, and references to academic literature on current theories for your specific research (Adom et al., 2018). It is essentially a blueprint or guide for conducting research. This research investigation had a unique theoretical framework. This research framework includes project management approaches that have a direct impact on the project cost performance of a Malaysian sub-urban construction firm. Figure 2.3 provides a reference to locating and contextualizing formal theories in this study.

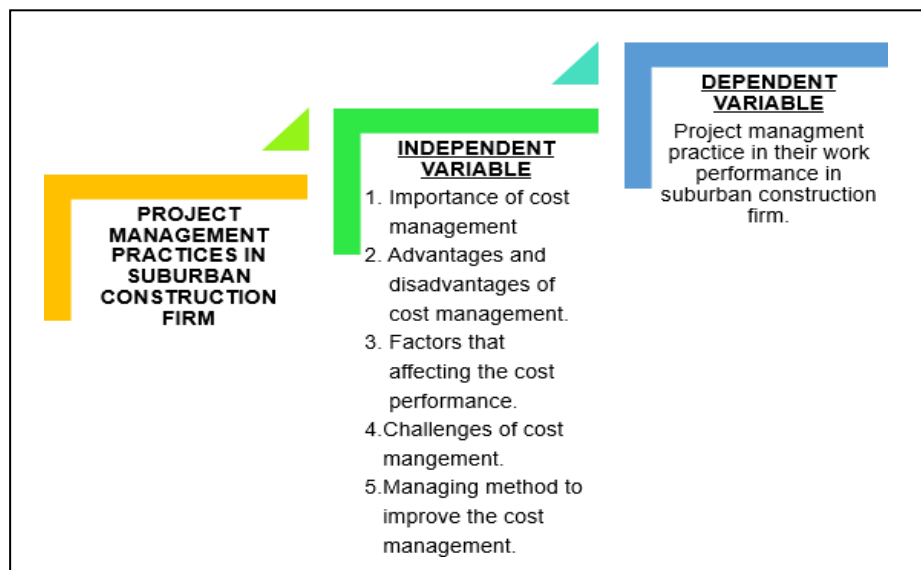


Figure 2.3: Theoretical Framework

The dependent variable in project management practice in their work performance at a suburban construction firm is depicted in figure 2.3 above. The dependent variable may be influenced by numerous independent variables in this chapter, which include the importance of cost management, the benefits and drawbacks of cost management, factors impacting cost management, and cost management methods.

Research Methodology

ABAS (2015) Research is a methodical approach of gathering and validating new and accurate information. Research technique is the path that researchers must take to formulate problems and objectives to provide the outcomes of data received from respondents (Sileyew, 2019). For data collection, two types of research methods can be used: quantitative methods and qualitative methods. While this study work will use a quantitative strategy to reach its goal (Profillidis & Botzoris, 2019). "The data produced are always numerical, and they are analysed using mathematical and statistical methods," stated (SkillsYouNeed.com, 2020). If no numbers are involved, it is not quantitative research." Meanwhile, it is a structured process primarily for obtaining and analysing data gathered from various sources, which include:

- i. *Surveys*
Data collection relies on disseminating questions for many individuals to answer via survey forms or online.
- ii. *Observations*
Data relies on counting the number of times a specific thing occurs.
- iii. *Secondary Data*
For instance, data gathered from company accounting.

As a result, the questions will be developed and distributed to respondents from the construction business in Ampang, Mont Kiara, and Taman Tun Dr Ismail. According to Ltd, (2020), the survey regions chosen are typical "suburban lifestyle" neighbourhoods adjacent to KLCC. The questionnaire was distributed using a Google form and was limited to

contractors and developers based in Ampang, Mont Kiara, and Taman Tun Dr Ismail. A total of 120 sets of questionnaires will be distributed or sent to companies, with a minimum of 70 sets of questionnaires expected to be returned. While the real number collected back is 76 data sets. Meanwhile, the aim established for this research has been met with an additional 6 responders.

