LEARNING ORGANIZATIONS: CAN THEY BE SHOWN TO EXIST THROUGH THE REALIZATION OF QUANTIFIABLE BENEFITS?

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Learning Organization concepts and their implementation have been debated for over fifty years. This paper constructs a position on how learning propagates within a knowledge intensive firm based on extant theory. The key purpose of the research is to establish how the effects of organizational learning can be measured in a knowledge intensive business in the support services sector. Learning Organization research areas reviewed included studies on Learning Organization strategy and implementation in the Construction/Project based sectors. Related key topic areas were; measurement; realization of benefits; and valuation of knowledge assets. The aim is to outline a bridge between Organizational Learning and the knowledge practitioners undertaking the learning. The review examines whether the quantifiable measurement of benefits from Learning Organization implementations can provide ‘evidence’ that organizations can learn in a meaningful and beneficial way. The paper reveals that this requires enabling learning as part of normal activity. The ongoing research is aimed at taking the learning from this review to develop strategies for implementing a learning organization culture in the sponsoring organization and quantifying the outcomes.

Keywords: benefits realization, knowledge assets, learning organization, organizational learning, strategy

INTRODUCTION

The topic of Learning Organizations and Organizational Learning has been analysed and debated for over 50 years. The fundamental issue as outlined by Donald Schön is about learning to learn and the need to develop ‘Learning Systems’ to bring this about (Schön 1971). However, research has continued with exponential growth achieved in the early 1990’s. This growth was identified by a study by Crossan and Gatto (1996) of the topic’s research profile based on the results of a keyword search using the terms “organizational learning” and “learning organization” in the Social Science Citations Index (SSCI), ABI/Inform and PsychLit databases.

In the last few years there has been an increasing interest in organizational learning within the construction sector in response to some of the issues raised by the Latham Report “Constructing the Team” (1994) and the Egan Report “Rethinking Construction” (1998). These reports covered a wide area with a focus on procurement methods, customer focus, partnering and alliances, leadership and the wider team, improving efficiency and quality, and reducing costs in a project based environment.
However, to date there has been little research which has systematically examined learning within the sector or how it plays out in different types of knowledge-intensive firm. This paper constructs a position on how learning propagates within a knowledge intensive firm in the support services/construction sector based on extant theory. It brings together different bodies of theory around this aim and also sets out to establish how the related benefits can be realized and measured. This provides a backdrop for an ongoing research programme which is seeking to develop an understanding of how the effects of organizational learning can be measured in knowledge intensive business support services.

KEY CONCEPTS

Organizational Learning and Learning Organizations
In the course of the literature review the early work of Argyris and Schon is cited but in recent times it is rarely covered in detail. However, there are important concepts that are still relevant. By examining them in their original context they can provide greater insight into the meaning of Learning Organizations and their implementation.

According to Argyris (1992) academics researching Organizational Learning usually have a sceptical approach revolving around three main challenges (p.1):

- Organizational learning is contradictory
- If it does exist then is it always beneficial
- Do real organizations learn productively and are they capable of doing so

Schön had already published a book entitled ‘Beyond the Stable State: Public and private learning in a changing society’ in 1971. It was based on contemporary events and is about Public and private learning in a changing society and is a personal reflection of the stable state, its loss and beyond. Concepts covered included societal change, diffusion of innovation, dynamic conservatism, learning systems, the business firm as a learning system, public (individual) learning, Government as a learning system.

In their paper entitled Theory in Practice (1974: 2-4) Argyris and Schön proposed the concepts of single loop learning, double loop learning, theories-in-use and espoused theory. Single loop learning is where errors are detected and corrected but the organization continues with their current policies and goals. Double loop learning is when error is detected and corrected in ways that involve the modification of an organization’s norms, policies and objectives. Theories-in-use are the mental maps which guide interpersonal behaviour, the behavioural worlds we live in, our effectiveness and capacity for learning rather than the theories people explicitly espouse which are theories-of-action.

