OEP[1] Validation Review Update

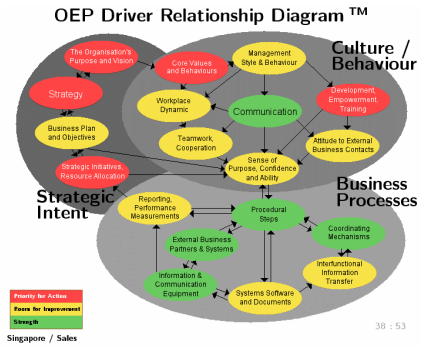
Conducted by Professor Jordan of Macquarie Graduate School of Management, Sydney Australia, March 2007

Background

COI[2] is keen to ensure that the survey components of its products such as that contained within their widely used OEP effectiveness improvement software/process have strong empirically valid in addition to their proven track record of success in the real world.

To ensure the empirical validity of our products we offer our survey data for periodic analysis, conducted by qualified independent[3] analysts.

In late 2006, COI asked Macquarie Graduate School of Management, a key research partner and one of the world's top business schools, to conduct updated validation analysis on the OEP 19 driver model – see below.



The issue

Does the OEP survey, the results of which feed into the 19 driver measurement model above, actually ask insightful questions about each of the 19 drivers and inturn provide reliable measures of effectiveness across each of the 19 drivers from which organisations can identify and address effectiveness issues.

The answer as you can see below is, yes.

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Introduction

This report concerns the initial evaluation of the OEP questionnaire. A random sample of

1000 responses were examined to determine whether the elements and drivers of the OEP model were being measured reliably. A variety of statistical techniques were used to test the validity of the constructs. This initial analysis showed that the questionnaire is fundamentally sound. Subsequent analysis is foreshadowed.

Questionnaire design

The questionnaire consists of 107 questions that are Likert-scale with responses in most cases:

Fully/Largely Agree

Mostly Agree

Party Agree

Not at all

The questions are coded into three 'elements':

1. Strategic Intent
2. Culture/Behaviour
3. Business Processes and Systems

[1] Organisational Effectiveness Profiling (OEP) is one of the world's leading effectiveness improvement processes. The OEP software offers a fully integrated solution to build and maintain the highest levels of organisational and team effectiveness, including effectiveness measurement systems, improvement planning and implementation Wizards, program management, tracking and monitoring Dashboards.

[2] Centre for Organisational Innovation (COI) is the developer/owner of OEP.

[3] COI and associated companies did not pay or in any way recompense MGSM or the writer to conduct the analysis contained in this paper.

In turn each of the elements is coded into a total of 19 'drivers':

For the Culture/Behaviour element the following drivers:

1. Attitude to external business contacts
2. Communication
3. Core values and behaviours
4. Development, empowerment, training
5. Management style and behaviour
6. Sense of purpose, confidence and ability
7. Teamwork/cooperation
8. Workplace dynamic

For the Strategic Intent element the following drivers:

1. Business plan and objectives
2. Purpose and vision
3. Strategic initiatives and resource allocation
4. Strategy

For the Business Processes and Systems element the following drivers:

1. Coordinating mechanisms
2. External business partners and systems
3. Information & communication equipment
4. Interfunctional information transfer
5. Procedural steps
6. Reporting, performance measurement
7. Systems, software and documents

Each of these drivers was represented by between 3 and 12 questions (mostly 5 or 6). A total of 1000 completed questionnaires were received. All fields were complete. No demographic data was included.

Analysis results

Each of the drivers was analysed for scale reliability using Cronbach's Alpha. All drivers achieved score well above the usual cut off of 0.7, except for 'Interfunctional Information Transfer' where it was an acceptable .637. There were only three items for this driver which explains the value to some extent.

The second stage of analysis was to carry out confirmatory factor analysis on each driver. The purpose was to see whether each of the drivers was a unidimensional construct. The way in which the OEP model is described suggests that each driver should represent only a single concept. The standard test for this is to use factor analysis with the number of Eigen values exceeding 1.0 being taken as the number of factors to be used. A further consideration is the percentage of the variation that is explained by the factor.

Eighteen of the nineteen drivers were found to be clearly unidimensional. That is, the items in the driver were sufficiently correlated that they represented only a single concept. In each case the first factor (from the factor analysis model) explained a large proportion of the variation, typically over 50%.

The 'Procedural Steps' driver was found to consist of two factors. Although the second factor only had an Eigen value of 1.03 - marginally above the cut-off.

It is likely that careful examination of each of the items for this driver will result in the deletion of 1 or 2 of them and leave a single factor model.

Thus the first cut *analysis has shown very good scale reliability and strong unidimensionality of all of the drivers."*

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