Data Analysis and Discussion

The questionnaire is analyzed using descriptive analysis from Part A through Part D to create a clear picture for better understanding, and responses are analyzed in percentages and figures. Part A of this study used frequency analysis to demonstrate the respondents' demographic background, which comprised gender, ages, races, education level, employment, position in the organization, working experiences, and monthly income. Furthermore, for Parts B, C, and D, the mean of the data was used to calculate the dispersion of responses from the Likert scale of the questionnaires.

Section A

This section defines the demographic background information of the respondents, which includes gender, age, race, education level, company occupation, position taking in the working position, working experience in this firm, and income range.

Gender

Table 4.1 provides the percentage and number of respondents of each gender. The percentage of male respondents is 47%, or 36 people. Female respondents make up 53% of the total, or 40 people.

Table 4.1

Gender of Respondents

		Percent	Frequency	Valid Percent	Cumulative Percent
Valid	Male	47	36	47	47
	Female	53	40	53	100
	Total	100	76	100	

Age

The age of responders is shown in Table 4.2. There are 35% between the ages of 0 and 24 (27 people), 33% between the ages of 25 and 34 (25 people), 13% between the ages of 35 and 44 (13 people), 8% between the ages of 45 and 54 (8 people), and 4% between the ages of 55 and above (3 people). It demonstrates that the age range of 0 to 24 years old has the highest number of respondents that react and answer the questionnaire for this study. While those above the age of 55 are the least likely to answer to this research inquiry.

Table 4.2

Age of Respondents

		Percent	Frequency	Valid Percent	Cumulative Percent
Valid	0 - 24 years old	35	27	35	35
	25 - 34 years old	33	25	33	68
	35 - 44 years old	17	13	17	85
	45 - 54 years old	11	8	11	96
	55 years old and above	4	3	4	100
	Total	100	76	100	

Type of Race

Table 4.3 depicts the respondents' race. There are 18% Malay respondents, 70% Chinese respondents, 12% Indian respondents, and no other race respondents. The bulk of responders are Chinese, with 53 people, Malay, with 14 people, and Indian, with 9 people.

Table 4.3

Type of Respondents Race

		Percent	Frequency	Valid Percent	Cumulative Percent
Valid	Malay	18	14	18	18
	Chinese	70	53	70	88
	Indian	12	9	12	100
	Total	100	76	100	

Education Level

Table 4.4 shows the results of the respondents' educational level. There are 7 people from the secondary level, 14 people from the diploma level, 50 people from the bachelor's degree level, 4 people from the master's/PhD level, and 1 person from the accounting profession. It is obvious that the bulk of respondents completed their education up to the bachelor's degree level, with 50 people, while the least number is at the Accounting Profession level, with just one person.

Table 4.4

Education Level of Respondents

		Percent	Frequency	Valid Percent	Cumulative Percent
Valid	Secondary	9	7	9	9
	Diploma	19	14	19	28
	Bachelor's Degree	66	50	66	94
	Master/PhD	5	4	5	99
	Accounting Profession	1	1	1	100
	Total	100	76	100	

Type of Occupation

Table 4.5 shows the results of the respondents' occupations. There are 86% from the private sector, with 65 respondents, 9% from the self-employed, with 7 respondents, 5% from the unemployed, with 4 respondents, and no respondents from the public sector in the survey areas. It is apparent that the bulk of responses are from the private sector, with 65 people, and the least number are from the non-employed, with 4 people.

Table 4.5
Type of Occupation

		Percent	Frequency	Valid Percent	Cumulative Percent
Valid	Private sector	86	65	86	86
	Self-employed	9	7	9	95
	Non-employed	5	4	5	100
	Total	100	76	100	

Type of Position

Tables 4.6 show the respondent's current status in their career. There are five main categories included in the poll. According to the results, there are 41% of quantity surveyors with 31 people, 13% of project managers with 13 people, 3% of contract managers with 2 people, 5% of architects with 4 people, and 34% of other professions with 26 people, including purchasing officer, site supervisor, director business developer, auditor, interior designer, and office assistant. It is apparent that the majority of respondents hold the post of quantity surveyor.