They recognized that this early work was not linked sufficiently with the concept of organizational capacity for learning. A conceptual bridge was needed between individual and organizational behaviour which is covered in their next book Argyris and Schön (1978).

A number of key definitions were proposed:

Organizational Learning:

“Organizational learning occurs when members of the organization act as learning agents for the organization, responding to changes in the internal and external
environments of the organization by detecting and correcting errors in organizational theory-in-use, and embedding the results of their inquiry in private images and shared maps of the organization.” (p.29)

In practice, this means that certain employees have the organizational ‘freedom’ or are mandated to review existing routines which are not performing correctly. This may be as a result of changes to the business environment. They are empowered to propose changes which are then communicated to individuals or groups of individuals by sharing their own mental images of the improvements needed with individuals and to the rest of the organization through any resulting changes to the formal organization structure charts.

_Deutro learning:_

“When an organization engages in duetro-learning, its members learn, too, about previous contexts for learning.” (p.27) . This type of learning is about applying organizational learning concepts to the learning process itself. The focus is on analysing successes and failures. From this the barriers to learning can be identifying. Strategies can then be developed to overcome these barriers which are then communicated to the individuals in the organization and implemented.

In a later book Argyris (1992) promoted Organizational Learning as a “competence” (p.i) that all organizations need in order to improve detection and correction of errors and, in turn, improve their potential to innovate. A strong emphasis was placed on errors that may cause embarrassment to the individual or may even be threatening in some way and which have the potential to become barriers to learning at all levels within the organization. He argued that, whilst the research literature covering the Learning Organization produced by practioners tended to be prescriptive and that covering Organizational produced by academics tended to be sceptical. They are complementary in that, one ignores what the other finds of crucial importance but both are about whether real organizations can in fact sustain a learning organization culture. He also recognized the difficulty of creating a learning organization by the reference to the need to establish, through interventions, the “rare” conditions necessary that make it part of everyday working.

The key concepts related to the proposed research are the ideas and lessons to be drawn concerning productive learning i.e. double-loop and duetro-learning; identifying and overcoming barriers; defensive routines i.e. mechanisms developed at the individual, group, managerial levels and organizational level to overcome embarrassment in identifying errors; and, the adverse consequences of Human Resource based interventions and of the researchers themselves in carrying out their studies. There is little reference to the actual quantification of benefits related to interventions that would bring about Organizational Learning i.e. the creation of a Learning Organization.

A more recent empirical study, in an educational institution context, examined a reflective-action learning group framework as an organizational learning enabler (Yeo, 2006). The framework was designed to create a learning ‘space’ (c.f. Lewin (1951), Lave and Wenger (1991), Kolb and Kolb (2005)) i.e. which is not constrained by physical or institutional boundaries. The discussion of the study’s survey results extended the single/double loop learning concepts (Argyris and Schön 1978) into a triple loop model which described single loop learning as related to competence, double-loop learning as related to capacity and triple loop learning related to competitive advantage of the individuals. The study demonstrated that reflective-
action learning is aligned to Kolb’s (1984) experiential learning cycle. In terms of recommendations covering implementation of reflective-action learning in an organization there was useful table relating the stages in the framework to the critical success factors, organizational learning and organizational effectiveness.

The Organizational Learning theorists have continued to debate the existence of organizational learning whilst the Learning Organization practitioners have continued to develop, expand and refine their approaches to implementing the ideal of a learning organization. An overall common theme is systems thinking but more recent work has covered the existence and development of routines to overcome the increasingly dynamic nature of our world.

Implementation approaches
Sector related studies, such as Jashapara (2003), have shown that organizational learning leads to increased organizational performance. In this case the results were based on a qualitative survey based instrument using economic and human resource dimensions. The conclusions drawn were that this is achieved through double loop learning creating competitive advantage; it is competitive or political cultures that are more likely to promote double loop learning; due to competitive forces firms need to align their learning on efficiency and proficiency to respond to these. It concludes that people need to align their day-to-day learning to a continually changing external environment.

