

Understanding Organisation Culture and Innovation: A Case Study Approach^{©1}

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ABSTRACT

Using Nonaka and Takeuchi's (1995) description of innovation as being heavily dependent on knowledge, which is based on the underlying values and assumptions that underpin the learning process, this case study revisits the fundamentals of organisation culture and innovation to draw a positive correlation between the two. It is now recognised that the innovation and ability of the organisations to continuously improve their innovativeness are rapidly being appreciated as essential requirements for their competitive advantage. The continuous process of innovation is closely associated with the company's intellectual capital and its management. Further, we argue that the innovative capability of the organisation is dependent on the culture which according to Gagliardi (1986) refers to the coherent system of a groups, distinct set of features or traits, which not only mean its basic values but its beliefs, models of behaviour, technology, symbols and artefacts too.

Our contention is that the organisation culture propels the organisation towards a tacit and continuous process of innovation. The case study tests the theoretical premise that the organisation culture fosters innovativeness. The culture having been validated and passed through the tests of internal and external reality, the organisation experiences a cognitive transformation (Kekale and Kekale, 1995) and hence, original beliefs, values, processes become basic implicit assumptions and are embedded within the organisation.

Key Words: Innovation, Organisation Culture.

INTRODUCTION

The rapidly emerging global economy, resulting from the emergence and development of new technologies, raises a multitude of issues for businesses both large and small. It creates opportunities for business to expand their revenues, drive down their costs, and boost their profits (Hill, 2000). The spread, assimilation and further improvement of new technologies largely determine the patterns of competition, growth, and trade amongst international firms and nations at large. The implication is that in the dynamic, chaotic world of global competition, organisations must innovate if they are to compete successfully (Robbins et al., 2000). However, according to an Arthur D. Little study, funded by seven OECD countries, most firms still have difficulty adopting practices and behaviours associated with innovation (Bubner, 2001). This is partly because of the scope and the complexity of underlying capacities that enable a firm to be innovative. Given the volatility in the environment (Robbins et al., 2000), long term economic performance demands that firms develop an adaptive culture in which innovation features

prominently (Smith, 1998). The same was also observed by Deal and Kennedy (1999), who, in a 15-year longitudinal study found that organisations with strong cultures outperform other organisations having weaker cultures.

According to Dahlgaard and Dahlgaard (1999) business excellence can be defined and achieved through the '4 Ps': excellent people, excellent partnerships, excellent processes and excellent product. Joynt and Welch (1985) stress the critical role played by the personnel component in all its ramifications, in the outcomes of domestic and particularly international activities of a firm (Tung, 1982, Lorange, 1986, Dowling and Welch, 1988, Welch and Welch, 1994). These outcomes, typically in the form of knowledge, skills, networks and experiences are embedded in the stock of human resources and the success of the firm depends on the extent and effectiveness with which this knowledge is disseminated, assimilated and utilised within the organisation (Benito and Welch, 1994). The organisational effectiveness and its innovativeness is, thus, assumed to be influenced by the organisational culture (Russell, 1988).

Organisation culture has been defined by Schein (1985), as "a pattern of basic assumptions – 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." According to Schein (1985), these basic assumptions, guide decision makers in dealing with the problems of external adaptation and integrating the behaviours of organisational members. Simply put, organisation culture includes, among other things, the mission and vision of the corporate, the values, beliefs and behavioural norms and expectations shared by the organisation's members, which directly influence the organisational member's motivation, performance, satisfaction and stress levels (Cooke and Szumal, 1993). Culture, acting through institutionalised belief systems and group norms, can be a very effective means of directing the behaviour of organisational members toward innovative activities, even though innovation is a highly uncertain process. Organisational members are intentionally socialized into the assumptions and belief systems of the culture where group norms help to shape the behaviour of the group members so that it is in accordance with the values and beliefs of the organisation's culture.