Table 4.6
Type of Position

		Percent	Frequency	Valid Percent	Cumulative Percent
Valid	Quantity Surveyor	41	31	41	41
	Project Manager	17	13	17	58
	Contract Manager	3	2	3	61
	Architect	5	4	5	66
	Others (Purchasing Officer, Site Supervisor, Director Business Developer, Auditor, Interior Designer, Office Assistant)	34	26	34	100
	Total	76	100	100	

Working Experience

Tables 4.7 provide the results of the respondents' industry work experience. There are 33% with less than 2 years of experience with 25 people, 28% with 2 to 5 years with 21 people, 21% with 6 to 9 years with 16 people, and 18% with 10 years or more with 14 people. It is apparent that the bulk of respondents have less than two years of experience, with 25 people, while the least number of respondents have ten years of experience or more.

Table 4.7
Working Experience

		Percent	Frequency	Valid Percent	Cumulative Percent
Valid	Less than 2 years	33	25	33	33
	2 to 5 years	28	21	28	61
	6 to 9 years	21	16	21	82
	10 years and above	18	14	18	100
	Total	100	76	100	

Range of Monthly Income

Tables 4.8 show the outcome of the respondent's monthly income. There are 32% with less than RM 2,500 with 24 people, 35% with RM 2,500 to RM 4,999 with 27 people, 18% with RM 5,000 to RM 7,999 with 14 people, 11% with RM 7,500 to RM 9,999 with 8 people, and 4% with RM 10,000 and beyond with 3 people. It is obvious that the bulk of respondents (27 in total) earn between RM 2,500 and RM 4,999, while the least number of respondents (three in total) earn RM 10,000 or more.

Table 4.8
Range of Respondents Monthly Income

		Percent	Frequency	Valid Percent	Cumulative Percent
Valid	Below RM 2,500	32	24	32	32
	RM 2,500 to RM 4,999	35	27	35	67
	RM 5,000 to RM 7,499	18	14	18	85
	RM 7,500 to RM 9,999	11	8	11	96
	RM 10,000 and above	4	3	4	100.0
	Total	100	76	100	

Section B

The questionnaire contains nine items in this section. Respondents use a five-point Likert scale to answer each question. Each question in this part is designed to help you learn about the factors and management methods that can affect the cost performance of a suburban local construction firm. Aside from that, the mean is the average of the data gathered from the respondents. In other words, the highest mean indicates a higher rank in this part, and it is the sum of all the findings divided by the number of questionnaires. The aim of standard deviation (SD) is to assess data spread from the mean. Meanwhile, a higher SD score indicates a bigger deviation from the mean. The results of the respondents' responses in this area are shown in Tables 4.9 below. Most respondents think that "underestimating the duration of the project, resulting in schedule delays" is a factor and management approach that affects cost performance in the suburbs, and therefore it ranks top with an overall mean value of 4.2105 and a standard deviation of 0.7714. This element has 44.70% and 39.50% agreeing and highly agreeing. While only 13.20% responded neutrally and 2.60% disagreed with this factor. According to Memon et al (2015), inadequate planning before to construction will result in poor project management at all phases. The mean value was 3.47, with a standard deviation of 0.91 and a rank of 6 among their responders.

