

Project Management: A Requirement for Zimbabwean Indigenous Contractors

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Abstract

Project Management is a fairly new profession in the Zimbabwean construction industry. The information revolution brought about by the Internet has resulted in clients becoming more critical of the way construction projects are being procured right from inception through implementation to maintenance. This has brought the limelight on the Zimbabwean Indigenous contractors who despite a great deal of assistance from government in the form of affirmative legislation have failed to deliver construction projects timeously to specification and within budget. The Zimbabwean construction industry is greatly fragmented. There exists professional practices and foreign owned construction companies who are increasingly embracing project management as a tool for project delivery. The new generally small to medium sized construction companies owned by the local business people have still not grasped project management. This paper explores the emergence of indigenous contractors and what can be done to improve their operations.

Keywords: Project Management, Indigenous Contractors, and Professional Consulting Firms.

The Zimbabwean construction industry can be defined as a two - tier system where the client and professional practices like Architects, Quantity Surveyors and Engineers form one team under the client and formulate a contract to bring in contractors. There are two distinct types of contractors; namely the traditional multinational companies and the newly established indigenous companies. At independence in 1980, the new government advocated for the inclusion of the local business population into the construction industry. This affirmative legislation was aimed at empowering the locals to have say in the development of the new independent country. Despite the passing of this affirmative legislation, which created the indigenous contractors who were mostly involved in small to medium scale construction projects, there has not been much success achieved. The major reason for failure is the lack of project management knowledge within the new contractors. Several measures were put in place to make these new contractors who by and large constitute about half of the contracting businesses in Zimbabwe. The Government through the affirmative legislation directed that for any public funded project, an indigenous contractor has to be involved either as a joint venture partner or several of these new contractors have to constitute half the number of subcontractors. It even went further in making it compulsory for small to medium sized public funded projects to be reserved for the indigenous contractor.

Assistance in the form of waiving of performance guarantees, provision of advance mobilisation funds, expatriate personnel paid by the government, subsidised construction materials etc were advocated and effected. Two decades after this legislation, the indigenous contractor has failed. The reason is that they lack knowledge of project management. The PMBoK regards project management as the

most efficient way of introducing unique change. Various definitions of a project have been put forward during the formative years of the project management discipline.

The one definition that clearly describes a project is:

A project is a defined course of action with a clear stated goal to be executed over a time period, at a cost, within various technical and quality parameters that are measurable from start to finish to establish whether success has been achieved.

(PMBok, 2000. p 14)

This therefore means the developing a plan to achieve this goal and then working this plan, ensuring that progress is maintained in line with the desired goal is project management. It appears in the Zimbabwean situation, indigenous contractors take on board a project and set to implement it without proper planning. This is so in that this research has found out that the indigenous contractors attribute late completion of projects due to late material deliveries, shortage of qualified site personnel to run the project, shortage of foreign currency to import materials. This will not be the case if advance planning is carried out before project start.

Construction projects undertaken by indigenous contractors are still executed the traditional way that does not encourage project management techniques. The following is typical of the way in which small to medium projects are being implemented:

- Traditional forms of contracts namely the Zimbabwe General Conditions of Contract (ZGCC4); General Conditions of Contract for Central & Southern Africa (GCCC&A); Civil Engineering Conditions of Contract Zimbabwe (CECCC) and Construction Industry Federation of Zimbabwe (CIFOZ). These are a hybrid of the JCT and GEC forms of contracts but revised during the 1950's. They no

longer apply to modern often-complex construction projects. Even in the developed countries like the UK, France, Germany, although still in use they have undergone tremendous changes to suit today's world.

- The architect/Engineer is still head of the design team despite the overwhelming requirement for someone who will co-ordinate the efforts of these traditional professionals.
- Payment procedures are still done the traditional way. Retentions are still calculated on the basis of 10% of contract sum irrespective of the fact that this adversely affects the contractor's cash flow.
- The indigenous contractor is still in the majority of the cases a one-man business who appoints 3 to 4 qualified people to the positions of General Manager, Construction Manager and Finance Manger. The site management team is devoid of a qualified Site Agent, Site Engineer, and Site Quantity Surveyor yet these are the cornerstone of project success if given support from head office.
- Procurement of materials is done at the time when the operation that requires that type of material becomes critical.
- There lacks a deliberate desire to address the problematic designs, which in most cases require imported building materials at project award stage.

These shortcomings on the part of the indigenous contractor have negatively impacted on their success.

