Aspects of a Learning Organisation

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ABSTRACT

The concept of being a successful learning organisation, with all its associated attributes have been commented on by many eminent authors and this paper provides an historical context for the development of a 'learning organisation. There exists a plethora of literature on learning organisation theory, but little appertaining to the implementation process. This paper seeks to contribute to this existing body of knowledge and offer a valid methodology for organisations to fully engage in “Triple Loop Learning” Thus becoming truly learning organisations, with all the associated advocated advantages this brings. The authors’ further hope to stimulate some interest in this important subject, which in today’s world of economic turmoil may be a means of ensuring corporate survival.

Key Words: European Foundation for Quality Management Excellence Model (EFQM.EM), Learning Organisation, Loop Learning, Results Approach Deployment Assessment and Review (RADAR).

1. INTRODUCTION

Within the current turbulent operational environment of organisations there is no room for inefficiency and ineffectiveness, organisations must not only maximise the utilisation of scarce resources they must also be constantly striving to improve. They have to learn from current experience and strive to enhance there product and/or service provision. One way of engaging in this process of self-improvement is to become a learning organisation.

However, one of the key issues when addressing the concept of becoming a learning organisation is that there is no clear consensus as to what constitutes one, and a multitude of definitions abound. These range from aspirational type definitions of organisations, “...where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, [truly in line with a post-modernist philosophy] and where people are continually learning how to learn together” (Senge 1990). To more normative definitions, such as that espoused by Garvin, “A learning organisation is an organisation skilled at creating, acquiring, and transferring knowledge, and at modifying its behaviour to reflect new knowledge and insights” (Garvin 1993).

Nyhan et al (2004) have suggested that, “...the prescriptive and simplistic formula based view of the learning organisation does nothing more than discredit the concept”. In their opinion, becoming a learning organisation involves more than simply applying a formula; each individual organisation needs to,”...devise its own unique theory based on its own distinctive practice”. This view requires each host organisation to match both its activities and operational paradigm to the attainment of developing a learning organisation culture. The following sections of this paper explore some of the key issues to be addressed when seeking to be a learning organisation.

As noted above organisations do require some kind of learning model in order to be successful and one methodology for achieving this goal is the deployment of the European Foundation for Quality Management Results, Approach, and Deployment. Assessment and Review (RADAR) Learning Strategy, this concept is further explored within this paper.

2. OVERVIEW OF THE HISTORICAL DEVELOPMENT OF LEARNING ORGANISATIONAL THEORY

The concept of the learning organisation has longevity; with Burns and Stalker (1961) publishing their theory of mechanistic and organic systems. This followed lengthy studies of a large number of Scottish electronics companies operating in increasingly competitive and innovative technological markets during the 1950’s.
The 1980’s resulted in a decade of immense upheaval for many large corporations who increasingly found, “…their success eroded or destroyed by the tides of technological, demographic, and regulatory change and order of magnitude productivity and quality gains made by non-traditional competitors” (Hamel and Prahalad 1994).

A new wave of literature related to learning organisations emerged during this period, heavily influenced by organisational learning and action learning theories such as those developed by Revans (1983). Much of the work from this period recognised that corporate survival in the new global competitive environment was dependant on an organisation’s ability to learn faster than its competitors, and that this ability may be the organisation’s only form of sustainable competitive advantage (De Geus 1988).

Nonaka (1991) recognises that in a global economy typified by shifting markets and technological proliferation, successful companies will have to, “…consistently create new knowledge, disseminate it widely throughout the organization, and quickly embody it in new technologies and products”. In today’s shifting world economic sands Nonaka’s comments are still very pertinent for organisations.

It was Senge’s (1990) seminal text, ‘The Fifth Discipline’ that really popularised the concept of the learning organisation. Senge described five vital dimensions or ‘disciplines’ which he considered to be essential for an organisation to become a learning organisation, they are: team learning, personal mastery, managing mental models, shared vision and systems thinking.

