CHAPTER I

INTRODUCTION

Motivation can be defined as the willingness of employees to put forth effort in pursuit of organisational goals. Motivation is not a constant, for it can vary between employees at the same time and in the same employees at different times. Motivation can be looked at from the individual and organisational perspectives. At the individual level, if an employee is motivated, he will be able to satisfy his needs, whether physiological or psychological. At the organisational level, if employees are motivated, there ought to be increased productivity and efficiency, and reduced turnover and absenteeism. Hence, it is important for organisations to determine what motivates their employees, especially professional employees, who are vital to the achievement of their objectives.

As Malaysia moves into the 21st century, many professional employees, especially consulting engineers, will play a vital role in helping the nation achieve the status of a fully developed country.[1] After all, consulting engineers are one of the largest providers of professional services in the country. Thus, the problem of what motivates the consulting engineer becomes an important question that needs to be researched. Yet, little research has been done here.

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1. The Association of Consulting Engineers Malaysia (ACEM) defines a "consulting engineer" as a qualified professional person who performs engineering services for his clients on a fee basis. The ACEM was formed with the object of advancing the profession of consulting engineers by grouping those engineers whose work is of a purely consultative character, and by providing facilities for government and associations representing industry and trade to confer with consulting engineers as a body. Its members are engineering specialists, who are registered as professional engineers with the Board of Engineers Malaysia (BEM).

The BEM was constituted by the Registration of Engineers Act 1967. Its main functions are :-

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1.1 SIGNIFICANCE OF THE STUDY

As this study attempts to investigate the underlying factors that motivate consulting engineers in their working environment, it will be useful to consulting engineers themselves who will get to know what factors actually motivate them at work. It will also be useful to engineering consulting firms who will get to understand the motivational forces behind the work behaviour of consulting engineers. The study may also be useful in helping to determine what factors motivate other professional employees doing work similar to that done by consulting engineers. And it is hoped that this study will spur further research on motivation, whether in the engineering profession or in other professions locally.

1.2 OBJECTIVES

The overall objective of this exploratory study is to investigate the factors that motivate consulting engineers. In line with this, the specific objectives are as follows :-

(i) to identify the motivational needs of consulting engineers in their working environment;

(ii) to identify the organisational tasks performed by consulting engineers;

(iii) to investigate if their tasks meet the motivational needs of consulting engineers; and

(iv) to investigate the effect of demographic variables on the motivational needs of consulting engineers.

(a) to approve or to reject applications for registrations by engineers;
(b) to fix the scales of fees to be charged by registered engineers for professional services rendered; and
(c) to determine and regulate the conduct and ethics of the engineering profession. Under the aforementioned Act, any engineering firm established as a body corporate must be registered with the BEM.

1.3 METHODOLOGY

Primary data on what motivates them were obtained from a sample of consulting engineers working in engineering consulting firms in the Klang Valley. Data were collected by means of a mailed questionnaire. The questionnaire used had been tested for validity and reliability. Once collected, the data were analysed and summarised using the Statistical Package for the Social Sciences (SPSS) programme. Basic descriptive statistics and statistical procedures such as cross-tabulation, regression analysis and analysis of variance were used to analyse the data. All statistical manipulations followed commonly accepted research practices. Secondary data on motivation in general were obtained from numerous texts, journal articles and other publications.

1.4 SCOPE

The study is confined to consulting engineers working in engineering consulting firms located in the Klang Valley. The study is so confined because the highest concentration of such firms is to be found there.[2] The study excludes consulting engineers working in other firms because of the usual time and money constraints. Also excluded for the same reasons are consulting engineers working in the public sector.

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2. Of the 61 consulting firms listed in the ACEM's 1992/1993 Directory, 46 were situated in the Klang Valley. Moreover, of the 153 consulting firms registered with the BEM in 1993, 119 were located in the Klang Valley.

1.5 LIMITATIONS

The findings of the study are generalisable only to a limited extent for two reasons, one academic and the other geographical. Academically, the study was modelled on the *3 Needs Theory* developed by Murray (1948), McClelland (1961), Atkinson (1964) etc. and so does not take into account other theories of motivation such as Maslow's (1954) Hierarchy of Needs, Herzberg's (1966) Motivation-Hygiene Theory, McGregor's (1967) Theory X and Theory Y, Vroom's (1964) Expectancy Theory, Locke's (1967) Goal-Setting Theory and Adam's (1976) Equity Theory. Geographically, the study was confined only to consulting engineers working for engineering consulting firms in the Klang Valley and hence excludes consulting engineers working as such outside the Klang Valley and in the public sector.

1.6 ORGANISATION OF THE STUDY

This study comprises five chapters. Chapter I serves as an introduction to the study. Chapter II discusses the concept of motivation and reviews the literature on this subject. Chapter III outlines the research methodology. The research results are analysed and discussed in Chapter IV. Chapter V concludes the study by summarising the findings and making some recommendations for further research.