

AN ACCELERATED INTEGRATED SMALL CONSTRUCTION CONTRACTOR DEVELOPMENT MODEL: A HOLISTIC APPROACH FOR A DEVELOPING COUNTRY

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ABSRTACT

An empowerment model for the rapid development of emerging (small) construction contractors is described. This model has a sound theoretical base, has been developed through extensive field research and has been introduced in practice where the results are continuously measured. The operational model is subject to project management and quality management. Formal training and mentoring of contractors have been identified as key elements of the model. The role players in the construction industry and the broader business environment that could positively influence the development of the contractors have been identified and are included in the model. An important observation is that the model is composed mainly of generic elements and could easily be adapted in the same format in other industries.

KEY WORDS: empowerment; emerging construction contractor; mentoring; training; project management; quality management.

1. INTRODUCTION AND DEMOGRAPHIC PERSPECTIVE

South Africa is a developing country, albeit a unique one. After the arrival of the first white settlers in 1652 an amazing sequence of events lead to the development of a nation, and an economy, which now displays all the development categories of a first world, third world and a developing economy, rolled into one. The following features are observed (Hauptfleisch 2001:1):

- A population of approximately 42 million with the number of illegal aliens unknown, but possibly in excess of 4 million.
- Population growth is presently in the region of 3%.
- The Gross Domestic Product (GDP) grows at 4% to 5% p.a, of which 5.1% is invested in construction, with an inflation rate of about 4%.
- The construction industry employs more than 500 000 people, of which only 45% are estimated to be working in the formal sector.
- The economy and state finances are very well managed, but a lack of substantial foreign investment hampers the development of the full economic potential.
- The first democratically elected government came into power in 1994, following a remarkable negotiated transition.
- With sweeping policy changes taking place in government and the civil service, the learning curve is very steep regarding the process of capacity building and delivery.

- With one of the highest incidences (estimated 1 in 5 to 10) of the disease in the world, the impact of HIV/AIDS on the population is now starting to manifest itself socially, with important economic implications.
- South Africa is to a large degree a developing country and demands on limited resources are severe.
- There are 11 main languages, and even more minorities, therefore the country consists of minorities by virtually any norm other than on the basis of colour, with approximately 70% Black, 15% White, 5% Asian and 10% Mixed descent.
- An estimated 8 million households in South Africa have a combined income below the minimum subsistence level of R1400.00 per month (\$250 per month), which is a reflection of the widespread unemployment and poverty.
- The country is divided into 9 provinces.

An obvious outcome of the above is that the affluent minority (mainly whites) and the poor majority (mainly blacks) have to find ways whereby a strong middle class, which includes all sections of the population, can be developed by empowering people to create a better life for themselves.

2. STRUCTURAL INTERVENTIONS

The following structural interventions have been made by government and other organs of state to create an “enabling environment” for the rapid development of, inter alia, construction contractors:

2.1 Creating an enabling environment

The Government has adopted legislation to create an enabling environment, with the following Construction Industry Development Board (2004:5) (CIDB) reference in their status reports regarding the White Paper that pre-ceded the creation of the CIDB:

“Informed by the White Paper: “Creating and enabling environment for reconstruction growth and development of the construction industry” (1999), and the Construction Industry Development Board Act (Act 38 of 2000), two overall questions were asked by this review of the construction industry:

- a. Are the principal objectives of construction industry development being achieved, and are they the right objectives?
- b. Is the performance of key delivery sectors and that of the broad policy environment supportive of Construction Industry Development?

The review further seeks to identify key challenges and the necessary action by stakeholders to boost and direct the industry’s development trajectory.”

2.2 Construction Industry Development Board

The CIDB mandate that followed from the above legislation is encapsulated in the following abstract in the Construction Industry Development Board: Annual Report (2004/2005:12):

“Our Mandate is to:

- Provide strategic direction and develop effective partnerships for growth, reform and improvement of the construction sector;
- Promote sustainable growth of the construction industry and the sustainable participation of the emerging sector;

- Promote improved performance and best practice of public and private sector clients, contractors and other participants in the construction delivery process;
- Promote procurement and delivery management, the uniform application of policy throughout all spheres of government, ethical standards, including a code of conduct;
- Establish the registration of projects and contractors, and other suppliers, to systematically regulate and monitor the performance of the industry and its stakeholders for sustainable growth, delivery and empowerment and for improved performance and capability. ”

2.3 Broad Based Black Economic Empowerment

Government initiatives are further supported by the Broad Based Black Economic Empowerment Act (No 53 of 2003) (BBBEE, 2003:2) that is now in the implementation phase, that reads as follows:

“To establish a legislative framework for the promotion of black economic empowerment; to empower the Minister to issue codes of good practice and to publish transformation charters; to establish the Black Economic Empowerment Advisory Council; and to provide for matters connected therewith.”