The fifth discipline, systems thinking, was seen as the integrating discipline which unites the organisations, individual and total environment, based on a conceptual framework that describes a system as a set of interrelated subsystems. Senge (1990) further proposes that it is the relationship between these subsystems that ultimately influences the functioning of the whole. This concept is not mutually exclusive from the concept of the integrative nature of the seven functions of management and their impact upon organisational performance. In fact to be a learning organisation the operational paradigm must ensure a holistic approach between organisational management and leadership.

The work of Senge (1990) has been criticised for paying insufficient attention to knowledge management systems, the structures of the organisation and their implication as a resource to learning (Sun and Scott 2003), whilst Garvin (1993) considers Senge’s model as too ethereal, and lacking a, “…framework for action”. The RADAR model noted within the introduction section of this paper addresses the shortcomings of Senge’s work, as noted by Sun and Scott (2003).

Other authors have commented on the types and operational aspects of organisational structure and there impact upon developing a learning organisation, with Johnson and Scholes (2002) asserting that organisations have traditionally been viewed as hierarchical, bureaucratic structures geared towards stability rather than change characteristics and “…not suited to the dynamic conditions for change of the 21st century.”

Goh (2001) describes learning organisations as “…non-bureaucratic, with decentralised decision making structures, empowered employees and open lines of communication”. He proposes that by adopting policies and work procedures of a less rigid nature, a more fluid organisational structure is created. This corroborates the views of one of this papers authors Griffith & Watson (2004) in that a heterarchical approach, which involves maintaining high levels of fluidity, is a fundamental requirement for companies operating in areas of ever-increasing complexity, as we are today, when seeking to be a learning organisation.

Örtenblad’s (2004) “learning structure” model, builds on this idea by describing a decentralised, flatter organisational structure that is team based, with learning depicted as an input, and flexibility as an output.

Within modernist (non – learning) organisations there exists very simple structure or boundary relationships. Linkages are achieved through formal rules and procedures, and relationships between different groups are formalised, and fluidity and communication is usually conducted on hierarchical lines.

In comparison the post-modern (learning – organisation) possesses little distinctiveness of roles, and boundaries are blurred. Emphasis is placed upon creating teams with positive productive relationships, all directed at increasing the organisation’s ability to cope with change because this is necessary for them to be creative. Majaro (1992) points out that making the change to a post-modernist (learning) organisation “…is easier said than done…” and that ”One of the most difficult challenges to any organisation is the process of changing a climate or corporate attitudes [and organisational structure]”. It is undoubtedly a difficult change process for any organisation to undergo, but the benefits are well worth the effort expended
3. CONSTITUENTS OF A LEARNING ORGANISATION

Resource Allocation
Garvin (1993) suggests that a learning organisation is one that fosters, “…an environment [operational paradigm] that is conducive to learning”. He further purports that in order for employees to learn, they require adequate “…time for reflection [reflection before taking action] and analysis, to think about strategic plans, dissect customer needs, assess current work systems, and invent new products”. This highlights an important prerequisite for implementing any new initiative, the provision of adequate resources, particularly those of time and funding.

However, time and money alone will not create the required climate for learning. Ho (1999) proposes that the learning organisation provides an environment where, “…people are excited in trying out new ideas and recognise that failure is an important part of success”. Ho, is not advocating failure, but noting that it may occur and that if it does the organisation must learn from the experience, and not replicate the error again.

Love (2004), underpins this view describing an atmosphere where, “…experimenting with new approaches is encouraged and errors are not perceived as failures” These traits, when viewed in the context of an organisational environment typified by ever increasing complexity and uncertainty (Malhotra 1996), clearly point towards a morphogenic culture utilising processes that, “…allow for change and development…” [and where] the exciting nature of change is always highlighted [and viewed as an opportunity to learn and improve]” (Griffith & Watson 2004).

