

## **TRANSFORMATION IN THE NATIONAL DEPARTMENT OF PUBLIC WORKS: A MARKET DRIVEN STRATEGY**

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**ABSTRACT:** This paper investigates the depth and extent to which the National Department of Public Works (NDPW) is transforming within the Built Environment, relative to the social, economic, political, historical, gender, legal and equity spheres. Transformation is one of the most critical aspects of effective strategic management and the South African government, through the (NDPW), is committed to facilitating delivery by other departments by providing accommodation and property management services and meeting the objectives of poverty alleviation and transformation. In 2003 the Department formulated a new vision, mission and value statements to demonstrate the Department's and its employees' serious commitment to Government's vision of a better life for all the country's citizens.

The (NDPW) aims to promote the government's objectives of economic development, good governance and rising living standards and prosperity by providing and managing the accommodation, housing, land and infrastructure needs of national departments, by promoting the national Expanded Public Works Programme and by encouraging the transformation of the construction and property industries. In pursuance of this objective the Department will endeavour to efficiently manage the asset life cycle of immovable assets under the Department's custodianship, provide expert advice to all three spheres of Government and parastatals on immovable assets, contribute to the national goals of job creation and poverty alleviation through the coordination of public works programmes nationally, of which the Expanded Public Works Programme (EPWP) and National Youth Service (NYS) forms an integral part; and provides strategic leadership to the Construction and Property Industries.

### **Keywords**

**Ability** is the possession of the necessary skill, power or competence.

**Attitude** is the way an individual views something or tends to behave towards it, often in an evaluative way.

**Construction Industry** is the sector of the economy that is concerned with the erection and maintenance of structures which includes the design, procurement, completion, commissioning and maintenance of domestic, commercial and industrial buildings.

**A Graduate** is an individual who receive a degree in the built environment.

**A hypothesis** is a proposition that is formulated for empirical testing.

**Perception** is the act or the effect of distinguishing.

**Project manager** is someone appointed in the built environment to manage multi-discipline endeavours.

**A proposition** is a statement about concepts that may be judged as true or false if it refers to observable phenomena.

**Reliability** has to do with the accuracy and precision of a measurement procedure

**Skills** are the abilities acquired by training.

**A theory** is a set of systematically interrelated concepts, definitions, and propositions that are advanced to predict and explain the phenomena.

**Validity** refers to the extent to which a test measures what we actually wish to measure.

**A variable** is a symbol to which numerals or values are assigned.

The following definitions are attributed to Saunders et al (2000: 10)

## 1 INTRODUCTION

The construction industry is often used as a regulator of the general economy (Wells 1986:135; Ball 1998:226). This is because the construction industry “has proved a good instrument for transmitting short-term deflation through the economy without creating widespread political upheaval, economic disruption or closure of productivity capacity” (Moreo, J. 1990: 212).

Furthermore, because the industry can be technologically flexible, it can be used to create employment when necessary and hence it is often used as an economic regulator (Edmonds and Miles 1984:182). Lopes (1998:648) conclude that “it is the great flexibility of construction activity in adjusting to different framework conditions that particularly makes this sector a major contributor to the process of development.” It is therefore, for both economic and administrative reasons, that the reductions and increases in government spending are often concentrated on construction projects (Morton 2002:91). However, there are different and opposing views on whether governments deliberately use or should use public spending on construction as a means of regulating the economy (Ofori 1988:241).

### 1.1 Construction trends in South Africa

The construction industry trades within a complex global environment that contains significant contrasts. Whilst third world infrastructure development is aimed at providing the basic needs and seeks to deliver self-sufficiency and wealth creation, the developed world is focusing on getting more from an ageing existing infrastructure in terms of efficiency and profit, and on enhancing the quality of life and conserving the environment (Horwitz 2000:136). The construction industry’s contribution to domestic product in South Africa is significantly below that of the developed world. Regarding private sector investment in non-residential buildings, it decreased by 1% to R12 405 billion, with the biggest decline being in office accommodation. The number of building plans passed continues to drop, but the number of buildings completed has returned to the 1995 levels

after decreasing for 5 consecutive years. However, within the building sector, 86% of the number of contracts were for a value of R5 million or less (CSIR 2004:66).

## **2 METHODOLOGY**

This chapter addresses the procedures and techniques used in this study. It focuses on the steps taken in the construction of a theoretical basis for the study, the method of data collection and the sampling methodology. Regarding the techniques used in data collection, the choice of the measurement technique and its limitations are examined. Furthermore, the procedure used in the analysis and interpretation of the data is presented.