Research Methodology

The research is based on a non-experimental approach. The aim was to unravel the underlying causes of failure on the part of the indigenous contractors despite considerable assistance both financially and materially from government. The sampled population was selected from the major cities and towns of Zimbabwe where these indigenous contractors are located. The ranking of these indigenous contractors was based on annual turnover. Zimbabwe is in the middle of a terrible economic recession. The figures in Zimbabwe dollars terms might seem hugely substantial but the fact is the value of the Zimbabwe dollar against major world currencies is very small. Medium sized indigenous contractors are those with an annual turnover of over Z\$1 billion employing more than 5 qualified personnel. Small sized indigenous are those with an annual turnover of less than Z\$1 billion and employ not more than 5 qualified personnel. The indigenous contractors are mostly concentrated in the major cities and bigger towns where most of public funded work is carried out.

A questionnaire was designed that aimed to get as much information as possible on the respondents' reasons for failing to complete projects on time, to specification and within budget. The following parameters were included in the questionnaire:

- Average turnover over the last 5-10 years
- Composition of staff employed during the same period
- Source of funding to start the awarded projects
- Form of contract used for most of the projects executed during the same period
- Project duration against programmed at tender.

There were 99 questionnaires sent out to both small and medium sized contractors. A total of 79 responded and only 15% showed that they had managed to complete their projects on time. The table below illustrates these findings.

Project Time Completion within a 5-year period.

Duration of Project Overruns	Small Scale	Medium Scale	Total	% of total
Nil - overrun	5	7	12	15%
6 months - 12 months	9	11	20	25%
12 months - 18 months	12	3	15	19%
Over 18 months	23	9	32	41%
Total Respondents	49	30	79	100%

The results of the success rate in terms of completion on time are very poor. This goes to show that there is an urgent need to change the way construction is being carried out.

The change that is required by the indigenous contractors is embracing project management as a tool to deliver awarded projects. The reliance on the old forms of contracts designed during the 1950's is a big draw back for the Zimbabwean indigenous contractor. This however, is not a criticism on their part alone but on the whole construction industry. All the stakeholders should move away from these archaic forms of contract. The indigenous contractor however, is reluctant to tender for contracts that are based on new forms of contracts like the NEC family of contracts. This fear of change has led to their failure. They are reluctant because from the survey, 90% of indigenous contractors only tender for public sector funded project. These are run on the ZGCC4 form of contract, which is basically a modified GCC, developed in the 20th century. The indigenous contractors maintain that it is easier to understand as well as that they are assured of work because of the affirmative legislation that requires awarding them a certain percentage of work on all public sector funded projects. Private developers are slowly moving away from contracts like CIFOZ, which is archaic and opting for NEC form of contracts.

The indigenous contractors should embrace project management in order for their businesses to succeed. The idea of a one-man business who does not have any construction background should be done away with. It is vital for these owners to be the major shareholder and employ qualified personnel to run their businesses. There are cases where decisions are made which are very costly to both the contractor and the client. The contractor fails to complete the project on time, within budget and produce a low quality product simply because the people on site are not qualified to run these projects. Most of these owners of the new contracting businesses have no construction background at all. According to Wekwete (1989), 90% of indigenous

contractors in Zimbabwe have never been involved in construction before independence;

'They are people who by virtue of their social standing at independence managed to be incorporated in the indigenisation euphoria'.

The major factors contributing to failure on the part of indigenous contractors are:

- Lack of contracting knowledge
- Lack of managerial skills
- Abuse of government funding like advance mobilisation funds
- Limited access to financial support from government funding
- Adversarial nature of the construction industry in Zimbabwe.

Analysing the above factors, the most probable root cause of failure for the indigenous contractors is illiteracy with regards to the requirements of good construction management.

Lack of construction knowledge results in bad decisions being made on site.

Drawings are wrongly interpreted resulting in defective work. The supervising agent will obviously condemn such work resulting in remedial work at the contractor's expense. This further strains the relationship between the design team and the contractor. Infact, most respondents have attributed to the heavy-handed attitude of the design team towards indigenous contractors. Many man-hours are lost due to lack of construction skills. Indigenous contractors have been heavily criticised by government officials for being careless and abusing advance payment funds. The real problem is that the indigenous contractor does not understand construction financial management processes. Most often than not, advance payments are considered as value resulting in part of it being channelled to other projects or other activities which

have nothing to do with the project in question. They fail to understand that most jobs are tendered with value loaded upfront for cash flow reasons. Experience has shown that for a fairly simple 10km road construction, the bulk of the cost normally comes about halfway the project period whereas value comes in right at the beginning.