Table 4.9

Cost Performance Affecting Factors and Management Methods

NO	Factors and Management Methods That May Influence Cost Performance in a Suburban Area Local Construction Firm	Respondents' Degrees of Importance as Measured by Five Likert Scales (1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree)					MEAN	SD	RANK
		1	2	3	4	5			
6	Underestimating the project's duration, resulting in scheduling delays	0	2	10	34	30	4.2105	0.7714	1
		(0.00%)	(2.60%)	(13.20%)	(44.70%)	(39.50%)			
9	Poor site management and oversight by the contractor	0	3	10	32	31	4.1974	0.8168	2
		(0.00%)	(3.90%)	(13.20%)	(42.10%)	(40.80%)			

2	Contractor's cash flow and financial difficulties	0	1	11	40	24	4.1447	0.7062	3
		(0.00%)	(1.30%)	(14.50%)	(52.60%)	(32.60%)			
8	Contractor's poor planning and scheduling	1	4	10	33	28	4.0921	0.9118	4
		(1.30%)	(5.30%)	(13.20%)	(43.40%)	(36.80%)			
7	Decisions are made at a slow pace.	0	5	38	24		4.0658	0.8380	5
		(0.00%)	(66.00%)	(11.80%)	(50.00%)	(31.60%)			
1	Price and material fluctuations	0	1	12	45	18	4.0526	0.6712	6
		(0.00%)	(1.30%)	(15.80%)	(59.20%)	(23.70%)			
4	Parties' failure to communicate	2	4	12	29	29	4.0395	0.9992	7
		(2.60%)	(5.30%)	(15.80%)	(38.20%)	(38.20%)			
5	Changes in design occur frequently.		8	14	30	22	3.8158	1.0546	8
		(2.60%)	(10.50%)	(18.40%)	(39.50%)	(28.90%)			
3	There is a labor shortage on the job site.		10	13	39	13	3.6974	0.9525	9
		(1.30%)	(13.20%)	(17.10%)	(51.30%)	(17.10%)			

"Contractor's poor site management and supervision" ranks second, with a mean value of 4.1974 and a standard deviation of 0.8168. This is the second highest in this category. This element has 42.10% and 40.80% agreeing and highly agreeing. While only 13.20% responded neutrally and 3.90% disagreed with this factor. According to (Memon et al., 2015), many managers are unable to appropriately plan work, interact with employees, and direct activities. The mean value was 3.67, with a standard deviation of 1.06 and a rank of 4 among their responders. "Cash flow and financial difficulties faced by contractors" has moved up to third place. This is the third most common response, with a mean of 4.1447 and a standard deviation of 0.7062. This element has 52.60% agreeing and 32.60% highly agreeing. While only 14.50% responded neutrally and 1.30% disagreed with this factor. According to (Memon et al., 2015), a lack of site employees and inefficient planning and scheduling can have an impact on site management. The mean value was 3.89, with a standard deviation of 1.21, and their responders ranked second. "Incorrect planning and scheduling by contractors" rank fourth, with a mean value of 4.0921 and a standard deviation of 0.9118. This is the fourth highest ranking among the nine criteria in this section. This element has 43.40% and 36.80% agreeing and highly agreeing. In this part, only 13.20% replied neutral, 5.30% disagree, and 1.30% strongly disagree. According to (Memon et al., 2015), poor project planning leads to poor project execution. The mean value was 3.67, with a standard deviation of 1.12, and a

rank of 4 among their responders. The ninth rank, on the other hand, is "shortage of site workers," with the lowest mean value of 3.6974 and SD value of 0.9525. This factor has the lowest ranking of the nine in this area. This element has 51.30% agreeing and 17.10% highly agreeing. While only 17.10% responded neutrally, 13.20% disagreed, and 1.30% strongly disagreed to this factor. According to (Memon et al., 2015), because the majority of the work is outsourced out to subcontractors, the majority of the workers are engaged by these subcontractors. If there is a disagreement between the contractor and the subcontractor, this problem immediately takes precedence. The mean value was 3.78, with a standard deviation of 1.12, and their responders ranked third. In summary, the range of respondents' replies in Section B is 4.2105 to 3.6974. "Underestimating the duration of the project, resulting in schedule delays" (4.2105), is followed by "Contractor's poor site management and supervision" (4.1974), "Cash flow and financial difficulties faced by contractors" (4.1447), "Incorrect planning and scheduling by contractors" (4.0658), "Fluctuation in prices and material" (4.0526), "Lack of communication between parties" (4.0395), and "Frequent design changes" (3.8158).