### **2.1 Construction of a Theoretical Basis for the Study**

A review of relevant literature was undertaken on central concepts foundational to this study. It thus serves as a basis upon which theoretical assumptions are made about the phenomenon under study, enables the establishment of a link between theory and empirical research, and makes possible the explanation of the findings of the present study in terms of the theoretical propositions made.

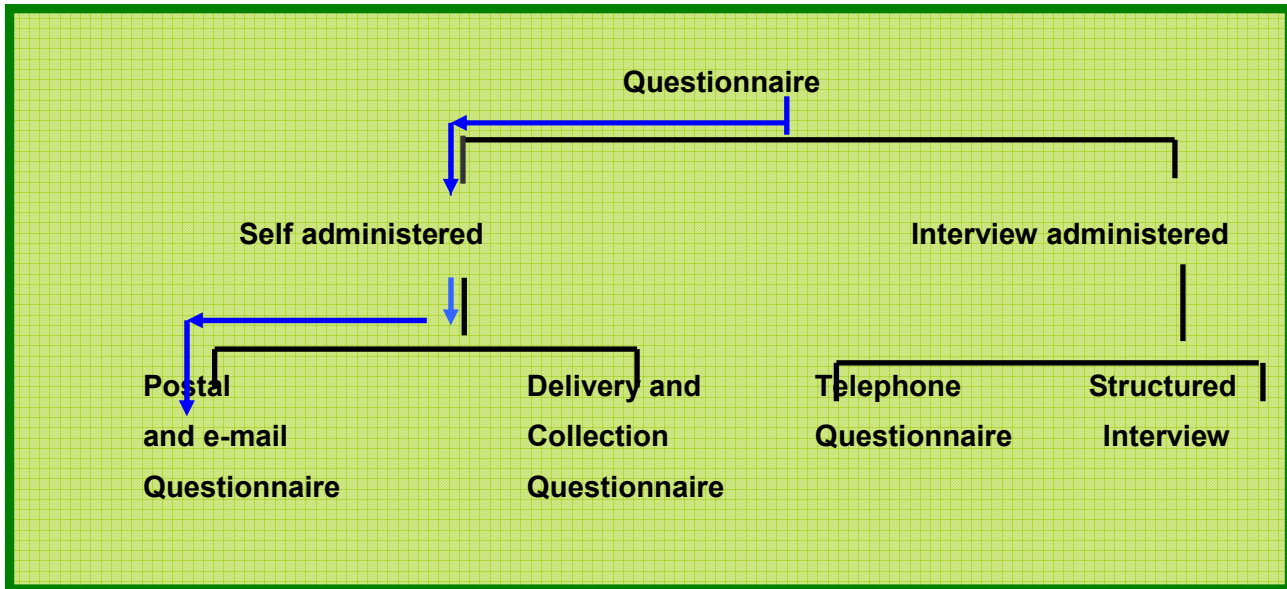
### **2.2 Method of Data Collection**

The group administration method is used when the population in which the researcher is interested corresponds to one or other group that is stationed elsewhere. According to Huysamen (1994:150), "attitude scales and survey questionnaires may be administered to all of them simultaneously."

In this research, the population for the questionnaire comprised NDPW staff, contractors, consultants and Built Environment Professionals. The questionnaire, which comprises three sections, is constructed on the basis of the theoretical literature reviewed.

This data collection method is common in business research. It allows for a large amount of data to be collected, assimilated and analysed. It is generally perceived as authoritative. The data is not lost easily as there is a good management of the control process over the research. Greater independence can be exercised, without delaying the progress. The major weakness envisaged is that the data will not be qualitative. The diagram below outlines the probable methods of data collation and the path that will be followed in this survey:

Figure 2.1: Types of Questionnaires



Source: Adapted from Saunders, Lewis and Thornhill (2000: 194)

### 2.3 The quantitative approach

Blaxter, Hughes and Tight (2002:79) argue that “the way questions are asked influences what needs to be done to answer them” yet often the “methods cart” is placed before the “contents horse.” The positivist research which often is quantitative (in contrast to the qualitative approach) is used. Quantitative research is empirical research where the data are in the form of numbers. It is indirect and abstracts and treats experiences as similar, adding or multiplying them together or ‘quantifying’ them. Hence a major obvious weakness of quantitative research is that it omits “too much of what is human” (Blaxter et al 2002: 59). However, Howe (1994: 161) notes that “quantification does not eliminate qualitative judgements and therefore is not an alternative to them” since quantitative data exclusively does not provide “any real understanding of the lives behind the numbers.”