2.4 Expanded Public Works Programme

The Expanded Public Works Programme (2005:2) states the following objectives as set by government:

“The Expanded Public Works Programme (EPWP) is a national programme that aims to draw a significant number of the unemployed into productive work. This programme involves creating temporary work opportunities for the unemployed, while ensuring that workers gain skills and training on the job, and so increase their capacity to earn an income in the future. The emphasis of the EPWP is to expand the use of labour-intensive methods in government-funded service delivery projects to create more work opportunities and stimulate entrepreneurial activity. The programme has a target of providing employment opportunities and training for at least one million unemployed people in its first five years. It involves all spheres of government as well as State Owned Enterprises (SOE’s) establishing itself as a cross-cutting government programme that extends beyond the Department of Public Works.”

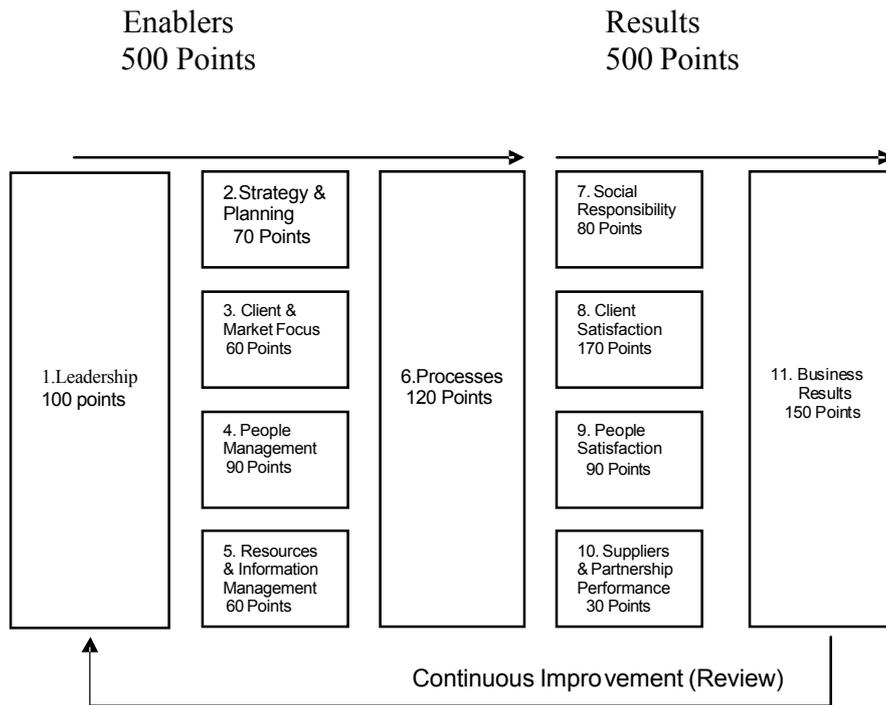
2.5 South African Construction Excellence Model

The Council for Scientific and Industrial Research (CSIR) has been involved in research work to develop the South African Construction Excellence Model (SACEM). Dlungwana and Rwelamila (2005:2-3) reports as follows:

“The South African Construction Excellence Model (SACEM) (Figure 1) is a business performance assessment tool developed to evaluate the overall performance of contractors in addressing many of the challenges addressed above. The model embraces the principles of strong leadership, a long-term approach, continuous improvement, client focus, people management and results-orientation. The model uses a questionnaire-based scoring technique to evaluate the contractor’s level of development and the extent to which best practices are embraced. The model thus provides an objective assessment of the contractor’s strengths and areas for improvement and enables management to implement appropriate improvement. More than just an assessment tool, the model is aimed at contributing to the national strategy

for developing the construction industry by facilitating the rapid adoption of the best practice that ensures improvement in contractors’ productivity, competitiveness and strategic management of social and environmental issues. The management of socio-environmental performance should be achieved in parallel to profitability and growth performance.”