Styhre et al. (2006) examined organizational learning in the context of ‘craft’ based construction workers. They concluded that in the case of these workers communities of practice that rely on non-verbal rather than written interaction are the key to developing more effective learning.

A paper by Hosely et al. (1994) introduced of the concept of competitive forces and the need to focus on these as part of the drive for strategic change whilst promoting a learning culture. This is highly relevant to the case study organization in the proposed research in terms of its growth ambitions in expanding markets and new sectors. It also has strong links to the research area of dynamic capabilities which will be explored in the proposed research as time permits. A contemporary study by Hosely et al. (1994) examined “competitive learning” and proposed communication as the vital link, in particular the promotion of active-listening. The model developed was based on a dynamic approach to learning based on the assumption that organizations develop unique solutions based on competitive forces.

The importance of individual and organizational learning was emphasized by Pedler (1995). Decisions are required as to how an organization intends to use the learning at all levels both individually and collectively including wider stakeholders. Organizations need to collaborate in order to understanding learning, learning about learning, and implementing learning. His concluding comment was the notion that “Becoming a learning company is more of a journey (emphasis in original) than a destination.”

A key finding in the Diez et al. (2005) study was the uncovering of the aspiration of the individuals to work for a learning organization at some stage in their working life. This relates directly to Senge’s (1990) definition of a learning organization which contains the concept of collective aspiration. In the case study the organization had moved from being state run national institution to a private multi-national company. This relates closely to the market environment the proposed research case study will
examine i.e. central and Local Government Contracts with transfer of government
employees to deliver the services.

The debate has widened to include knowledge management issues. In a joint
benchmarking study by the European Foundation for Quality Management (EFQM),
American Productivity and Quality Center International Benchmarking Clearinghouse
(APQC/IBC) and the Knowledge Management Network (KMN). The result was a
Organization”. A Site Visit Questionnaire instrument was used to guide the capture of
best practice in six topic areas General Issues; Case for action; Strategy and
Objectives; Implementation; Measurement and Business Results.

A study by Holt et al. outlined a learning framework for strategic construction
alliances based on system thinking for developing mutually beneficial learning. The
approach was outlined using a case study on an SME construction company’s
exclusive alliance with a large insurance company.

Easterby-Smith et al. (2000) demonstrated that the focus has now moved to studies at
the organizational level and was even moving further to encompass studies of learning
across boundaries and between organizations. Similarly, they examined the “territorial
debates” covering organizational learning and knowledge management based on the
work of Nonaka and Takeuchi (1995: pp44 - 46). They concluded that this work gave
a too narrow definition (based mainly on the work of Senge 1990) of organizational
learning. They argued that the ability of individual behaviour to understand
organizational level events is not feasible and that there is a paradox due to the need
for external assistance with the required interventions. Another related issue covered
was the approach of Brown and Duguid (1991) and their concept of knowledge
development as a key result of learning which is endorsed by Nonaka and Takeuchi.

Garvin (1993) links organizations with knowledge and learning in simple terms. He
introduces measurement as one of the three key issues unresolved by the theorists –
meaning (or understanding of the concepts), management and measurement. Also, the
need to provide a suitable environment for learning which creates time to learn, gives
training in related core skills and opens up boundaries. A further study by Blackman
and Henderson (2005) investigated the effects on learning and knowledge based on
the Senge (1990) disciplines of shared mental models (i.e. company vision) and
systems thinking.

In terms of implementation lessons learnt Kiedrowski (2006) raised diffusion of
commitment through the middle management layers, improved training and
development to institutionalize culture change, emphasis on cultural rather than
structural change, re-use of existing survey data would appear useful provide the
ability to measure consistently prior years in order to provide a baseline for
improvements.

