

## THE ASSESSMENT OF ORGANISATIONAL CULTURE

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SOME PRELIMINARY FINDINGS

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### ABSTRACT

This paper outlines a research project in evaluating the organisational culture of the Sydney Institute of Technology which has been undergoing restructuring since 1992, and must now position itself as a model of best practice in providing quality vocational education and training.

The paper discusses results obtained from the administration of two survey instruments at the Sydney Institute of Technology. The first focuses on models of organisational culture, such as clan, adhocracy, market and hierarchy, and the second asked respondents to describe their perceptions of the Sydney Institute of Technology metaphorically.

Responses from the two survey instruments are then related to a Teaching/Learning Index developed at Sydney Institute of Technology as a measure of customer satisfaction.

Recognition is given to Dr Brian Jones, Jennifer Goodlet and Stuart Muir in the preparation of this paper.

## 1. Introduction

Culture is an important characteristic of any organisation as it consists of the values, beliefs and social ideals of staff, and can be either an asset or a liability. As an asset it can generate high levels of cooperation because of the shared beliefs and values, but a liability when these do not align with the needs of an organisation.

This paper provides some preliminary findings of the existing organisational culture of the Sydney Institute of Technology, a major provider of vocational education training programs. It is suggested that this benchmark will be a useful contribution to the current educational reform debate that proposes that organisations, such as the Sydney Institute of Technology, need to be more competitive, have a stronger customer focus and be increasingly flexible (Elliott, 1996).

## 2. Approaches to the Study of Organisational Culture

Organisational culture has been defined as :

"a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (Schein, 1992).

Another way of thinking of organisational culture is in terms of "the way we do things around here", the values, beliefs and attitudes of staff of an organisation.

While there are a number of models that have been used to study organisational culture (see Sinclair, 1991; Seymour, 1992; Kabonoff, 1993 and Whitaker, 1993), the frameworks used in this exploratory evaluation of the culture of the Sydney Institute of Technology are based on Jung's psychological archetypes and the competing values framework.

The four types of cultures that emerge from these two frameworks are labelled as clan, adhocracy, market, and hierarchy (Cameron, 1985), and are shown in Figure 1.

Figure 1: A Model of Cultural Congruence for Organisations

Flexibility

Individuality  
Spontaneity

#### CLAN

Mentor, facilitator  
Loyalty, tradition  
Human resources, cohesion

#### ADHOCRACY

Entrepreneur, innovator  
Innovation, development  
Growth, acquiring new resources

Internal emphasis

External positioning

Short-term orientation  
Smoothing activities

Long-term time frame  
Achievement-oriented activities

#### HIERARCHY

Coordinator, organiser  
Rules, policies  
Permanence, stability

#### MARKET

Producer, hard-driver  
Goal accomplishment

Competitive actions, achievement

Stability  
Control  
Predicability

The four cultures are pure types, and it is unlikely that an organisation will reflect only one type. In fact, real organisations do not fall neatly into one or the other of these four cultural types and in every organisation all four types exist. It would be expected however to find that there would be one cultural type that would dominate in an organisation.

### 3. Instruments Used to Measure the Four Cultural Types and Images Through Metaphor

An organisational culture diagnostic instrument, the Institutional Performance Survey (IPS) was developed by the National Centre for Higher Education Management Systems in the United States, and has been used to measure the organisational culture of universities and colleges throughout that country (Smart et al., 1993) (Quinn, 1988) (Zammuto et al., 1991) (Smart, 1988) (Fjortoft et al., 1994). This instrument has been used in this current research, and consists of written descriptions of cultural scenarios based on Jung's psychological archetypes and Quinn's competing values framework (Smart et al., 1993). Respondents using this instrument were asked to distribute 100 points in four attributes of the four descriptions of organisational cultural types of clan, adhocracy, market and hierarchy, depending how similar each cultural description was to the Sydney Institute of Technology.

The four attributes are characteristics, or what the overall organisation is like; leadership and the approach that permeates the organisation; bonding mechanisms, or "glue", that hold the organisation together; and strategic emphasis.

A common criticism of assessments of culture using questionnaires is that respondent's answers reflect only their personal attitudes, producing organisational climate data and not cultural data. The advantage of the IPS is that the cultural scenarios act as a mirror against which respondents can reflect the actual culture of their own

organisation (Quinn,1988).

As the values embedded in the basic underlying assumptions of an organisation operate at the unconscious level, a powerful means of identifying these values and bringing them to the level of the conscious is by the use of images (Kelly,1991). These images are influential in guiding our thoughts and behaviour within organisations (Grady,1993) and form the basis of a questionnaire, Images of Schools through Metaphor (ISM) developed by Grady (1993), to determine the image of a school. An example of the importance of knowing the image perceived of a school is one where students perceived classrooms in the best light when their teachers saw the school as cooperative and celebratory, and the reverse when their teachers saw the school as being suppressive, mechanistic or concerned largely with basic needs (Grady,1993).