Section C

The questionnaire contains eight questions in this section. Respondents use a five-point Likert scale to answer each question. Each question in this part is designed to learn about the cost-management difficulties faced by local suburban construction enterprises. Aside from that, the mean is the average of the data gathered from the respondents. The highest mean indicates a higher rank in this section, and it is the sum of all the findings divided by the number of questionnaires. Based on the results of the cost management problems obtained from responders in this section, Table 4.10 was created.

Table 4.10

Cost Management Issues in Local Suburban Construction Firms

NO	Cost Management Obstacles in Local Suburban Construction Firms	Respondents' Degrees of Importance as Measured by Five Likert Scales (1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree)					MEAN	SD	RANK
		1	2	3	4	5			
1	Inexperience with existing tools and procedures	0	3	11	29	33	4.2105	0.8377	1
		(0.00%)	(3.90%)	(14.50%)	(38.20%)	(43.40%)			
5	It is challenging to keep track of	0	2	12	35	27	4.1447	0.7781	2
		(0.00%)	(2.60%)	(15.80%)	(46.10%)	(35.50%)			

	daily cost data from several sources.								
2	Abandonment of difficult strategies	0	2	18	27	29	4.09 21	0.85 13	3
		(0.00 %)	(2.60 %)	(23.7 0%)	(35.5 0%)	(38.2 0%)			
3	Managers' inconsistency in cost management	0	2	13	39	22	4.06 58	0.75 43	4
		(0.00 %)	(2.60 %)	(17.1 0%)	(51.3 0%)	(28.9 0%)			
8	Failure to identify areas for improvement	0	0	18	37	21	4.03 95	0.72 00	5
		(0.00 %)	(0.00 %)	(23.7 0%)	(48.7 0%)	(27.6 0%)			
6	Projects suffer from a lack of financial commitment.	1	4	13	32	26	4.02 63	0.92 34	6
		(1.30 %)	(5.30 %)	(17.1 0%)	(42.1 0%)	(34.2 0%)			
7	Contractual modifications	0	3	21	34	18	3.88 16	0.81 60	7
		(0.00 %)	(3.90 %)	(27.6 0%)	(44.7 0%)	(23.7 0%)			
4	Serious decision-making failure, exorbitant marketing costs	1	4	15	39	17	3.88 16	0.86 36	8
		(1.30 %)	(5.30 %)	(19.7 0%)	(51.3 0%)	(22.4 0%)			

The aim of standard deviation (SD) is to assess data spread from the mean. Meanwhile, a higher SD score indicates a bigger deviation from the mean. The majority of respondents think that "lack of knowledge of using existing tools and techniques" is a cost management concern in the suburbs, and hence it ranks top in the overall mean value of 4.2105 and SD value of 0.8377. This component has 38.20% and 43.40% agreeing and highly agreeing. While only 14.50% responded neutrally and 3.90% disagreed with this factor. According to (Gamil & Abdul Rahman, 2018), ineffective communication leads to ineffective outcomes. As a result, effective communication is critical to the success of a project. The second rank is "it is difficult to monitor daily cost data from various sources," with a mean of 4.1447 and a standard deviation of 0.7781. This is the second highest in this category. This element has 46.10% and

35.50% agreeing and highly agreeing. While just 15.80% of respondents responded neutrally, 2.60% disagreed with this aspect. According to (Adjei et al., 2018), erroneous daily cost data should be taken seriously since monitoring a significant number of data process from many sources might be one of the difficult difficulties in a suburban contractor organization. "Abandonment of complicated strategies" moves up to third place. This is the third most common response, with a mean of 4.0921 and a standard deviation of 0.8513. This element has 35.50% and 38.20% agreeing and highly agreeing. While just 23.70% responded neutrally and 2.60% disagreed with this factor. According to (Adjei et al., 2018), it is challenging to combine residual knowledge with previous work experiences in this field.