#### 2.3.1 Surveys

According to Leedy (1997: 191), “a survey means to look or see over or beyond.” For Blaxter et al (2002:77) “a survey is the method of collecting information by asking a set of pre formulated questions in a predetermined sequence in a structured questionnaire to a sample of individuals drawn so as to be representative of a defined

population”. Since survey research focuses on “generalised statistics that result when data are abstracted from a number of individual cases” it is “essentially cross-sectional” (Best and Kahn 1989: 78).

### **2.3.2 Descriptive research**

Characteristics of descriptive research are hypothesis formulation and testing; inductive-deductive reasoning to make generalisations; methods of randomisation for errors to be estimated when inferring the features of the population from observations of samples; variables and procedures are described accurately and fully for the study to be conducted by other researchers; and it is non-experimental as it addresses the relationship between non-manipulated variables in a natural context (Best and Khan 1989: 89).

## **2.4 The Questionnaire**

For Blaxter et al (2002: 77,179) the questionnaire is one of the techniques which are “at the heart of ...survey research” and it is “one of the most widely used social research techniques”. The questionnaire is regarded as a descriptive survey method and a commonplace instrument for observing data beyond the physical reach of the observer. Leedy (1997: 190). cite that the researcher obtains data from a remote targeted source in an impersonal way.

For Herbert (1990: 55) the advantages of using a questionnaire are: it's standardised wording and question order allow for responses to be compared, it is a fast way to collect data and the respondent has the freedom to answer from his/her perspective. Furthermore, the questionnaire is often less expensive, the respondent's confidence may be more because anonymity is guaranteed and it is less exacting on the respondent for an immediate response. According to Blaxter et al (2002: 179) the questionnaire has unique advantages, and properly constructed and administered, it may serve as a most appropriate and useful data-gathering device in a research project. Hence, the questionnaire was deemed the most suitable data gathering instrument to attain objectives of this research.

## **2.5 E-mail and postal survey**

The use of e-mail, postal surveys, personal or telephone interviews are a personal judgement call on the researcher's part. The postal and e-mail survey was deemed most conducive and was therefore chosen for this study. Leedy's (1997: 198) guidelines were applied in preparing the questionnaire. The reasons for using the e-mail and postal survey are:

- Respondents have more time to respond to the survey;
- Bias is removed as the respondent is not influenced by the presence of an interviewer; and
- The likelihood of sensitive questions being answered is increased (Barker 1996: 101; Kress 1990: 100).

However, the main disadvantage of a mail survey is its low response rate. According to Barker (1996: 110), "responses to mail surveys are poor and returns of less than 60% are common." To counteract this disadvantage, Welman and Kruger (1999: 160) identify three appeals which may be used to motivate participation:

Ego appeal, where respondents participate because they like the topic of the research and want to be noticed; value appeal, where respondents wish to assist the researcher and a combination of the two reasons.

## **2.6 Sampling Technique and Description of the Sample**

According to Cooper and Schindler (2003: 178), "the basic idea of sampling is that by selecting some of the elements in a population, we may draw conclusions about the entire population." For Kidder and Judd (1986: 154), "sampling is the selection of a fraction of the total amount of units of interest to decision-makers for the ultimate purpose of being able to draw general conclusions about the entire body of units." The group studied will comprise:

- NDPW staff in the Built Environment,
- Contractors,
- Built Environment Practitioners, and
- Clients of NDPW.

### **2.6.1 Reliability of questionnaires**

According to Best and Khan (1989: 160), "Reliability and validity are essential to the effectiveness of any data-gathering procedure", such as the use of the questionnaire as the research instrument of choice here. Reliability can be determined via the following means: first test-retest reliability which provides "an estimate of the degree of fluctuation of the instrument, or of the trait it is designed to measure, from one administration to another" (Roux, N., Botes, P. Brynard, P., Fourie, D. 1997: 123).

The reliability of the questionnaire can be assessed on the basis of the following two questions:

- Will the results be the same for different occasions?
- Will different researchers make similar observations?

According to Rubin and Babbie (1992: 218), "existing statistics often have problems of reliability, and it is necessary to use them with caution." The implication is that statistics are often manipulated to prove a result as opposed to deriving a conclusion.

### **2.6.2 Validity of questionnaires**

Cooper and Schindler (2003:232) address the following types of validity: content validity (degree to which the content of the items sufficiently represent all the relevant items studied); criterion-related validity (degree to which the predictor is adequate in embracing pertinent aspects of the criterion) which embraces predictive validity (predict future; criterion data are measured after some time has lapsed) and concurrent validity (description of the present; criterion data are available at the same time as the predictor scores); and construct validity (tries to pinpoint underlying constructs being measured and how well the test represents them).