Knowledge Management
Pedler et al (1988) recognised the importance of utilising information technology to, “…informate’ as well as ‘automate… [in order to] seek information for individual and collective learning.” More recently, Lobermans (2002) asserted that a, “corporate architecture” needs to be in place to facilitate learning and to, “…create knowledge sharing and dissemination mechanisms across the organisation” and that the capture and systemisation of knowledge is a prerequisite to being a learning organisation. The growing number of organisations utilising intranets and ‘lessons learned’ databases gives some indication of the perceived value of knowledge management systems.

Recent research into cross-project learning led Newell (2004) to conclude that, “…there is accumulating evidence that the medium of capture and transfer through ICT such as databases and corporate intranets is limited in terms of how far such technology can actually facilitate knowledge sharing” Newell’s study also found that where transfer of learning had occurred, it had depended far more on social networks and a process of dialogue, than on ICT.

These findings concur with the views of Nonaka (1991) in that the key to organisations obtaining greater knowledge is through facilitating:

- the sharing of tacit knowledge through socialisation;
- the collation of discreet pieces of explicit knowledge to create new knowledge;
- the conversion of tacit knowledge into explicit knowledge i.e. externalising what individuals know;
- the conversion of explicit knowledge to tacit knowledge, i.e. internalising explicit knowledge.
- having in place a strategy for creating, acquiring and disseminating knowledge;
- collective aspiration (a shared vision);
- an emphasis on continuous learning;
- a holistic, ‘systems thinking’ approach to learning that recognises the interrelatedness of the organisation, the individual and its external environments;
- a tolerance for experimentation.

4. MENTAL MODELS AND LEARNING METHODOLOGIES

Senge’s (1990) discipline of managing mental models recognises that “…new insights fail to get put into practice because they conflict with deeply held internal images of how the world works, images that limit us to familiar ways of thinking and acting”. This relates to “Breaking the Organisational Operational Paradigm” and involves aspects of cultural change and hence change management processes. These aspects are not easy to achieve, especially without full senior management support, which has to be clearly demonstrated, by active participation.

Argyris and Schön (1974) opined that people are often unaware that the mental models that inform their actions are often not founded in the beliefs that they explicitly espouse, leading to a contradiction between their espoused theory and their theory in use. In order for people to manage their behaviour more effectively, they suggest the use of a learning model. The suggestion that there can be an institutional model echoes the view espoused by De Geus who sees the mental models of each learner as “…a building block of the institutional mental model” (De Geus 1988) (Cummings 2005)
Single, Double and Triple Loop Learning

Argyris and Schön (1974) first developed the idea that there are two basic types of organisational learning, ‘single loop’ and ‘double loop’. Single loop learning is where organisations respond to changes in their internal and external environments by detecting and correcting errors in order to, “…maintain the central features of the organisational norms” (Barlow and Jashapara 1998). Argyris 1996 (cited Dahlgaard 2004) when considering learning within an organisational context suggests that an error is any mismatch between the intention and what actually happens (the results).

However, he further argues that discovering errors is not really learning. Learning only occurs when the discovery or insight is followed by action. From this viewpoint, learning inevitably involves the taking of an action.

It could be argued that incremental, imitative learning methods such as benchmarking and best practice are examples of single loop learning. Within what Argyris described as ‘single loop’ learning, decisions are based solely on observations while in double loop learning decisions are based on both observation and thinking.

Learning hasn't really taken place until it's reflected in changed behaviours, skills and attitudes. (Stata 1989)

Double loop learning involves a more demanding approach to learning, where an organisation’s norms, policies, assumptions and past actions are critically examined in order to inform new strategies for learning (Argyris and Schön 1974). Inevitably, such introspective organisational analysis may bring about conflict: Love (2004) maintains that, “Frequently organisational conflict is a correlate of double loop learning in as much as the status quo is challenged.”

The double loop learning advocated by Argyris and Schön is fundamentally what Senge was referring to when he suggested that mental models should be brought to the surface and reflected on by “balancing advocacy and inquiry”, a process he describes as being “…open to disconfirming data as well as confirming data - because we are genuinely interested in finding flaws in our views” (Senge 1990).

