

CHAPTER 1

INTRODUCTION

1.1 MACROPERSPECTIVE

As in other countries of the international community, the Republic of South Africa (RSA) needs to respond proactively and adapt to the continuous changes that occur as a result of numerous dynamic macro-environmental forces.

By reason of the interaction that occurs between the different subenvironments which collectively make up the macro-environment, a change in the prevailing conditions of one subenvironment (for example, the political subenvironment) may have a direct or indirect influence on all or only on some of the other subenvironments. These other subenvironments include the economic, social/welfare, institutional, technological and physical environments.

The subenvironment in the RSA which is currently undergoing and also expected to further undergo dramatic changes in the immediate future is the political subenvironment. Awarding full and equal political rights to all members of the population will necessarily evoke major changes in some of the previously mentioned subenvironments. For example, it can reasonably be foreseen that the need and demand for social services such as health, housing and education will increase dramatically due to the expected changed priorities in the social/welfare arena. A situation could then arise where the current backlog between the demand for and supply of certain collective services will increase further.

The above difference between the unlimited needs (or demand for services) and the limited resources available by which the needs must be satisfied (or supply of services) is typically regarded from a macro-economic perspective as a problem of scarcity (Lombaard & Stadler, 1978: 3), If it was assumed that all resources were utilized in an optimal fashion, choices would then have to be made between competing needs by means of prioritizing. The extent to which needs are satisfied as measured by the real Gross Domestic Product (GDP) serves as a yardstick for the extent of the economic wealth for a given country (Lombaard et al, 1978: 21). Because the real economic growth rate for South Africa was lower than the population growth rate during the last decade, it can merely be accepted from this macro-economic perspective that, apart from the reduction in economic wealth per capita, the difference between the demand and supply of certain collective services had to increase. It is also expected that this negative trend of increased backlogs will be maintained in the foreseeable future.

In South Africa the public sector is responsible for rendering certain collective services such as health, education and national defense. Because of the nature of these services (such as the inseparableness of the services and the joint advantages that all members of the population receive), they are normally provided by an institution outside the free market place (Lombaard et al, 1978: 12). These services are financed by direct and indirect taxation which the State collects from the members of the population.

Given the above scenario, the dilemma faced by the institutions of the public sector, is the challenge to meet the increased demand for collective services with resources which do not increase at a comparable rate and are, in fact, actually expected to increase by a lower rate. In conjunction with this problem, the economic wealth or real GDP per capita of the

population should be maintained and preferably be increased without the increase in the tax burden (which by itself may place a further constraint on economic growth).

In order to render collective services, different resources, such as labour, capital, materials, machines and equipment, are needed. Physical facilities which come to mind are for example, classrooms or university lecture halls for education and hospitals or clinics for health services. As an integral part of the public sector's responsibility to render these collective services, the need therefore arises for the provision of such physical facilities. Due to the complexity of this function, the construction activities undertaken to provide the physical facilities are centralized and are managed by work departments or administrations (note that these terms are used interchangeably hereafter).

It should be clear at this point, that the rendering of collective services and more specifically, the provision of physical facilities or building accommodation by public sector work departments should occur within the framework of the limitations imposed by the current and projected changes in the subenvironments of the macro-environment. Possible solutions or strategies for effectively and efficiently handling these matters or the complex problems which may result from them, should consider these ever-changing environmental forces.

Against this macro-perspective introduction it is now possible for this introductional discussion to progress to a more specific microlevel in order to introduce the specific research question.



1.2 MICROPERSPECTIVE

Kerzner (1992: 1) in his opening remarks on the role and importance of project management asserts:

"Almost all of today's executives are in agreement that the solution to the majority of corporate problems involves obtaining better control and use of existing corporate resources. Emphasis is being placed on looking internally rather than externally for the solution to these problems."

Given the need to remove or at least considerably narrow the difference between the demand for collective services (and also the accompanying physical facilities or building accommodation needed for the actual rendering of the services) and the shortage or lack of sufficient resources, it may be argued that a solution or strategy is needed whereby the existing available and realistically projected future resources are more effectively and efficiently utilized.

Project management focuses on the management of projects. The Project Management Institute (PMI) (1987: 4-1) defines project management as:

" ... the art of directing and coordinating human and material resources throughout the life of a project by using modern management techniques to achieve predetermined objectives of scope, cost, time and participant satisfaction."