The study by Dovey and White (2005) investigated learning in a knowledge intense
organization where the goal was transformational learning to promote a culture of
innovation. Concepts such as social capital, power management and the role of the
“external critic” were explored. There are some interesting parallels with the case
study company for the proposed research in terms of the history of the firm and the
knowledge intensive environment. Issues around action research and the impact the
researcher may have on the environment were also studied. This theme was also
explored by Lalle (2003) and concluded that the ‘actor researcher’ has two limitations.
Firstly, the lack of independence in terms of gaining access to other areas outside their
role. Secondly, a lack of neutrality which can be beneficial in terms of “reality-building interventions”.

A number of the studies examined concluded that there is no one best way for implementing a Learning Organization e.g. there is no one roadmap, Senge et al. (1994); “It may not be possible or wise to undertake a “Senge-only” LO intervention” Kiedrowski (2006); and, organizations develop their own unique answers to address the competitive situations they exist in, Hosely et al. (1994). This supports the view in the proposed research to use a hybrid strategy that takes the best from all the competing concepts.

Finally, although some studies covered the information technology based ‘knowledge’ economy companies it was not apparent that the research has covered all the issues related to high growth acquisitive ‘industrial’ economy companies that are still in the process of entering the still relatively new (in socio-economic terms) ‘knowledge’ economy.

Benefits Realization and Measurement
In terms of measurement of Learning Organizations a number of the papers reviewed proposed frameworks and models which were then used as the basis for qualitative assessments. Few, if any, proposed quantifiable methods and tools. This was probably due to the lack of real world studies in particular, in the construction support services sector. In order to cover this field it was necessary to cross into the knowledge management and intellectual capital research literatures to locate the research into valuation techniques.

In the construction/contracting sector a conceptual research framework was developed by Wong and Cheung (2005) which drew on recent work from, among others, Kululanga et al. (2001, 2002) covering organizational generative learning and Jashapara (2003) mentioned above. The aim was to guide research to assist the goal of sustainable continuous improvement by bridging between the research into project monitoring and research in organizational learning. The framework was used to evaluate existing research in order to link past studies with proposed studies. It concludes ‘it becomes instrumental to demonstrate the learning effects in construction organizations in real situation (sic). It suggests that the ‘learning curve’ model is the best method for demonstrating Organization Learning effects in real situations. A further suggestion is to investigate the use of data from performance monitoring systems.

One study that did cover real world issues was the EFQM/APQC/IBC/KMN Good Practice Report (1997). The findings included the following key findings under measurement and monitoring - “Intellectual capital indicators should be developed with employee participation” and interestingly - “No measurements were found for changing human capital into structural capital”. Under business results the single key finding was “Leveraging future earnings is more important than cost savings, but tangible benefits have been reported”. No details were given for the actual measurement processes used or results obtained.

Whether organizations can learn or not they can as a collective increase their effectiveness and competitiveness by applying the theories proposed by the Learning Organization researchers covering all levels of learning, individual, team, organization, institution, governmental and wider society as envisaged by Schön (1971) in his book ‘Beyond the Stable State’.
There is a further opportunity to link this area of work with that of implementation of Learning Organizations in an area that is not covered well in research in terms of monitoring realization of benefits and quantifying the value of learning and knowledge gained i.e. the appreciation in knowledge assets. The selection of the right method is crucial and the ability to communicate it both within the organization and externally to stakeholders is of key importance. The ability to measure will assist in closing the gap between the Learning Organization practitioners and Organizational Learning academics. The proposed research will provide evidence, providing there is a causal link, that organizations can learn in a meaningful and beneficial way and the barriers overcome in order to achieve the goal of creating the right conditions for learning as part of normal everyday activity.