Collins and Poras (1994) observed that long lived companies, with financial performance which established them as industry leaders, often shared a number of common qualities: core values which dictated the behaviour and recruitment of employees; focus on continuous self improvement, learning from failures. Cooke and Lafferty (1986) developed a typology of organisational cultural norms that includes constructive, passive/defensive, and aggressive/defensive sets or styles of behavioural norms. Constructive cultures are expected to encourage interaction with others and approach tasks in ways that will help them meet their higher order satisfaction needs and are characterized by achievement, self actualising, humanistic encouraging and affiliative norms. This is somewhat similar to Ouchi's (1977) description of a clan as a control mechanism in organisations. Clan controls, according to Ouchi (1980), are most effective in certain types, or parts of organisations where the outputs are ambiguous and difficult to measure, and where behaviour controls are inappropriate because the transformation process is unknown. The social requirements of a clan rely largely on the existence of shared values and beliefs and organisational commitment, which are also characteristics of organisational culture. Etzioni (1961), refers to this as normative values where rewards are symbolic in nature, in contrast to coercion and economic assets as rewards and incentives for appropriate behaviour and

performance. Passive / defensive cultures, on the other hand, are characterised by approval, conventional, dependent and avoidance norms as compared to aggressive / defensive cultures which are characterised by oppositional, power, competitive and perfectionistic norms (Cooke and Szumal, 1993). Organisational culture is assessed in terms of its strength of shared normative beliefs across these twelve thinking or behavioural styles.

While, Katz and Kahn (1978) argue that group norms have a significant impact on individual performance, Schein (1985), states that the founders of the organisations are a major influence in the formation of organisational culture. The values, assumptions and beliefs of the founder / entrepreneur are very often transmitted to the organisational members and become characteristics of group culture. The entrepreneur who values creativity and change and believes in innovation as an appropriate response to dynamic external conditions, can transmit these values and beliefs to organisational members. These values are transmitted by way of, 1) mentoring and coaching group members; 2) focussing attention of group members on successful development and implementation of innovation as an ongoing organisational practice; 3) creating a reward system which rewards both successful innovation and innovation related behaviour, and 4) by recruiting, hiring and promoting innovative people.

According to Robbins et al (2001), an innovative organisation culture characterises acceptance of ambiguity, tolerance for the impractical, low external controls, tolerance of risk, tolerance of conflict, focus on ends rather than means and open system focus. The essence is that the individuals are empowered and encouraged to consider alternative routes to meet the goals, where empowerment is defined as encouraging and rewarding employees to exercise initiative and imagination (Zemke and Schaaf, 1989). According to Tornatzky et al. (1983) innovation research has concentrated on three structural variables: centralization, formalization and complexity. While the complexity of the organisation is purely a structural component, the level of decentralization and informality in an organisation are representations of its organisation culture. Early studies (Burns and Stalker, 1961) found an association between increased levels of innovation and an organic organisation, representing a highly adaptive and flexible organisation with division of labour, highly trained and empowered employees. Positive associations have been found between innovation and a decentralized and informal organisation.

(Bubner, 2001) defines innovation in organisations as a series of processes that are designed and managed to create and apply ideas and knowledge, directed at value creation and capture, and leading to new and different products / services, processes, technologies, ventures and business systems. His contention is that innovation is a process and not an object or an outcome and hence it refers to both ideas and knowledge. Innovation, therefore, encompasses not only science and technology based innovation but also links it to knowledge creation and management. In this context, Nonaka and Takeuchi (1995) have a comprehensive view on knowledge creation in organisations which includes a broad set of socialisation, documentation and idea application processes that underpin continuous innovation in organisations.

Innovation processes are formed by knowledge bases and continuous flows of information (Perez-Bustamante, 1999). Further, innovation has been described as an iterative process of knowledge transfer within the organisation. The knowledge chain transfers information, data and knowledge in a forward and backward process between the different innovative activities, hence,

upgrading the overall R&D process. As a component of organisational learning, innovation is a process of acquisition, processing, storage and recovery of information that can be studied from the following perspectives: general knowledge creation, R&D learning, manufacturing learning, commercial learning and survival learning (Perez-Bustamante, 1999). Essential to the process of innovation, is the ability of the organisational culture to; 1) develop collective knowledge reservoirs by sharing individual knowledge and experiences which are shared among the members of the organisation and provide the basis for structural capital of the organisation; 2) create knowledge depositories (Howells, 1996), and 3) promote a proactive approach to achieve the internal dissemination of knowledge, independently of where it was created and how it was deposited (Fahey and Prusak, 1998).