This contemplative approach is necessary in order for organisations to escape what Shukla calls “…the success trap” (1997). He describes how successful companies try to replicate their achievements by formalising their effective practices and procedures, standardising their products and services and investing in tried and tested technologies. However, this may not be appropriate in changing turbulent operational environments.

In “Triple Loop Learning” a reflection phase is incorporated to support or improve the thinking phase and hence to improve the decision making process. Triple loop learning is concerned with ensuring that any deployed action will result in the required change, and is not just a “knee jerk reaction” unlikely to bring about the sought after result.

In summary it can be stated that in “Single Loop Learning” people’s decisions are based solely upon observations, While in “ Double Loop Learning” decisions are based on both observation and thinking.

“Thus both double and triple loop learning can be considered as generative learning, while single loop learning can be considered an adaptive learning” (Dahlgaard 2004)

The above has been highlighted in order to emphasise the importance of Triple Loop Learning being incorporated into any model designed to improve the learning of an organisation and the developed RADAR model employs the concept of triple loop learning.

Thus far we have considered the various aspects of a learning organisation, including an appropriate learning culture, now we shall consider how the RADAR concept can assist in developing this culture.

5. RADAR

At the heart of the EFQM Excellence Model (see figure 1.) a specific logic exists and this is known as RADAR. The RADAR logic consists of the following four elements: Results, Approach, Deployment, Assessment and Review.

Within this paper is not possible to fully describe the EFQM Excellence Model and readers can obtain full information on the model and its deployment from URL:www.efqm.org/seflas.htm. Underpinning the EFQM Excellence Model are the principles of knowing where an organisation is, where it wants to go and how it can get there. The model links self-assessment to informed planning and to implementation, through ‘a framework of key processes’. Self-assessment can be seen as a catalyst for driving business improvement and hence achieving business goals.

The scoring system for the EFQM, EM is provided (see Tables 1, 2, & 3) so that the authors of this paper can incorporate their developed Pentagonal Profile, which is an effective means for focusing both organisational resources and energy, geared to learning and improvement.
The key concepts built into RADAR are that, the learner experience is critical to self-assessment, with an emphasis on collecting valid and reliable evidence, that the primary purpose of self-assessment and development action plans is organisational self-improvement. All assessments are required to be deployed with rigour, irrespective of organisational size. The host organisation should always try and triangulate its collected evidence base, reflection upon results is vital so that organisations can engage in triple-loop-learning.

The application of the RADAR philosophy will assist in driving business improvement through utilising the model. The logic purports that an organisation needs to:

- **Determine the Results** it is aiming for as part of its policy and strategy making process. These results cover the performance of the organisation, both financially and operationally, and the perceptions of its stakeholders.
- **Plan and develop** an integrated set of sound **Approaches** to deliver the required results both now and in the future.
- **Deploy** the approaches, in a systematic way to ensure full implementation.
- **Assess and Review** these approaches are based on monitoring and analysis of the results achieved and ongoing learning activities. Finally, identify, prioritise, plan and implement improvements where required.

EFQM’s RADAR Model mechanism is related to Deming’s continuous improvement philosophy (learning) of (plan - do - think – act). More importantly, the process is driven by self-assessment, which is not only a means for measuring continuous improvement, but also an excellent opportunity to integrate total quality management into normal operations (EFQM 2000) Figure 2. Provides a pictorial representation of the RADAR model.

Finn and Porter (1994) noted the foremost reason for using the EFQM Excellence Model and its embedded RADAR was that it offered a “…framework for exploring the link between organised activities and results and for driving continuous improvement”. Thus applying the concepts of a learning organisation.

The EFQM Excellence Model provides a valuable framework for addressing the key operational activities of organisations. It is useful because it enables a link to be made between people, organisational objectives and improvement processes, all encompassed under the umbrella of continued improvement. (EFQM,1999).
In order to put the score of 512.2 points established in Table 3. in the context of best practice it should be noted that the EFQM will conduct a site visit on an organisation obtaining over 500 points, and the EFQM award for excellence is usually awarded to organisations obtaining a score between 750 and 850 points. Therefore, a score of 512.2 points is a very respectable score.