Failure to appreciate the fact that later construction operations are more expensive than road clearance and base formation will result in the contractor experiencing cash flow problems. The majority of Zimbabwean indigenous contractors do not have good credit ratings with material suppliers because of their history of defaulting on credits. This aggravates the situation in that instead of site management concentrating on the core site business, they spend a considerable amount of time chasing head office for material supplies.

With good project management, all these pitfalls are avoided in that before project start, a proper material procurement schedule is in place and the cost known. Cash-flow bar charts are a requirement through out project duration. This gives insight of what to prepare for before the actual problem occurs.

The lack of contracting knowledge on the part of indigenous contractors is very costly for them as well as the client. General labourers are recruited from areas far from the project are, unilateral cessation of works at the very first instance of delayed payment without following contractual procedures leads to unnecessary disputes are the norm. The existence of a two-tier system in the Zimbabwean construction industry does not help the indigenous contractor at all. On one hand there exists a highly professional design team used to manage multinational contractors with project management knowledge. These very same design teams are also required to manage the new

indigenous contractor whose knowledge of project management is very shallow.

Confrontation is mostly likely to occur. Things taken for granted by the design teams can be very demanding on the part of the indigenous contractor. Critical analysis is rarely appreciated. When delays occur due to reasons beyond the contractor's control, surely extension of time should be granted. However, it can not just be granted if the contractor does not show that he has taken all necessary actions to reduce the impact of such delay. This is one area where the indigenous contractor's construction skills are exposed. Many of the respondents gave late delivery of critical materials to site like cement as reason for causing delay. They however fail to demonstrate that orders for such materials were placed on time with alternative sources consulted in the event that a particular supplier fails to deliver. The indigenous contractor is quick to point a finger to the supervising agent for unfair treatment. Such lack of contractual knowledge has caused the adversarial relationship between the contractor and consultant. This does not help at all as the project suffer delay resulting in additional costs. This is one of the major causes of frustration between the design team and the contractor. With good project management all this can be resolved amicably.

The shortage of qualified personnel and skilled artisans in the employ of the indigenous contractor can not be overemphasised. There are a lot of instances where bad construction management on the part of the indigenous contractors has hampered the successful delivery of construction projects. Today's construction industry requires modern project management techniques in order to strike a functional relationship between time, cost and quality. These are the hallmarks of modern construction. In order to maintain such a balance the contractors have to understand important aspects of critical analysis, better buying, good estimating, record keeping,

adherence to contractual obligations, etc, etc. Failure to apply these, it is difficult for the Zimbabwean indigenous contractor to deliver a project on time, to required specification and within budget. The lack of qualified site agents, buyers, quantity surveyors, etc employed by the indigenous contractors hampers their ability to apply good project management techniques. The research has found out that most indigenous contractors do not have any contingency measures during project implementation. It is common knowledge that in construction there are several problems that a project will face irrespective of how meticulously the design team would have produced their contract documents. There are various unknowns like unforeseen ground conditions that will affect progress; human error in setting out; shortage of construction materials and availability of plant when it is required. All these affect progress of works. It is impossible to totally eliminate problems during construction. However with a qualified and experienced team on site enjoying head office support, the impact of these problems can be reduced to an extent that a project can recover and be on track as far as completion deadlines are concerned. Good project management entails planning in advance the moment there is likely-hood of delay due to, say, lack of sufficient detail to execute a certain task. The supervising agent is quickly notified via an early warning system and anticipated additional costs calculated in the event of delay. This helps the supervising agent in prioritising problems with those likely to have most adverse impact on the programme having to be addressed first. This is not happening in projects undertaken by indigenous contractors because they do not have the right personnel. Shortage of materials can be dealt with a good and effective relationship with the contractor's supply chain. Suppliers more often than not have a reasonable anticipation of an impending shortage of a certain type of material. They can therefore inform head office so that