Figure 1: Structure of SACEM



Source: (Dlungwana & Rwelamila, 2005:5)

2.6 Construction Education and Training Authority

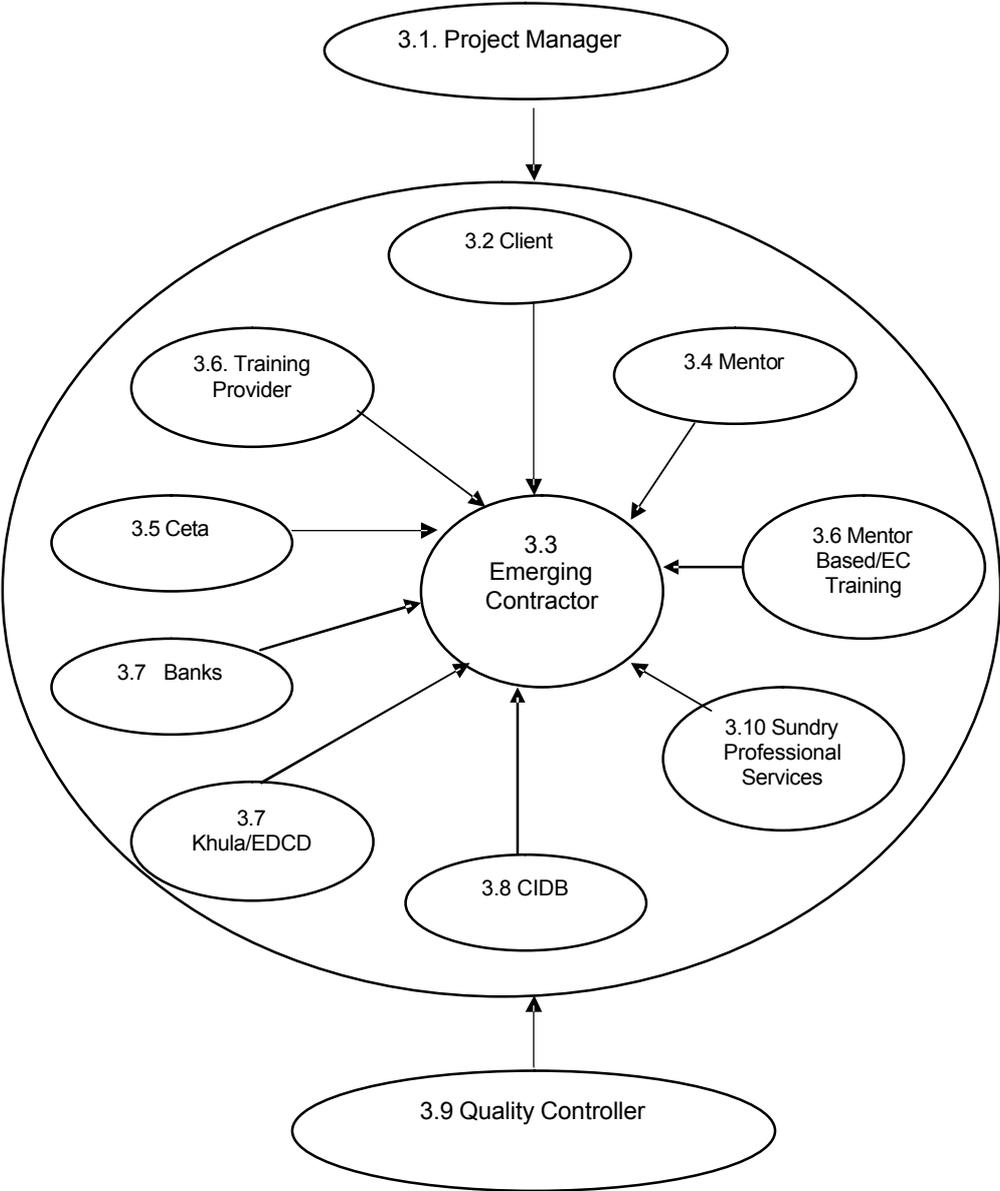
The Skills Development Act (Act 97 of 1998) provides for the creation of Sectoral Education and Training Authority (SETA) for each of the various economic sectors. The Construction Education and Training Authority (CETA) is responsible for the construction industry . A levy, expressed as a % of salaries and wages paid by employers, is placed in a fund that is applied in terms of stated guidelines, to ensure that education and training take place in the industry.

