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A Model of Individual and Organisational Unlearning

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Abstract

Within the learning literature, both at an individual and an organisational level, there is increasing mention of the term unlearning as distinct from learning. It could be claimed that whilst not using the specific term, writers in the adult learning field have been using this concept for many years. This paper explores unlearning in terms of its relationship to the well known literature on adult learning and types of knowledge, how unlearning is reported to occur within these different levels of knowledge, and finally the link to the individual change and transition literature. This analysis and synthesis of the literature in the broad areas of adult learning, knowledge and change presents some clear indications for the required focus of future research, and provides an introductory model.

Keywords: Unlearning, individual change, learning, knowledge, organisational learning

Introduction

The topic of unlearning, as distinct from learning, is starting to emerge within both the adult learning and organisational learning literature. In reviewing the existing research and literature, many have pointed to the lack of research in the area of unlearning. Easterby-Smith (1997:1108) proposes that “..further work should be conducted into how individual and shared cognitive maps can change”, whilst Delahaye (2000:49) notes, “(i)t is interesting to reflect that the concept of unlearning only recently has become a phenomenon worthy of consideration in adult and organisational learning. Centuries ago, an individual’s knowledge would last a lifetime, indeed knowledge would be passed down generations and still be highly useful. This has changed during this century until, as we pass into the new millennium, knowledge becomes rapidly obsolete – hence the need to consider the unlearning process. Surprisingly, there has been very little written on the topic.”

At an individual level, it has been suggested that “individual mental models play a pivotal role, yet that is precisely an area where we know little and there is little to observe. One challenge is to find ways to make these mental models explicit; another is to manage the way these mental models are transferred into the organizational memory” (Kim, 1993:46). It has also been suggested that to

address the rapidly changing environment, organisations may choose to develop their employees in terms of their ability to adapt and handle change (or unlearn) (LePine, Colquitt, & Erez, 2000). However, even at an organisational level, there is caution that “research in this area is fairly new and there are many issues that need to be resolved before it can be used effectively in applied settings.” (LePine et al., 2000:564)

Hedberg (1981:6) states, “(i)ndividuals’ learning is doubtless important in organizational learning. Organizations have no other brains and senses than those of their members.” The importance of focussing on the organisational context is recognised, even though the major consideration of this paper is individual unlearning. The importance of considering both organisational and individual learning and unlearning is supported by the fact that many organisational change programs commence by focussing upon the individual and their awareness of self in order to enable unlearning (Garrety, Badham, Morrigan, Rifkin, & Zanko, 2003; Kiel, Rimmer, Williams, & Doyle, 1996). It has been recognised that “positive individual change has a positive organisational impact” (Kiel et al., 1996:71). Kim (1993:37) likewise suggests that “...organizations ultimately learn via their individual members. Hence, theories of individual learning are crucial for understanding organizational learning.” Newstrom (1983) also suggests that the most relevant competencies for guiding the unlearning process is an understanding of adult learning and an understanding of organisational change.

Therefore, this paper commences by providing an overview of the existing literature in the area of unlearning and then suggests a model for individual and organisational unlearning, identifying key themes in relation to factors which may impact upon the unlearning process. The focus is then turned to considering in more detail, the issues and factors at an individual level which will impact upon an individual’s ability and willingness to unlearn, before recommending a number of areas requiring further research in order to enhance the knowledge in this area.

Unlearning – the current literature

A number of definitions have been proposed about unlearning. The following summarises some of the key definitions found in the literature:

Author	Definition
Hedberg	“Knowledge grows, and simultaneously it becomes obsolete as reality changes. Understanding involves both learning new knowledge and discarding obsolete and misleading knowledge” (Hedberg, 1981:3)
Newstrom	“...the process of reducing or eliminating preexisting knowledge or habits that would otherwise represent formidable barriers to new learning.” (Newstrom, 1983:36)
Prahalad & Bettis	“Unlearning is simply the process by which firms eliminate old logics and behaviours and make room for new ones.” (Prahalad & Bettis, 1986:498)
Starbuck	“Unlearning is a process that shows people they should no longer rely on their current beliefs and methods” (Starbuck, 1996:727)

It is apparent that in some cases the definition is referring to the unlearning encountered by individuals, and others are referring specifically to organisational unlearning. These definitions are similar in that they generally recognise unlearning as a process rather than a discrete event, and secondly they also acknowledge the close link between learning or acquiring new knowledge, and unlearning. Some may in fact argue that making a distinction between learning and unlearning is not necessary. However, at least some of the literature in the area of learning specifically, does not recognise the existence of previous knowledge and its potential for impact on the learning process; this lack of recognition of previous learning is referred to by Newstrom (1983) as the “clean slate fallacy”. Therefore, whilst it is acknowledged that there is the potential to see the concept of unlearning as nothing more than a play on words, it is contended that there does exist a distinct difference between

the two processes of unlearning and learning, even though they may even occur simultaneously. It is also emphasised that unlearning should not be viewed as an end in itself. The major reason for encouraging or engaging in unlearning is to allow the inclusion of new information or behaviours, and as a means to assisting learning, innovation and change.