According to Russell (1988), since innovation is an uncertain, unpredictable process, it cannot be directed by formal structural means. Innovation requires creative problem solving during its initiation and implementation by a large number of organisational members. This is because innovation related norms help to express the value of innovation to group members and to define appropriate or expected behaviours within the context of the innovation process. Russell (1988) identified seven norm dimensions that were associated with innovation: 1) support for individual creative activities; 2) recognition of innovation as an appropriate solution to organisational problems; 3) free and open exchange of information both inside the organisation and with external agents; 4) open minded consideration of new ideas; 5) commitment to development of new ideas by providing psychological and resource support; 6) support of moderate risk taking in new ventures and, 7) support for the effective implementation of change.

There seems to be a wide agreement that the organisation culture refers to a system of shared meaning held by members that distinguishes the organisation from other organizations (Becker, 1982) and (Schein, 1985). This system of shared meaning is, on closer analysis, a set of key characteristics that the organisation values (Hofstede et al., 1990) and (O'Reilly III et al., 1991). These characteristics, in aggregate, capture the essence of an organisation's culture. It is argued in this paper is that the organisation culture, acting through norms and organisational belief systems, is an important determinant of innovation.

RESEARCH METHODOLOGY

The research task and the variables that flow from this literature then identify empirically whether there is a strong correlation between organisation culture and innovation. In this paper, we pursue this task by using the case study approach. Various companies were approached and assessed for inclusion as case studies, including an insurance and reinsurance firm, and an academic institution. However, for the purpose of this study, ABC Consulting (the original name of the company is kept confidential), was opted, which is the Australian operation of an international engineering and environmental consultancy. The organisation was selected because of its ability to cater to a highly differentiated clientele which requires a high level of ingenuity, creativity and the ability to transform creative ideas and customer needs into tangibles (innovation).

ABC Consulting (Australia) has been in operation for over 35 years (since 1965 in Victoria) within Australia and has acquired an enviable reputation for quality, innovation and delivery.

They compete with five other major Environmental and Engineering Consultancies, the world over. ABC Consulting offers consulting services which are quite extensive in nature. Some of the prominent services offered, include concept design, conducting feasibility studies, investigative research and analysis, design management, project documentation, cost estimation and budget control, specialist computer analysis and application, presentation of expert evidence, contract documentation and tendering. Apart from having worked on major projects, such as AMP (Centrepont) Tower (including the Olympic sculptures), Sydney Harbour Tunnel, Melbourne City Link and Federation Square, ABC Consulting has also won 20 National Engineering and Environmental Excellence Awards. Hence, the researchers felt that this organisation could be a interesting sample to study the correlation between organisational culture and innovation. In future years ABC Consulting seeks to expand into other areas in which it operates internationally; investments, operations and maintenance and outsourcing of utility services for key industrial clients.

For the purpose of this study, a questionnaire was framed with the aim to identify the strategic linkages between organisation culture and innovation. Individuals representing different layers in the organisation structure were also interviewed so as to acquire a comprehensive view of the company as a whole. Many of their comments have been quoted in the paper in order to expose the full nature of the issues involved. Corporate documents were investigated to gain further insights. The remainder of this paper is structured as follows. The next section presents a description of the organisation followed by a discussion of the cultural characteristics of the organisation and its ability to impact organisational innovation.

CASE STUDY

ABC CONSULTING (AUSTRALIA) PTY LTD.

ABC Consulting (Australia) has over 230 employees nationally and the HQ is located at St Leonards, Sydney. The organisation has regional divisions which are further subdivided into locations / states, headed by area directors who are responsible for the performance and the growth of ABC Consulting in their respective locations / states. At the area level the organisation is structured according to functional departments based on support functions and technical functions which are subdivided into different departments. The support department includes a commercial department, administration, HR, among others. The technical departments areas are divided according to the following business centres: building structures, civil (land development), traffic (transportation networking and development) and water (resources, supply, drainage). This paper is mostly concerned with the Victorian office that is situated in Melbourne and employs approximately 80 personnel.

The following section, after extracting variables from the literature, discusses the organisation culture at ABC Consulting with reference to its innovative capabilities. The research paper identifies the following elements of the organisation culture to test its correlation to organisational innovation.

Relationships and Innovation

*“We seek to do the new and unexpected, in order to find the best solutions ... with authority based on knowledge and experience...commercial acumen, balancing risk and reward.” –
Corporate Values at ABC Consulting.*

ABC Consulting is identified as an organisation which emphasises on developing innovative, profitable and value added service for their clientele, resulting from a culture which stems from entrepreneurial people continuously enhancing their professional capabilities. The emphasis is on promoting individual and team creative effort and employee volunteerism.