The scoring summary sheet Table 3. provides a useful overall picture of the organisation and the scores are determined by undertaking a full analysis of the organisation concerned (again beyond the remit of this paper). However, we have developed the data further to provide more detailed information for the host company in the form of a Pentagonal Profile. It would be very useful for a company to know the profile related to: approach; deployment; assessment and review; criteria results.

This would allow the organisation to focus its efforts for improvement. An example of the above approach follows. Note, average scores have been calculated for the noted areas and 'Results' have been divided into 'Results' and 'Scope', thus providing further detail enabling more effective corrective actions, as scope relates to how well the approaches have been deployed. See Figure 3. The pictorial representation of the RADAR Pentagonal Profile enables instantaneous understanding of the current state of the company. It is also a very quick and accurate method of benchmarking the host organisation form time period to time period, or, between inter-organisational data analysis comparisons. Senior Managers must remember that the self evaluation process is designed to develop continuous learning and hence improvement. Therefore, the self-assessment activity must be conducted on a regular basis so that corrective actions can be evaluated as part of a continuous learning organisational activity.

**Table 1. Scoring Summary Sheet**

**Table 2. Scoring Summary Sheet**

**Table 3. Scoring Summary Sheet**

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*Note these are the factors from the model

1. Enter the score awarded to each criterion at both sections 1 and 2 above
2. Multiply each score by the appropriate factor to give points awarded
3. Add points awarded to each criterion to give total points awarded for applications
Figure 3. RADAR Pentagonal Profile

Company Profile
Readers are asked to see EFQM’s RADAR Model incorporated in their Assessment Scoring Handbook for further detail and explanation of the full scoring criteria.

Figure 3, indicates for the company profiled that out of a maximum possible score of 100 for each component of the RADAR Model, including scope, it has achieved the following scores, Results 46, Approach 55, Deployment 60, Assessment and Review 35, and Scope 44.

Thus we can conclude, for example, that it is not attaining its set results (approx half) the approaches taken are only 55% successful and deployed on 60% of activities. But more telling is the fact that Assessment and Review (establishing what has been achieved and learning from the experience) has taken place in only 35% of cases. The scope score of 44 clearly establishes that the RADAR Results are not addressing the relevant areas of the organisation.

This particular organisation needs to ensure greater effectiveness in linking the key aspects of the RADAR Model, and in particular ensure that it closes the loop between obtaining feedback and converting it into feed forward information, in the spirit of a learning organisation. The proposed application of the EFQM Excellence Model RADAR concept provides a practical means for organisations to become learning organisations.

6. CONCLUSION

The concept of the learning organisation has evolved as a response to a rapidly changing, dynamic business environment, which is constantly in flux and this is certainly true today. What is required is a fluid, flatter, less hierarchical organisational structure that offers less resistance to the seepage of knowledge through the organisation.

Further an organisational structure only provides the skeleton of the learning organisation; a capillary system is needed to transfer knowledge around the organisation. It does seem that most knowledge management strategies focus solely on the electronic collation of information, failing to take account of how different types of knowledge are internalised and externalised via social and informal organisational networks.

There also appears to be a degree of consensus that a ‘learning climate’ needs to be created, where individuals feel free to experiment with new ways of doing things. This requires a blame free culture where mistakes, instead of being hidden, are acknowledged and learned from and thus eradicated.

Changing organisational culture and corporate paradigms requires a well planned change management strategy and this needs to be initiated and supported by senior management, in order to have any chance of success. It does seem that the utilisation of ‘mental models’ by companies inhibits the implementation of new concepts and most models are based on replicating previously effective practices. The models, though individually held, collectively form and reinforce the organisational model or paradigm, which is focused on maintaining the status quo. The RADAR model is designed to challenge the status quo, with a view to obtaining continuous organisational improvement and learning, and is therefore advocated by the authors of this paper.

7. REFERENCES


Full Paper for: Education and Training Systems and Technologies (EISTA 2009)
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