Furthermore, the fourth rank is "managers' lack of consistency in cost management," with a mean value of 4.0658 and a standard deviation of 0.7543. This is the fourth position in this section. This component has 51.30% and 28.90% agreement and strongly agreement. While just 17.10% responded neutrally and 2.60% disagreed with this factor. The eighth rank, on the other side, is "serious decision failure, excessive marketing expenses," with a mean value of 3.8816 and a standard deviation of 0.8636. This is the lowest ranking among the eight challenges in this division. This element has 51.30% agreeing and 22.40% highly agreeing. While only 19.70% responded neutrally, 5.30% disagreed, and 1.30% strongly disagreed to this factor. According to (Adjei et al., 2018), the project's quantity surveyor or cost engineer must use the cost control approach to create a series of plans for other project participants to review and select the best plan within the agreed budget constraints. Finally, the range of respondents' responses in Section C is 4.2105 to 3.8816. There is a "lack of knowledge of using existing tools and techniques" (4.2105), which is followed by "it is difficult to monitor daily cost data from different sources" (4.1447), "abandonment of complicated strategies" (4.0921), "lack of consistency in cost management by managers" (4.0658), "failure to pinpoint improvement opportunities" (4.0395), "lack of financial commitment in projects" (4.0263), "variations in contract" (3.8816), and The average mean result can be shown in table 4.10 above.

Section D

The questionnaire contains eight questions in this section. Respondents use a five-point Likert scale to answer each question. Each question in this section is designed to learn more about how to enhance cost management in a local suburban construction firm. Aside from that, the mean is the average of the data gathered from the respondents. The highest mean indicates a higher rank in this section, and it is the sum of all the findings divided by the number of questionnaires. The aim of standard deviation (SD) is to assess data spread from the mean. Meanwhile, a higher SD score indicates a bigger deviation from the mean. The results of cost management improvement received in this part from respondents are shown in table 4.11. Most respondents think that "Improving your communication skills" is the best way to improve cost management in the suburbs, and it ranks first in the overall mean value of 4.3816 and SD value of 0.6726. This component has 44.70% and 47.40% agreement and strongly agreement. While only 6.60% responded neutrally and 1.30% disagreed with this factor. According to (Taylor, 2017), communication is always one of the most crucial aspects of any industry. If a person fails to communicate effectively with his team, it will result in a significant loss of efficiency owing to misconceptions and may lead to project failure.

Table 4

11 Cost Management Improvements in Local Suburban Construction Firms

NO	Cost Management Improvements in Local Suburban Construction Firms.	Respondents' Degrees of Importance as Measured by Five Likert Scales (1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree)					MEAN	SD	RANK
		1	2	3	4	5			
5	Enhancing your communication abilities	0	1	5	34	36	4.38 16	0.67 26	1
		(0.00 %)	(1.30 %)	(6.60 %)	(44.70 %)	(47.40 %)			
8	Pay attention to your coworkers as well as the challenges on the ground.	1	0	8	29	38	4.35 53	0.77 81	2
		(1.30 %)	(0.00 %)	(10.50 %)	(38.20 %)	(50.00 %)			
7	Invest in training to enhance techniques and keep projects on track.	0	6	38	32	0	4.34 21	0.62 30	3
		(0.00 %)	(7.90 %)	(50.00 %)	(42.10 %)	(0.00 %)			
2	Improve your planning by allocating time before the project begins to determine the available resources.	0	0	7	44	25	4.23 68	0.6 081	4
		(0.00 %)	(0.00 %)	(9.20 %)	(57.90 %)	(32.90 %)			
6	Set up performance appraisals	0	2	9	39	26	4.17 11	0.73 73	5
		(0.00 %)	(2.60 %)	(11.80 %)	(51.30 %)	(34.20 %)			