3 INTEGRATED EMERGING CONTRACTOR DEVELOPMENT MODEL

The enabling environment that has been created as overviewed above, leaves the construction fraternity with the challenge to create a working model to achieve the stated objectives within the unique demographics of South Africa. The integrated emerging (small) contractor development model is a serious attempt to put such a working model to the test.

Figure 2 is a diagrammatic presentation of the Integrated Emerging Contractor Development Model (IECDM) that depicts all the identified role players required in order to maximise the development of emerging contractors. All the identified inputs required to obtain a holistic outcome are hereafter described briefly:

Figure 2: Integrated Emerging Contractor Development Model



Source: (Hauptfleisch, 2006. Own diagram)

3.1 Project Manager

As the IECDM is applied as a project within a project management programme (on a repetitive group bases) it is imperative that it should be managed as individual projects within an overall programme. Observation of other “programmes” where the approach has largely been to allocate resources to development initiatives without strong project management thereof, supports the observed mediocre outcomes of such programmes. If a programme is not project managed overall, the outcome is predictably poor.

3.2 Client

Every project must have a clearly identified client who is committed to the following:

- 3.2.1 The provision or facilitation of construction contracts for the contractors, valued up to R5 million (U S \$1 million) for a period of at least 24 months. The model supports the development of contractors in a “learn and earn” environment with mentoring support on site and in general business practices. On-off availability of contracts for contractors on the programme disrupts the process and distracts the contractors’ focus on development.
- 3.2.2 The client is required to make dedicated management inputs into the programme, provide an adequate budget for the programme, requiring achievable guarantees from contractors and enter into agreements with role players as necessary.

3.3 Emerging Contractors

Contractors are subject to selection in order to enter the programme. The following criteria have to be met:

- 3.3.1 Assessment and acknowledgement of previous learning (RPL) in order to select a suitable training package.
- 3.3.2 Must satisfy the minimum Construction Education and Training Authority (CETA) requirements to enter a “learnership”, leading to a national construction contractor qualification.
- 3.3.3 Must pass a potential test as part of the selection criteria.
- 3.3.4 Has to commit to the intensive 24-month training programme.
- 3.3.5 Have to be positively disposed towards a mentor/protégé relationship.

3.4 Accredited Construction Mentor

Mentors should be selected for the programme according to the following specific criteria, as being trained in a specific discipline does not assure the automatic ability to act as a mentor:

- 3.4.1 Pass an examination and psychometric evaluation conducted by the University of the Free State (or a other acceptable evaluation).
- 3.4.2 Take part in a structured training course to establish understanding and compliance requirements of the mentoring objectives.
- 3.4.3 Pass a personal interview for selection onto the programme.
- 3.4.4 Must be dedicated and committed to act as business advisor and confidant of the emerging contractor, in some instances taking an executive responsibility.
- 3.4.5 Has to oversee the institutional (formal) training of the emerging contractor and the transfer of such skills to the business of the contractor.
- 3.4.6 His main objective should be to develop a self sufficient and sustainable contractor, who can operate independently after 24 months.

3.5 Construction Education and Training Authority (CETA)

CETA as the statutory body providing funding for skills development are involved to provide the following:

- 3.5.1 To provide finance for a tripartite agreement to facilitate training by a training provider. The three parties to the agreement being the emerging contractor, the client (acting as the employer) and a training provider registered with CETA as such.
- 3.5.2 Provide assistance with the Recognition of Prior Learning (RPL) process.
- 3.5.3 Fulfil its normal role as training authority, assessing outcomes of training and the awarding of qualifications.

3.6 Training Provider

The training provider has to be CETA accredited and should be carefully selected in order to assure that he is capable to provide the required training, working within a structured managed programme, contrary to the normal practice where training providers are only accountable to CETA. Emerging Contractors are trained in terms of the National Qualifications Framework (NQF) on Level 2. The programme is structured according to the 70:30 (or 30:70) CETA requirement, which relates to the variation in time distribution between classroom and on site training. The on site portion of the training is substantially enhanced by the presence of the mentor.