measures can be put in place to mitigate the shortage, say by requesting the supervising to approve alternative material not in short supply without compromising quality. This requires advance notification because there are certain procedures that the supervising agent needs to follow like getting the manufacturer's technical details of the alternative material before approving it. Good project management helps in building up good working relationship with the client's design team as it reduces the apportion of blame syndrome very rampant in the Zimbabwean Construction industry. The medium scale indigenous contractors have complained of problems with their subcontractors who are in most cases small-scale contractors. This is attributed to lack of qualified and experienced staff to enter into subcontracts and manage subcontractors. Disputes of non-adherence to contractual obligations are quite common. A subcontractor is asked to come to site and carry out work without a subcontract simply because his price is good and has worked for the contractor before. The subcontract will be drawn out when the subcontractor is already on site. This is bad project management, which the indigenous contractors practice mainly due to inexperienced staff running the projects. If a subcontractor takes possession of site by way of a phone call and faxed price, the problem arise when the subcontract is drawn out and has to be agreed. In most cases it is found out that the subcontractors terms are traverse to the main contractors terms which are dictated by the conditions of his contract with the client. The payment clause is one of the most problematic ones. The main contractor according to the subcontractor has agreed to his payment terms by bringing him to site without a subcontract. In most cases 30 days after valuation date is the small-scale contractor's terms obviously because of the need to keep his cash flow good. The indigenous contractor's client is mostly a large and bureaucratic organisation like government, local authority or parastatal. They tend to include

longer payment terms like 65 days from assessment date when drafting their contracts. The subcontractor can not sustain such longer payment terms and in most cases will stop working even without giving the contractual notice period. Disputes arise and the project suffers more so if the subcontractor's work is on the critical path. This can easily be avoided by having a qualified Quantity Surveyor on site who will always insists on a subcontract being entered into before the subcontractor comes to site. The argument that is no time to negotiate and set up a subcontract since the work have to start immediately only shows the lack of planning by the indigenous contractor's site management team. The value of the qualified personnel to man the construction projects awarded to the indigenous contractor can not be underestimated. The no-availability of this vital resource has given to untold disputes between the client and the contractor. There are no proper records kept on site. The supervising agent is asked to certify additional costs incurred by the contractor without having made sight of the back up documentation. In most cases the quality of the supporting documentation is so poor that a genuine entitlement to additional cost reimbursement is thrown out. What is lacking here is an appreciation that contractual procedures have to be followed. It is difficult to have staff that abides to the contract when they themselves do not understand it. Genuine compensation events are rejected and the contractor's margin is reduced. The indigenous contractor has to embrace the concept of project management that calls upon qualified staff to run their projects. Without this, they will remain a failure despite generous government financial and material support given to them over the years.

The use of archaic forms of contract, late payments by the client are also root causes of the indigenous contractor failure to deliver projects on time, within cost and to

required specification. However, the overlying cause for failure is lack of project management skills. The introduction of modern forms of contract is vital but for the indigenous contractor to excel, they need the right people with the requisite skills and experience to appreciate modern forms of contracting.

Conclusion and Recommendation

The government's decision to promote indigenisation of the construction industry is a noble cause. The channelling of huge financial resources, legislation in the form of affirmative action favouring indigenous contractors and many other measures put in place are all commendable. However, it seems this indigenisation policy missed one fundamental aspect that of training these new contractors how to construct projects. This is the first step that should have been done. This means there is need for a new shift in the indigenisation policy for it to work. Project management has developed over the years in developed nations and is a tried and tested discipline. Once correctly applied with people possessing the required skills it will work. The indigenous contractors will continue to fail in project delivery as long as they do not possess project management techniques. This obviously has dire consequences to the economy as a whole in that the cost of public project failure is so big for an economy the size of Zimbabwe can sustain. There are rural road projects that were started 10 – 15 years ago but still not finished.

It is greatly recommended that the present professional bodies like the Zimbabwe Institution of Engineers (Z.I.E; Institute of Architects Zimbabwe (I.A.Z); Zimbabwe Institution of Quantity Surveyors (Z.I.Q.S); should lead the way in lobbying government to provide the necessary finance to train the new contractors. This can be

done by providing government grants to Universities and Polytechnics who then can run some vocational training programmes to train indigenous contractors.

Government through its affirmative policies could make it a requirement that for any indigenous contractor to qualify to tender for all public funded projects, the managers who run their companies should have proof of qualification or have passed the vocational training programme. The Zimbabwe Contractors Association and Zimbabwe Building Contractors Association should all be roped in to make this programme a success. No financial assistance in the form of government advance mobilisation should be availed to indigenous contractors whose managerial staff is not qualified in their respective fields. This is important because to avail these funds will only result in failure as has been the cases over the years. The promotion of indigenous contractors should be made a priority because it has great potential for employment creation whilst creating the necessary infrastructure the country desperately need. It is only by educating these indigenous contractors the principles of project management that they can begin to contribute meaningfully to economic development. It is only when project management has been appreciated by indigenous contractors that future projects awarded to them can be completed within budget, to specification and on time. This therefore calls a holistic approach by all the stakeholders involved in the construction industry in Zimbabwe.

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