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CHANGE DYNAMICS WITHIN PROJECT MANAGEMENT: AN ASSESSMENT TOOL

by

A.B. (Riana) SMITH
Student number: 23272130

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Supervisor:
Dr Yvonne du Plessis

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DECLARATIONS

I, Riana (A.B.) Smith, declare that the thesis "*Assessing change dynamics in project management: an assessment tool",* which I hereby submit for the degree Ph.D Organisational Behaviour at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

I, Riana (A.B.) Smith, declare that the thesis has been edited by Mrs Idette Noomé, Ms Nikola Haupt and Ms Dina-Marie Steyn from the Department of English at the University of Pretoria.

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ADRIANA BEATRICE SMITH DATE

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ABSTRACT

CHANGE DYNAMICS WITHIN PROJECT MANAGEMENT:

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SUPERVISOR: Dr Yvonne du Plessis

FACULTY: Economic and Management Sciences

DEPARTMENT: Department of Human Resources Management

DEGREE: Ph.D (Organisational Behaviour)

Today, organisations are increasingly using a variety of project management methodologies to effect organisational change. However, appropriate and thorough management of organisational change within the project environment is not inherent in the mechanistic nature of traditional project management, which focuses on the creation of a temporary organisation around a unique organisational issue, with the primary emphasis on the achievement of project milestones, cost and quality parameters. Usually, a change management imperative is not included in the project management methodology and it is therefore neglected, which has a negative impact on the outcome and/or longevity of the project.

It was therefore important to identify what the elements of change dynamics in the project management domain are across each project phase in order to assist project managers and teams to manage change dynamics consciously and diligently during the life cycle of the project.

The research problem and objectives of the study were informed by a comprehensive literature study, which revealed a need for the development of an assessment tool containing the elements of change dynamics across the four stages of the project life cycle.

Triangulation was used to ensure the integrity of the study. This included defining change management elements within the project management domain on the basis of a comprehensive literature study, administering the Delphi technique and applying Lawshe's content validity methodology. The DeVellis scale development methodology was then applied to the resulting draft assessment tool for the next phase of the research project.

The second phase of testing of the diagnostic tool exposed the 'change management measurement tool' to the views and opinions of two target population groups, namely some South African and some international project managers with various experience levels from different economic sectors.

Various iterations of exploratory factor analysis indicated the primary factors for each of the four phases of the project life cycle whilst identifying the most important change management elements to be retained in the final assessment tool. Item-scale and reliability analysis, together with Tucker's phi results, confirmed the reliability, internal consistency and structure of the assessment tool, which is comprised of 103 items. Highly intercorrelated items in each of the four project life cycle sections of the assessment tool, namely the conception/initiation, planning, implementation and post-implementation phases were indicated by Cronbach alpha coefficients of 0.937, 0.974, 0.931 and 0.875 respectively.

The results of this study contribute to the application of organisational behaviour techniques in the field of project management because the study provides an assessment tool to measure change dynamics during a project's life cycle. The aim of this study, to contribute to the body of knowledge by developing an assessment tool to link the existing theories of change management/change dynamics to the constructs and dimensions of project management and, more specifically, to the four stages of a project life cycle, has been achieved. The assessment tool that was developed in the course of this study can serve as both a diagnostic tool and a checklist which project managers can use to ensure that sufficient focus is placed on the change management imperative as part of the necessary project management methodology during a project's life cycle.

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