3.7 Banks and other Financial Institutions

Banks have to be convinced to take part in the programme as they typically regard the emerging market as a high risk and “not bankable.” Some banks are entering the market (cautiously) whilst some have responded favourably on tenders to serve this market under certain conditions. Other financial institutions such as the government controlled Khula Enterprise Finance, that provides a financial guarantee scheme, and provincial Development Corporations, that provide direct financial support, are cautiously active in this market. The main concern of financial institutions is obviously management of the risk of possible loss in the high risk emerging market. The following security for financial institutions is built into the IECDM:

- 3.7.1 A dedicated bank account is recommended for each construction contract that is entered into.
- 3.7.2 All payments due to the contractor for work done are ceded to this account and can only be withdrawn under the joint signatures of the contractor and the mentor.
- 3.7.3 Facilities are only provided by banks against a programmed cash flow projection, approved by the mentor.

3.8 Construction Industry Development Board (CIDB)

The CIDB adds the following value to the programme:

- 3.8.1 Construction industry “best practice” guidelines are general value added.
- 3.8.2 The introduction of a national “Register of Contractors” whereby all contractors are graded, provide benchmarks reflecting the ability of a contractor to undertake projects of a specific magnitude. As the first entry level for contractors is not strenuous, it is of

limited value in screening contractors for involvement in the IECDM. However, it does provide some order on the entry level as it enforces the principal that all graded (registered) contractors have to satisfy the legal requirements to run a business. Only contractors on the CIDB register are eligible to tender for public sector projects.

- 3.8.3 An important aspect of the register is, that even at this early stage, it is clear that contractors will aspire to progress to higher levels on the register, in order to be able to compete for bigger and more lucrative projects in the future. It therefore carries a strong motivator for contractors to develop themselves and their businesses.

3.9 Quality Managers

Independent quality management has to take place throughout the programme. This function is executed on all the elements of the programme and reported to all concerned, typically in a statistical diagrammatic format. Practically it is executed by visiting the contractors and their mentors monthly, with a quarterly meeting with all concerned present. Monthly progress reports from mentors, contractors, training providers, quality managers and the project manager are the main input documents used to provide the client with comprehensive feedback regarding the programme.

3.10 Professional Services

Professional services enter the programme from two angles. Firstly the project consultants are made aware of the structure of the programme and their support is solicited for the development of the emerging contractor. Conflict often exists on this level where contractors have not got the ability and or support to meet the project requirements. Under these conditions the project professionals find themselves under great pressure to deliver a satisfactory project to the project client. The IECDM addresses this problem substantially. Secondly, a budget should exist in order to obtain specialised professional support for the programme when necessary. This is not a common occurrence but should not hinder the programme when it does occur.

4 GENERAL

The following general aspects should prevail in order to ensure a successful outcome for the application of the IECDM:

- 4.1 A well structured organisation diagram and procedures have to be created and implemented.
- 4.2 Only involve committed role players.
- 4.3 Ensure that the programme is adequately funded. Financial support is available from a variety of sources, often unexpected and untraditional.
- 4.4 The roles of all the participants should flow from the organisational structure, but it is important that they, and specifically the management team, are adequately capacitated to fulfil their respective mandates.
- 4.5 Strong leadership is required from the project manager and the management team.

4.6 Quality management should be uncompromising and vigorously pursued.

4.7 The training providers and mentors have the daunting but rewarding task to ensure that skills transfer takes place and that sustainability is created.

5 SUMMARY

This model is complex and requires capable management to succeed. However, it has been introduced in practice, with gratifying results. The Eastern Cape Development Corporation was amongst the first to introduce the entire programme, covering an entire province in South Africa. The national EPWP is founded on the principals described in this model, after having attempted numerous other approaches that have resulted in mediocre outcomes at best. It would therefore appear as if a broad based national consensus at this stage supports the validity of the IECDM as described above.

An important observation is that the elements of the IECDM are not unique to the construction industry in South Africa. Similar structures exist in other industries and it can therefore be stated that the underlying structure of the IECDM is generic and transportable to other industries. Other developing countries may well benefit from this approach as well by adapting it to their local conditions. Comparative analyses in this regard are already taking place in Sub-Saharan Africa.

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