Work activities at ABC Consulting were organised around teams rather than individuals, which are formed on the basis of experience and knowledge surrounding a diverse range of operations required to complete the job to the client's satisfaction. ABC Consulting scored extremely high on their ability to task jobs in teams. The diversity of team members involved, and their skills and expertise enhanced their ability to successfully apply the resources on a 'project team basis' needed to design and build complex facilities in an efficient and cost effective manner.

‘we require teams simply because two heads is better than one ...more ideas mean higher levels of creativity ... or innovativeness if you like’ (Principal Bridge Engineer)

The team orientation enhanced both productivity and work satisfaction as it fulfilled the needs of 'affiliation' and 'humanistic encouraging' amongst organizational members which is representative of a constructive culture (Cooke and Lafferty, 1986). At the same time it was also found that the constant meetings and discussions amongst the team and other organisational members also promoted creativity not only at the group level but also at the individual level. Even though work is centred around teams, individual expression of interest is also taken into account.

‘Often there is limited choice for expression of individual interest in a project, however, if an employee expresses an interest in working on a particular project we try and arrange it’ – Area Director, ABC Consulting (Australia).

The team almost constitutes what Ouchi (1979) described as a clan, where goal congruence between individual and team objectives is achieved through a process of intentional socialisation with the clan culture. The team, then, acts as a socio-cultural control mechanism to guide behaviour of the team towards the achievement of the goal. The tendency amongst teams to solve any issues that may arise there and then and amongst the group members was observed. This is indicative of support for individual creative activities with a commitment to the development of new ideas by providing psychological and resource support. There is also evidence of free and open exchange of information both with internal and external actors in the organisations environment, which further promotes the ability of the organisation to promote innovativeness and be successful. For instance, they have been involved with several strategic alliances with their competitors, one of them being, the Melbourne City Link. As expected, relationships with the client are at the forefront, and enable them to satisfy and meet customer expectations.

'To achieve complete understanding of the client's needs we place a high degree of importance on consulting with the client and definition of the project brief. ... is the key to delivery of successful projects ... Stronger relationships with Clients increase the opportunities for repeat work, reduce bidding costs and opens the door for other offerings.' – Company Profile

Team members were also selected on the basis of the communication skills and this enabled them to exercise their interpersonal skills for the generation of new and creative ideas and problem solving. The organisation scored low on competitiveness among group members, as they tended to be co-operative and supportive of each other, but they were also deemed to be aggressive in their approach rather than easy going. The aggressiveness was however, geared towards achieving the set goals, which could range from setting tenders to designing bridges, etc. (outcome orientation). The organisation thus, also represented characteristics of an aggressive culture (Cooke and Lafferty, 1986), finding a balance between individual growth and organisational growth. Though associated with strong outcome orientation, the normative control mechanisms within the organisation were weak. Emphasis on economic rather than symbolic rewards (Etzioni, 1961) was observed which underlined the eventual low internal resistance to change and high levels of flexibility to counteract the rapidity of changes in the environment and competitiveness.

Centralisation and Formalisation of the Organisation

Centralisation has been defined as the degree to which decision making is concentrated in the upper levels of the organisation (Robbins et al., 2001). While decision making in terms of structure and strategy of ABC Consulting is concentrated at the senior management level, operational and functional decision making trickles down to the project team level, where the team goes through a brain storming session to evaluate different alternatives to come up with the best solution. The project teams are empowered to exercise initiative and imagination (Zemke and Schaaf, 1989). Although the organisation structure is formal, the extent of decentralisation and the empowerment of project teams is high. As mentioned above, the organisation promotes and encourages free and informal exchange of information and creates double feedback loops, allowing generation of ideas from different perspectives. It was also found that the management decisions at ABC consulting take into consideration the effect of outcomes on people within the organisation and hence, high on people orientation. The same can be exhibited from their high commitment to training and developing their human resources through the '*Global Development Initiatives*' Program.