	and hold people accountable.								
3	Simplify the project progress process while maintaining the reliability and accuracy of progress figures.	0	2	9	41	24			
		(0.00%)	(26.00%)	(11.80%)	(53.90%)	(31.60%)	4.1447	0.7249	6
4	Establish systems for measuring progress and forecasting at regular, incremental points during the project's life cycle.	1	1	13	40	21			
		(1.30%)	(1.30%)	(17.10%)	(52.60%)	(27.60%)	4.0395	0.7906	7
1	Reconsider your need for integrated software solutions like Glodon or BIM, which enable more productive, automated working methods.	1	7	13	26	29			
		(1.30%)	(9.20%)	(17.10%)	(34.20%)	(38.20%)	3.9868	1.0262	8

"Listen to your colleagues or staffs and problems on the ground" ranks second, with a mean value of 4.3553 and a standard deviation of 0.7781. This is the second highest in this category. This component has 38.20% agreeing and 50.00% highly agreeing. While only 10.50% of those polled responded neutrally, 0% disagreed, and 1.30 severely disagreed with this factor. Meanwhile, an experienced employee from another firm with a wealth of information capable of improving corporate processes and the company's development (Taylor, 2017). Moving up to third place is "Invest in training to improve the techniques used to keep projects running." This is the third most common response, with a mean of 4.3421 and a standard deviation of 0.6230. This factor has 42.10% agreement and 0% strong agreement. While only 50% responded neutrally, 7.90% disagreed with this factor. According to (Edwards, 2017), project efficiency can be improved by improving employees' abilities and procedures through training to keep the project on track. Furthermore, the fourth rank is "Improve in your planning in devote time before the project begins to figure out the resources on hand before you start work" with a mean value of 4.2368 and a standard deviation of 0.6081. This is the fourth highest in this category. This component has 57.90% and 32.90% agreement and strongly agreement. While just 9.20% responded neutrally, 0% disagreed and strongly disagreed with this factor. According to (Proehl, 2019), many suburban contractors did not take the time to seriously prepare their plans at the beginning of the planning stage, resulting in several faults in their work. The eighth rank, on the other hand, is "Reassess your need for integrated software solutions like Glodon or BIM that provide more collaborative, automated, and successful ways of working," with a mean value of 3.9868 and a standard deviation of 1.0262. It has the lowest means and the highest SD value. This is the least important of the eight importance elements in this section. This element has 34.20% and 38.20% agreeing and highly agreeing. While only 17.10% responded neutrally, 9.20% disagreed, and 1.30% strongly disagreed to this factor. This is the least important ranking because most suburban businesses are unwilling to spend extra money on software. They prefer to analyze their project using the traditional way (Taylor, 2017).

Finally, the average range of respondents' responses was 4.3816 to 3.9868. The suggestions include "Improving your communication skills" (4.3816), then "Listen to your colleagues or staffs and problems on the ground" (4.3553), "Invest in training to improve the techniques to keep projects running smoothly" (4.3421), "Improve in your planning in devote time before the project begins to figure out the resources on the hand before you start work" (4.2368), "Establish performance reviews and hold employees accountable" (4.1711), "Simplify the process of measuring project progress while maintaining the credibility and accuracy of progress values" (4.1447), "Establish processes where you're measuring progress and forecasting on regular, incremental points during the project's life" (4.0395), and the lowest rank is "Reassess your need for integrated software solutions like Glodon or BIM which provides more collaborative, automated solutions" (4.1447). The average mean result can be found in table 4.11 above.