Although many of the basic principles through which project management has evolved are certainly as old as humankind itself (Kharbanda, Stallworthy & Williams, 1980: 3), project management as a management philosophy for projects only really crystallized during the late fifties of this

century (Harrison, 1985: 1). The reason for this can probably best be found in that changing international macro-environments make a global resource scarcity a practical reality, and this demands the efficient utilization of all available resources.

Where identifiable projects, such as the construction of hospitals or schools, are undertaken, this problem of scarcity of resources has made the development of a management approach which can effectively deal with and efficiently utilize existing resources an absolute necessity.

Against this macro- and microperspective introduction, it may thus be argued that, should project management as a formal policy be implemented in public sector work departments (who ultimately bear the responsibility for the projects by which construction activities are undertaken in order to provide the physical facilities needed for the rendering of the collective services), this strategy could contribute significantly towards the elimination of the differences between the existing and projected future demand and supply of such services. With reference to Kerzner (1992: 1), this strategy would thus entail an internal rather than an external solution. For practical reasons, external solutions, such as providing additional resources by increased taxation or further international loans or merely shifting the responsibility for the rendering of these collective services onto the shoulders of the private sector, should only be considered once all other internal solutions have been exhausted.

Figure 1.1 illustrates some of the macro- and microconsiderations that have been highlighted up to this point.

Figure 1.1: Macro- and microperspectives of the research

FOREIGN COUNTRIES	REIGN COUNTRIES REPUBLIC OF SOUTH AFRICA		
		MACROENVIRONMENT (subenvironments)	MARKET ENVIRONMENT (submarkets)
	l N	POLITICAL	CONSUMER GOODS AND SERVICES
	T	ECONOMICAL	INTERMEDIATE GOODS AND SERVICES
	R	SOCIAL/WELFARE	CAPITAL GOODS AND FACILITIES
	A	INSTITUTIONAL	PRODUCTION FACTORS
	T	TECHNOLOGICAL	Natural resources
	O N	PHYSICAL	Labour Capital
	A L		Entrepreneurship Information

DEMAND	DIFFERENCE + / -	SUPPLY	THE COMMUNITY NEEDS
H .	TICIPANTS ect groups)		
PRIVATE HOUSEHOLDS	PRIVATE SECTOR		COLLECTIVE SERVICES
BUSINESSES/ENTERPRISES			
STATE/GOVERNMENT	PUBLIC SECTOR	are responsible for rendering	



renders these services required

PROJECTS
PROJECT LIFE CYCLE
conceptual phase
planning phase
construction phase
operational phase
divestment phase

which are embraced in

CONSTRUCTION	ACTIVITIES
BUILDING WORKS	ENGINEERING WORKS
schools	roads and bridges
colleges	dams and tunnels
universities	electricity supply
hospitals	water and sewerage
clinics	other services

the provision of physical facilities leads to

RESOURCES AND FACILITIES
human labour
capital
machines
equipment
physical facilities

projects are carried out by

TRADITIONAL APPROACHES

PROJECT MANAGEMENT

which focuses on

PROJECT
OBJECTIVES
cost
time
quality
participant satisfaction

and requires a

PROJECT MANAGER	INTERNAL (within organization)
managerial tasks	EXTERNAL (outside consultants)
planning	
scheduling	
organizing	
leading	
control	

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1.3 PURPOSE AND OBJECTIVES OF THE RESEARCH

The purpose of the research is to develop general guidelines on an implementation strategy for both the effective and efficient application of formalized project management in public sector work departments or administrations. The work departments under consideration are those responsible for managing the construction activities by which physical facilities, which are needed for rendering collective services, are provided.

In order to achieve the purpose of the research, it is necessary to formulate specific, verifiable research objectives. The research objectives are to:

- Identify success-driving and success-barrier factors (or forces) which would either positively or negatively contribute to the implementation of formalized project management in public sector work departments involved in construction activities.
- Classify these factors into categories of philosophical (related to the principal requirements for implementation), situational (related to the practical conditions in which the departments operate), organizational (related to the internal characteristics of the departments), job-dimensional (related to the different roles/responsibilities of personnel within the departments) and human-oriented (related to the characteristics of individuals or groups who work in the departments).
- Evaluate these factors in terms of their relative strength and importance in three categories public sector work departments: (1) where project management is already applied as a formal policy (2) where project management is applied informally and (3) where project management is not applied formally or informally; and, in addition, to evaluate the factors in terms of the three basic managerial levels,



namely (1) top-level management (2) middle management and (3) functional or lower-level management.

