

**THE DEVELOPMENT OF AN ASSESSMENT TOOL FOR  
MEASURING PROJECT MANAGEMENT CULTURE IN  
ORGANISATIONS**

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**23 October 2003**

**DECLARATION**

I, Yvonne du Plessis declare that "*The development of an assessment tool for measuring project management culture in organisations*" is my own work and that the views and opinions expressed in this work are those of the author and relevant literature references as shown in the reference list.

I further declare that the content of this thesis is and will not be handed in for any other qualification at any other tertiary institution.

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DATE

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**ABSTRACT**

**THE DEVELOPMENT OF AN ASSESSMENT TOOL FOR MEASURING PROJECT  
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The principles and practices of project management are increasingly adopted by organisations (technical and non-technical) that hope to reap its multiple benefits, particularly 'the opportunity to be both externally effective (fast to market) and internally efficient (doing more, faster, with less)' (Pinto, 2002).

Organisations may not be as successful as they anticipated when they opted to engage in project management, because their organisational culture does not support project work.

The primary objective of this research was *'to develop a reliable holistic diagnostic assessment tool to measure project management culture, as an operational culture, in organisations'*.

This research made use of multi-methods (triangulation) including:

- a thorough literature study;
- verification of the theoretical model of du Plessis (2001) by project management experts using Lawshe's (1975) technique;

- the development of a scale instrument (project management culture assessment tool) by using DeVellis's (1991) process supported by Clark and Watson's (1995); and
- a reliability test of the developed project management culture assessment tool (PMCAT), by using the Mann-Whitney t-test, in two independent organisations.

The results indicated that 94% of the project management experts who responded perceived the model and descriptive elements on project management culture by Du Plessis (2001) as valid.

A questionnaire with 135 variables derived from the validated model and descriptive elements was subjected to 494 project managers of whom 236 responded. This data was the input to the development of the scale instrument, using statistical techniques such as item analysis (SAS, 1997) and exploratory factor analysis (BMDP, 1993). The outcome was a project management culture assessment tool (PMCAT) that comprised of 89 items in a five-factor scale instrument. The overall reliability of the items in this scale was highly acceptable with a Cronbach alpha coefficient above 0.70. The scale inter-correlation showed that the factors are highly inter-correlated which can be expected from an interdisciplinary, holistic construct of factors that are systemic in nature.

The PMCAT was tested in two independent organisations and was found to be a reliable diagnostic tool that can distinguish between organisations' project management culture, especially in the South African project management environment.

**Key words:**

Project management, projects, project management culture, organisational culture, culture assessment, scale development.