The research needs to take into account the difficulties in measuring intangibles are referenced in Lev (2001) “…to improve managerial processes for coping with the idiosyncratic challenges posed by intangibles - spillovers of benefits (partial excludability), high risk, and non tradability; and to develop measurement and valuation tools for both managers and investors capable of rising to the major challenge……” p132. Sveiby (2004) also refers to this in that it is not possible to measure social phenomena accurately, it is fragile and open to manipulation. Measurement adds value only if the limitations are taken into account. The measurement of intangibles can uncover hidden costs or be used to explore other value creation opportunities i.e. with a ‘learning motive’ Establishing purpose of measuring intangibles is essential. The measuring process should be regarded as an ‘invitation to a learning dialogue’.

A paper by Green and Ryan (2005) provides the basis for including intangible assets into a value chain aligned to business strategy which can be used to assist in providing better utilization of resources to sustain competitive advantage and create value The context of this work relates closely to the proposed case study organization in terms of approaches and methods for valuing knowledge assets in a knowledge intensive environment and, how intangibles might be viewed.

**METHODOLOGIES TO BE EMPLOYED**

The methodology for the ongoing research is based on a single case study of a company in its initial state without a formal learning organization culture (Case Study organization as-is state) and the company one or two years into implementing a learning organization culture (Case Study organization future state at the end of the research period). Part of the research will be to establish suitable measures to monitor the progress of the implementation and the realization of benefits linked to the interventions put in place.

It is proposed to identify lessons learnt from both successful and not so successful Learning Organization implementations that can be applied in a rapidly growing knowledge intensive support services organization. This will be through an analysis of the literature already collected and in particular, case studies of companies that are perceived either by themselves or others to be learning organizations. Where possible, structured interviews will be held in a number of Learning Organizations and the responses analysed to identify suitable strategies, approaches and lessons learnt. Interviews will also be conducted with practitioners in the field. A similar exercise will be held within the company sponsoring in the research covering its existing Learning Organization strategy and implementation activities and plans. A gap analysis will be
conducted to identify areas where the learning from the research can be applied to modify the approach and propose a ‘hybrid’ strategy

In terms of measurement both quantitative and qualitative approaches will be considered. However, a key area of the current research project will cover the realization and measurement of quantifiable benefits. This will be carried out by reviewing the approaches detailed in the current Intellectual Capital literature e.g. Sveiby (2001) who describes twenty-one methods for measuring intangibles, approaches on Lev’s website and in his book Lev (2001) and, the “framework for intangible valuation areas” proposed by Green and Ryan (2005) and developed further by Green (2006a, b, c).

This type of analysis will be used to develop an approach for analysing the company from a knowledge asset viewpoint rather than the traditional financial “bottom-line” based view currently used. At this stage a number of approaches are under consideration and these include; change in employee value-added; employee fee income progression over time; employee salary market rate increase over time; opportunity cost savings due to increased retention rates

A key area will be to establish the causal links between the ‘Learning Organization’ based interventions and the benefits identified. Ishikawa cause and effect ‘fishbone’ analysis will be used where appropriate. An investigation will also be carried out into the “unintended consequences” of the “bottom-line” reporting approach currently employed and its impact on the implementation of a Learning Organization culture. Once the measures are developed they will be monitored over a two year cycle and an exercise conducted to check their validity.

CONCLUSION

The Organizational Learning theorists have continued to debate the existence of organizational learning whilst the Learning Organization practitioners have continued to develop, expand and refine their approaches to implementing the ideal of a learning organization. An overall common theme is systems thinking but more recent work has covered the existence and development of routines to overcome the increasingly dynamic nature of our world.

This review provides a sound basis for carrying out the proposed ongoing research which will attempt establish causal links to provide evidence of the benefits realized from implementing a Learning organization. Two basic research questions are proposed:

- Can organizations improve by learning and if the improvement can be measured quantifiably can this be used to prove that a learning organization exists?
- Can the causal links be established between the identified improvements and the interventions designed to create a learning organization culture?

REFERENCES