Knowledge Bases (Cultural attributes) and Innovation

The degree to which the organisation encourages employees to take risks was found to be within the low to moderate range at ABC Consulting which is also indicative of the competitiveness in their immediate environment and the pressures to cut costs. As one of the principal engineers put it:

'it just wouldn't be sensible to take risks in the industry we are in, certain amount of risk is permissible but beyond that the stakes are very high ... our reputation is very important, we can't afford to make mistakes'

A direct link can be established between the low risk taking attribute and the desire to experiment with new ideas, a scale on which the organisation was not found to be very high. The same was also indicated by their low tolerance for unsuccessful attempts even though an entrepreneurial streak is encouraged amongst organisational members and hence, their high score on attention to detail (Robbins et al., 2000) counteracts this shortcoming. To the extent that the socialisation of the organisation works, the ABC Consulting has obviously been able to gear its entrepreneurial streak towards an aggressive attitude while competing for tenders with their competitors and in getting the job done. The organisation has consciously, made a strategic decision to create an extensive network of inter-relationships with the university and other industry professionals to share R&D costs and keep track of various technological changes that take place in the industry and apply it rapidly into developing a quality service for their clientele. Although, they have been known to develop their own technology, should the need arise, expenditure on research and development is mainly restricted to training and development of their human resources. The links with universities and other professionals was found to be extremely strong considering the fact that a separate department has been created within the organisation structure to cater to the needs to this particular section of the organisation's environment. This also enables them to be quick to respond to changes in the environment.

Great care is taken while screening potential employees which balances the emphasis on entrepreneurial people and potential conflicts that may arise as a result of difference of opinions. A stringent recruiting criteria is in place and a strong positive relationship has been established with recruiting agencies which enables them to ensure a level of adherence to the organisation culture by the successful applicants (Collins and Poras, 1994, Schein, 1985). The screening process reduces to a large extent the possibility of conflicts from arising, which reconfirms that the tolerance for conflicts within the organisation is low. A scan of the profile of the organisational members indicates a high level of academic excellence amongst the members, enabling specialisation in the fields of endeavour. In other words, a high degree of internalisation of knowledge based and intellectual assets is observed. Their Human Resource Strategy amply represents this, which is a strategic part of the organizations ability to maintain their organisation culture and their ability to outperform competitors.

'The right people in the right place at the right time ... Consulting is a people business and we sell our people's skills. Therefore the purpose of the Human Resource Strategy is to ensure that there is a consistent approach to the way we deal with people through out consulting. Our people will differentiate us from our competitors. This can only be translated into a competitive advantage and profit ...' – Human Resource Strategy at ABC Consulting.

The knowledge within the organisation resides within the human resource of the organisation. The human resource strategy therefore exhibits the value of the human resource and the need to train, develop and retain their knowledge assets. Based on Schein's (1985) typology of the organisational leader as a mentor and coach, it was found, that ABC Consulting was not responsive enough. As mentioned above, the stringency of the recruiting criteria emphasises it. Knowledge repositories and depositories have been created and the organisation therefore, prides itself on its ability to *'consolidate and mobilise knowledge and resources from within the group, nationally and internationally'*. Hence, exacting emphasis can be seen on providing job security

to the employees, economic rewards and incentives for innovative work, career enhancements across the global organisation, which is represented in their low turn over rates.

CONCLUSION

Based on the analysis of the variables extracted from the existing literature, it was found that the organisation culture of ABC Consulting fosters innovation. Consequently, a correlation was established between organisation culture and innovation. There is a realisation that human assets are a source of their competitive advantage and hence, there is a strategic consciousness to preserve them and a high commitment to their development. The organisation was high on outcome, team and people orientation and was also aggressive in nature when competing with external actors in the environment. While some sort of a clan mechanism was prevalent, as was exhibited by low external controls, the organisation seemed to be weak on symbolic representations of rewards and incentives. ABC Consulting was found to be low on tolerance for risk, experimentation, but there is a high acceptance of ambiguity, prevalent within the environment. This is counteracted by strong and positive networks of inter-relationships with both, external and internal actors. ABC Consulting, nonetheless, has been able to develop a synergy between the organisation cultural factors and the environmental factors which direct positive aggressive behaviour towards competition, but at the same time, gear the organisational members towards creating a co-operative and supportive environment to work in. A high level of encouragement was observed for individual and group creativity. The same along with a high level of commitment to the training and development of human resources enables a continuous generation of ideas. The level of job security and people orientation of the organisation promoted a great sense of loyalty towards the firm and motivation and support for the organisation activities. Hence, the drive for innovative effort was perceived. ABC Consulting has maintained its reputation for offering value, innovation and service excellence through its organisation culture, i.e. shared values, beliefs and norms. To conclude, innovation and innovation related norms have to be a part of the functioning of the organisation. These norms over time, become embedded within the organisation culture, which becomes the driving force for innovation itself.

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