Validity is therefore concerned with whether the findings are really what they appear to be? Documentary data such as the minutes of meetings may not be totally valid unless the accuracy can be verified. The maintenance of the objectives of this research will be vital during the analysis stage to ensure that the data is not misrepresented. It is also acknowledged that the lack of objectivity would destroy and distort the conclusions arrived at (Blaxter et al 2003: 180).

## 2.7 Summary of Survey Population

Of the 100 questionnaires sent out (Table 4), 1 was scrapped due to incompleteness, and 75 were included in the analysis of the data, which equates to a response rate of 75% (75/100).

*Table 2.1 Summary of survey population.*

<b>No.</b>			
<b>Sent</b>	<b>Late</b>	<b>Scrapped</b>	<b>Processed</b>
100	0	1	75

## 3 CONCLUSION

This study investigated transformation in the NDPW. This chapter presents a summary of the main findings, and focuses on the conclusions and the recommendations. The hypotheses supported the findings of all previous work in similar or related areas of research. Transformation has been successful in many countries and many organisations. The question arises:-

Is the National Department of Public Works ready for the Transformation Process? Morally the time has come for the DPW to be made accountable for its decisions, actions and policies. Adequate legislative provision has been made to ensure this.

The vision to transform the Built Environment in a more significant way through the Construction Industry is not peculiar to South Africa. It is supported by the equity drives in both the developed and developing countries. However, a vision independently does not ensure implementation. The conditions in South Africa under apartheid in which blacks received little or no education aggravated the situation. Few opportunities, no role models and social demands such as the need to support and raise families augmented the dire plight of constructors. It would seem that a possible way forward is through the provision of education and training schemes that are presented in a manner that make it manageable for constructors to attend.

Gender issues in the Construction Industry continue to be debated, with complaints about the increasing skills shortage against the background of fewer young people considering construction as a viable career. The regular occurrence of accidents, injuries and fatalities on construction sites portray a negative image of the industry, which impedes it in attracting people at all levels of employment. Righting this situation



demands bold and visionary leadership from all sectors of the industry. Furthermore, larger construction employers need to do much more than they are doing at present.

It seems as if the construction industry in South Africa will continue to remain lethargic on improving the under-representation of constructors. This necessitates a total need for change in this industry, especially since, one respondent asserted candidly, 'the industry is in a mess.' The key role players will be the first to admit that the industry has major problems regarding transformation. Many constructors appear to be impatient with the slow process of change and are frustrated with the different key role players within the industry.

### **3.1 Recommendations**

The previous research examined the attraction and transition of women into the construction industry, and has shown how the barrier to transformational entrance to the industry can be challenged. The findings of this study suggest that aspects of the industry's culture may represent barriers to their progression within it. These need to be addressed if transformed participation is to be increased. The following recommendations are made:

- Legislation has to be enacted to enforce key role players to become change agents in the holistic acceptance of transformation in the industry,
- The leadership in construction must be trained to deal with discriminating cultures and values,
- The first year Built Environment programmes must contain aspects of transformation issues as a compulsory module,
- The NDPW must align its strategies and its vision to heighten the status of emerging constructors,
- The practice of equal opportunities in the sector must not be understood as men and women being equal, but being equally important to the environment because of the different capabilities and perspectives, and finally,
- The time has morally come for the Construction Industry to change.

It is recommended that a similar study be undertaken to assess the quality of the transformation processes in the post transformation environment and to assess the transformation process in line with this study. To critically analyse and evaluate the transformation process and align and compare the results to the results of this findings.

### 3.2 Areas of Further Recommendations

#### ➤ Regional Service Centres

In order to enhance service delivery and accelerate the social upliftment programme, it is recommended that Regional Service Centres be established to deal with issues at a single point of contact.

#### ➤ Staff Recognition and Reward

Staff should be acknowledged for outstanding achievement with a special recognition, like a 'Regional Managers Award for Outstanding Performance' or an 'Employee of the Month'.

#### ➤ Human Resource Development and Competencies

The existing HR must be empowered through ongoing training and continuous assessment to further enhance skills and abilities.

#### ➤ Customer Open Day Seminar

The purpose of this strategy is to create an environment of openness and transparency so that the customers and clients can identify with staff at different levels. This will eliminate bureaucracy and expedite service delivery.

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