Grady's questionnaire stems from the work of Steinhoff et al. (1989) and Owens et al. (1989) and was developed by assembling a set of metaphors in the form of a simple questionnaire through workshops consisting of teachers and students. The instrument developed by Grady (1993) has been adopted for use in this research and provides a secondary approach to the measurement of organisational culture at the Sydney Institute of Technology.

#### 4.Results

Results from Smart's IPS are presented first and these are followed by results from Grady's ISM Instrument. Both sets of results are obtained following analysis of survey responses from 429 full-time staff employed at the Sydney Institute of Technology, a response rate of 22.2%. While this response rate is disappointing it does allow for exploratory research into the application of both the IPS and the ISM in a vocational and education setting. Finally results, from the Customer Satisfaction survey following responses from 2,300 customers (students) are presented.

##### 4.1.Institutional Performance Survey (IPS)

The results from the IPS for all respondents at the Sydney Institute of Technology are presented in Table 1.

Table 1:Analysis of variance results for mean scores of culture type by organisational attribute

Organisatl Attrib	Culture Type				ANOVA f value p
	Clan	Adhoc	Hierarchy	Market	
Characteristics	17.5	8.7	51.6	22.1	255.4 >0.05

Emphasis	12.6	22.6	34.8	29.2	56.0	>0.05
Glue	20.2	12.7	43.4	23.8	115.0	>0.05
Leadership	10.8	13.3	60.6	16.8	246.6	>0.05

Analysis of variance indicates that there are significant differences between the mean scores of the four culture type variables for each of the four organisation attributes. In all cases the culture type hierarchy has the highest mean score. Further analysis using Fisher's least significance procedure to discriminate among the mean scores for each of the four culture types indicates that, in all cases the mean score for hierarchy is significantly different from the other mean scores.

From these results one can conclude that the dominant culture type among all respondents is hierarchical. This culture type is also congruent in that it receives the highest mean scores for all organisation attributes. While not statistically significant, there is also evidence of the presence of the three other culture types e.g., clan, adhocracy and market.

In terms of the model proposed in Figure 1, these results would indicate that the culture of the Sydney Institute of Technology is one characterised by the following characteristics: an emphasis on measurement, documentation, information management, tight fiscal control and efficiency. Staff are given well defined roles and expected to follow rules that outline what they do. Managers are expected to monitor and to co-ordinate and also to determine if staff are complying with rules and policies of the Institute. Job security is the major reward for all but executive positions.

#### 4.2. Images of School Through Metaphor Instrument (ISM)

In order to explore the patterns of respondent's images of organisational culture at the Sydney Institute of Technology, the data generated by both the Actual and Ideal forms of ISM were subject to descriptive statistics analysis and t-tests for differences between Actual and Ideal mean scores.

There were significant differences ( $p > 0.05$ ) between the Actual ISM and Ideal ISM mean scores for all metaphors except Beehive, Shopping Mall and Theatre. These differences in mean scores were then examined for the direction of difference and grouped into those metaphors where the Ideal ISM mean score was greater than the Actual ISM mean and those where the Ideal mean was less than the Actual mean score. These differences are presented in Table 2 and Table 3.

Table 2: Metaphors with significant differences between Actual and Ideal ISM mean scores and where the Ideal mean score is greater than the Actual mean score.

Metaphor	ActlMean	IdlMean	Diff inMean Scores
Team	3.0	4.6	1.6
Family	2.5	3.8	1.3
Orchestra	2.4	3.7	1.3
Forum	2.8	4.0	1.2
Negotiating Area	2.9	4.0	1.1
Garden	2.4	3.4	1.0
Artists Pallet	2.4	3.4	1.0
Living Organism	3.1	4.0	0.9
Expedition	2.7	3.4	0.7
Olympic Games	2.3	2.9	0.6
Exhibition	2.9	3.4	0.5
Culture	3.5	4.0	0.5

Table 3: Metaphors with significant differences between Actual and Ideal ISM mean and where the Ideal mean score is less than the Actual mean score.