Actual Framework

The framework "Project Management Differences Practices in Suburban Area Construction Firms" is intended to shed light on the fundamental differences and best practices required to successfully deliver construction projects in suburban settings. Suburban regions frequently present construction enterprises with a variety of unique problems, such as complex regulatory regimes, varying community expectations, and specific logistical issues. This framework is intended to assist construction experts, project managers,

and stakeholders with an organized strategy to effectively navigating these unusual challenges. As conclusion, from the discussion above, this paper able to produce the framework as below

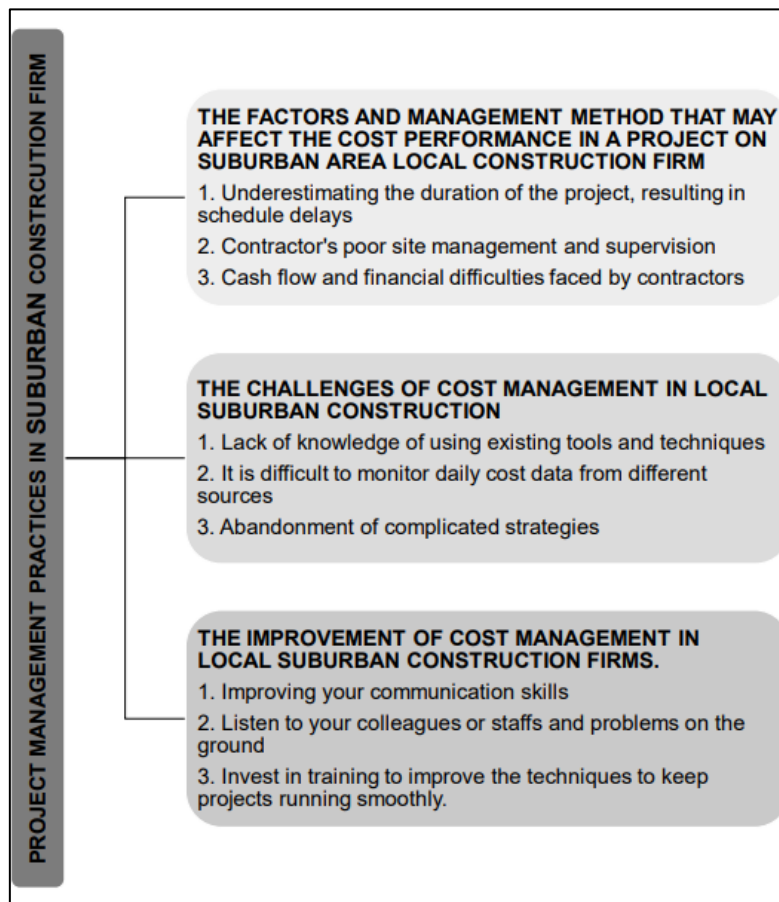


Figure 4.1: Actual Framework.

The construction business is a dynamic and varied enterprise that shapes our built environment. As cities grow and adapt, so do the expectations and challenges that construction companies encounter. Suburban areas, with their unusual mix of residential, commercial, and industrial activities, present a unique set of opportunities and limits for construction projects. Managing building projects in suburban areas necessitates a nuanced strategy that considers the region's unique characteristics and expectations.

Conclusion and Recommendation

According to the findings of this study, suburban construction projects require an independent, objective, and professional cost manager or quantity surveyor to monitor and analyze the process during the contract time to ensure that the project stays on track. Cost managers or quantity surveyors use their engineering judgment and experience to analyze and determine the optimal course of action, including cost estimation, cost control, and project profitability. As a result, cost management concepts for cost managers or quantity surveyors capable of ensuring that projects are constructed within budget while meeting project performance and quality. Readers will gain a better grasp of management techniques in a suburban construction firm because of this research. Meanwhile, this study serves to provide a better understanding of the aspects that may affect cost performance and the

obstacles that will be encountered throughout construction work. Following a thorough investigation of numerous publications and articles, as well as a survey analysis conducted by the researcher, the researcher recognized the limitations of this study. The researcher concentrated the questionnaire survey region at Ampang, Mont Kiara, and Taman Tun Dr Ismail to study the management methods in suburban construction firms. As a result, the findings of this study cannot be generalized to all Malaysian suburban area construction enterprises. Future researchers who want to conduct research in a similar area that is related to this research will have a clear source of information to focus on other professionals such as quantity surveyor firms or other types of management practices such as waste management in suburban areas.

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