Assess the theoretical probability whether an implementation strategy, based on the results obtained from the respondents, could contribute significantly to both the effective and efficient formal application of project management in public sector work departments involved in construction activities.

1.4 STATEMENT OF THE RESEARCH QUESTION

The research question is:

How can project management as formal policy be implemented effectively and efficiently in public sector work departments involved in the construction activities by which building accommodation is provided for the rendering of collective services?

1.5 DELINEATION OF THE RESEARCH

The research is limited to the following:

- A literature review of the main constructs found in the research namely, implementation strategies, project management and the management of organizational change.
- An empirical study of the extent to which formalized project management is currently applied by work departments of the public sector by way of the identification, classification and evaluation of the variables contingent upon such an application.



An empirical assessment of the theoretical probability that an implementation strategy, based on the results obtained from the respondents, could contribute significantly to both the effective and efficient formal application of project management in public sector work departments involved in construction activities.

1.6 SIGNIFICANCE OF THE RESEARCH

The primary contribution of this thesis is seen as the empirical identification of the factors (variables) on which the successful implementation of project management as formal policy depends when applied to the construction activities of the public sector. Furthermore, the factors are classified into five categories and evaluated in terms of their relative strength and importance for developing general guidelines on an implementation strategy for formalized project management in the public sector.

The theoretical probability of the implementation strategy based on the results from respondents is also assessed empirically in terms of its potential to contribute significantly to both the effective and efficient formal application of project management in public sector work departments involved in construction activities.

The research is of general importance because it is based on a perceived valid research question and further could expand the existing body of knowledge of project management, specifically with regard to implementation considerations in a public sector setting. Should the results of the research facilitate the implementation of formalized project management in the public sector, this study may in a broad sense, then, also contribute to the elimination of the current and future projected backlogs of collective services. Provided the findings are generalizeable, they could also be applied to other project-related activities of the public sector.

1.7 PLAN OF THE THESIS

The plan of the thesis, presented in Figure 1.2, contains the following chapters:

Figure 1.2: Plan of the thesis

CHAPTER	STRUCTURAL COMPONENT	PURPOSE OF THE STRUCTURAL COMPONENT
1	INTRODUCTION	Background to research question, purpose, objectives, delineation and significance of the research
2	LITERATURE REVIEW	Literature review of the major constructs in the research
3	RESEARCH PROBLEM AND METHODOLOGY	Research problem, methodology and research design
4	RESEARCH RESULTS	Presentation of the results
5	DISCUSSION OF THE RESEARCH RESULTS	Discussion of the major findings of the research
6	FINAL CONCLUSIONS AND RECOMMENDATIONS	Final conclusions and recommendations of the research

Chapter 1 provides both a macro- and microperspective introduction to the research question in order to obtain a suitable perspective for the statement of the purpose, objectives and perceived significance of the research.

Chapter 2 describes the literature as applicable to the major constructs relevant in the research. These are implementation strategies, project management and the management of organizational change.

Chapter 3 states the specific research question and presents the research methodology and design. Information about the research population and data collection procedures is also included.

Chapter 4 outlines the results of the empirical investigation.

Chapter 5 presents a discussion of the results and their implications with regard to the literature and the underlying theoretical framework.

Chapter 6 summarizes the investigation and discusses the main findings of the study critically. Finally, recommendations are also made for future research.

1.8 CHAPTER SUMMARY

This introductory chapter presented both a macro- and a microperspective of the general events and conditions leading to the formulation of the research question. The introduction thus served as a general reference point for the statement of the purpose and verifiable objectives of the research. The purpose of the research is to develop general guidelines on an implementation strategy for the application of formalized project management in public sector departments involved in construction activities whereby building accommodation is provided.

A brief statement of the research question was then presented together with the delineation of the research. The research is limited to the identification, classification and evaluation of variables which will either facilitate



or restrain the implementation of formalized project management in public sector work departments. It is also limited to the assessment of the theoretical probability and potential that an implementation strategy, based on the results obtained from respondents, could contribute significantly to both the effective and efficient application of formalized project management in public sector work departments.

The perceived significance of the research was broadly substantiated and finally, a plan was presented detailing the structure and summarized content of the subsequent chapters of the thesis.