Metaphor	ActMean	Idl Mean	Diff in Mean Scores
Traffic Jam	3.3	1.5	1.8
Straight Jacket	2.9	1.3	1.6
Prison	2.5	1.3	1.2
Ghetto	2.5	1.3	1.2
Military Camp	2.5	1.4	1.1
Museum	3.0	2.0	1.0
Herd	3.0	2.1	0.9
Machine	3.3	2.6	0.7
Labour Ward	2.7	2.0	0.7
Creche	2.6	2.0	0.6
Hospital	2.4	2.1	0.3

These tables can be interpreted as providing two distinct images of the Sydney Institute of Technology. The first, illustrated in Table 2, is an image consisting of metaphors that are associated with an ideal organisational culture that can be related to aspects of achievement-oriented activities with characteristics similar to adhocracy and market cultures described by Cameron (1985). The second image, illustrated in Table 3, is an actual image consisting of metaphors that are more associated with rules and policies and is similar to Cameron's hierarchy and clan cultures.

This data is useful from an organisation culture perspective in that it provides guidance in the ways in which Sydney Institute of Technology

management staff and teaching staff act (Grady,1993). For example if Institute management staff wish to move the actual culture towards a desired ideal then strategies to achieve this can be influenced by the appropriate metaphors. Similarly if teaching staff embrace notions of achievement and these can be identified in their actions it is likely that the teacher-learning interaction may improve. Conversely if teaching staff are more driven by rules and policies then it is also likely that the teacher-learning interaction may decrease.

#### 4.3.Customer Satisfaction Index

An organisations culture is a reflection of the customer service provided for both internal and external customers. It is suggested that while clan and hierarchical type cultures are more appropriate for an internal emphasis on customer service, it is the adhocracy and market cultures that have a more external focus on the needs of customers or, in the case of Sydney Institute of Technology, students who enrol there. This part of the research describes progress to date on the development of an index to measure customer satisfaction.

The Customer Satisfaction Index (CSI) used in this research consisted of ten items extracted from the Customer Service Survey developed for the NSW TAFE Commission (Total Customer Service, 1995). This survey contains a section consisting of 37 items designed to measure various aspects of how NSW TAFE Institutes are providing customer satisfaction. The survey uses a 7 point scale with a rating scale ranging from 1 = Terrific to 7 = Terrible. For the CSI, 10 items were extracted from the original 37. These were administered to 2,300 students and the CSI then developed using responses on the 1,2 and 3 ratings. The ten items are illustrated in Table 4 and indices for individual Faculties and

the Sydney Institute of Technology are illustrated in Table 5.

Table 4 :The Ten Items of the Customer Satisfaction Index

1.  
Enrolment is easy
2.  
You find out at the beginning of the course what you have to do to pass it
3.  
Your teacher knows what he/she is talking about
4.  
Your teacher explains everything clearly
- 5.



There is enough equipment for the whole class

6.

The equipment you use is up-to-date

7.

Your library has everything you need for your course

8.

Computers are available to use outside of class hours

9.

The course results you receive are accurate

10.

You get course results promptly

Table 5: Customer Satisfaction Indices

Fac A	Fac B	Fac C	Fac D	Fac E	Fac F	SIT
60	53	49	45	51	64	56

The indices are in percentages. The higher the percentage the higher the customer satisfaction. In general terms, the data in Table 5 suggests that while customer satisfaction is not low there is still room for improvement.

## 5. Concluding Remarks

From this exploratory research a number of comments can be made. The first is that both the IPS and the ISM appear to be applicable and useful for institutions in the vocational education and training sector. They have been easy to apply and have provided useful data in benchmarking the culture of the Sydney Institute of Technology. This can now be used to assist in developing strategies to implement change or to reinforce an existing culture. The Ideal ISM appears to be a useful tool in achieving this. Further applications of the Ideal ISM could be strengthened by further analysis of other metaphors not used

in the instrument. In addition application of multi-variate methods of analysis to both IPS and ISM data might provide useful information.

Secondly, the CSI is a useful measure of a post-secondary education

institutions performance. The application of the CSI in this research has provided useful comparative data on faculty performance as well as an overall Institute measure.

Thirdly, it is suggested that the research described in this paper sets a foundation for further work on the relationships between organisational culture and customer satisfaction in a post-secondary education setting. The preliminary evidence presented in this paper indicates that Sydney Institute of Technology has a congruent hierarchical culture. A move towards adhocracy and market cultures, with characteristics of innovation, entrepreneurialism, less rule, profit share, market capture, competitiveness and external customer focus should result in improved customer satisfaction as measured by the CSI. These cultures are more aligned with current priorities set by the Australian National Training Authority (ANTA) Board. Examples here include relationships between public and private sectors, the place of competition, and ways to continue reforms to drive efficiency and quality (Australian Government Publishing Service, 1996). The challenge here is whether this change can be achieved with the co-operation of staff and not the conflict that has been described in an example of cultural change by Elliott (1996).

Other post-secondary education institutions are invited to apply similar research. Such activity would allow for useful comparisons to be made.

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