The term relearning has also been used by researchers in the area of learning, however no specific definition has been offered to date. The context in which the term 'relearning' has been used would indicate that these researchers are in fact referring to the learning of something different after unlearning has occurred, not simply learning over again, something that has been forgotten or unlearnt (Bailey, 1989; Hedberg, 1981; Markoczy, 1994; Sinkula, 2002). Relearning is therefore considered to be no different to the concept of unlearning for the purposes of this paper.

Hedberg (1981) is recognised by many authors, as one of the seminal works in the area of unlearning. It is suggested by Hedberg (1981) that in predominantly an organisational sense, new knowledge replaces old knowledge as individuals learn more; much like overwriting. It is not considered to be the same as forgetting where information is lost regardless of its usefulness. Hedberg (1981) sees the two processes as happening simultaneously proposing that knowledge both increases and becomes obsolete, or is discarded as the situation changes. This discarding activity often referred to as unlearning is seen to be as crucial as gaining new knowledge, and the lack of ability to engage in unlearning is reported as a "crucial weakness of many organizations." (Hedberg, 1981: 3)

However, a number of the researchers in the area of forgetting suggest that knowledge is not destroyed but remains. For example, Bouton (1994; , 2000) in studying forgetting, extinction and lapse and relapse makes the point that extinction of behaviour is not the same as unlearning, as lapse and relapse can occur when the context in which the individual finds themselves, is manipulated. Therefore, it is being proposed that extinction does not in fact remove the learning altogether, it simply reduces the likelihood of the behaviour in certain contexts. Hence the proposal that new learning "overwrites" old learning is not supported by this research.

In support of this view of unlearning, Klein (1989) put forward a parenthetical model of unlearning suggesting that the old knowledge is not erased, but maintained (in parentheses as it were) for situations where it is believed that the new knowledge does not apply. It is therefore suggested that a decision is made by an individual as to what behaviour is appropriate based upon the context of the situation. In part, there is caution expressed about the widespread use of the notion of unlearning. Klein (1989) believes that individuals learn new ways of choosing a response to a particular situation, rather than unlearning a particular response. The point is made that when it is suggested in the context of unlearning that one response replaces another, there may not be any improvement in outcomes. Klein (1989) is suggesting that to improve, develop and grow, it is essential to learn a new method for selecting responses in the first instance and that simply replacing one discrete action/skill with another is insufficient. In this case, focussing upon the change of frames of reference/mindsets/theories of action is being advocated. Whilst it can be interpreted that Klein (1989) believes a focus on unlearning specifically is not necessary; others have identified that within the process of development, improvement and growth, it is still essential to recognise previous habits, knowledge and/or behaviours that are no longer optimal and relinquish them (Hamel & Prahalad, 1994; Nystrom & Starbuck, 1984).

In summary then, the term unlearning has been used in a number of different contexts. Some have referred to this concept in relation to individuals undergoing a process of relinquishing old ways and embracing new behaviours, ideas or actions (Baxter, 2000; Bridges, 1991; Duffy, 2003). Others have focussed more upon organisations, as a system, relinquishing previous methods and approaches in order to accommodate changing environments and circumstances internal to the organisation (Hamel & Prahalad, 1994; Hedberg, 1981; Klein, 1989).

Although many have written about the notion of unlearning, it would appear that there is a genuine lack of empirical studies relating to unlearning and its impact on attempts, at both an individual and

organisational level. In fact, many of the more recent articles written on the topic of unlearning have been written by practitioners and consultants (Duffy, 2003; Kerfoot, 1999; Magrath, 1997; Mariotti, 1999; Sherwood, 2000). Whilst these are based upon informed opinions and experience within organisations, it would appear that more robust research in this area would assist in either proving or disproving many of the assumptions, recommendations and theories offered relating to unlearning.

Individual change and transition

In addition to models specifically relating to unlearning, there have been some models relating to individual change and transition which can be seen to relate closely to the concept of unlearning. Some of these can be found in the applied management literature; however some are adapted from clinical psychology literature and research.

In analysing individual change and transition, Chell (1993) utilised two models to explain the process through which individuals progress during change. Firstly, the seven step model of immobilization, minimization, depression, acceptance of reality (Letting go), testing, search for meaning and internalization are highlighted. (Adams, J. S., J. Hayes and B. Hopson (1976) in Chell, 1993) Secondly, the cyclical process of Preparation, Encounter, Adjustment and Stabilization is also discussed (Nicholson, 1990). In these models, the steps of Acceptance of Reality (Letting Go) in the first model and of Adjustment in the second model can be seen to be closely linked to the concept of unlearning. Both these models, which are typical of the gap closure/gap connection approaches, indicate that unless unlearning occurs, individual change and transition will be inhibited.

However, French and Delahaye (1996) contend that these models of individual change (ie. gap closure and gap connection) are based upon assumptions which may not always apply. These assumptions include: that change transition has a linear progression, that it is a finite process, that resistance is viewed as a certainty and that the change transition is an externally forced process. Hence a model of individual change is suggested involving four phases of security, anxiety, discovery and integration, in a cyclical and ongoing process of change adaption. (French & Delahaye, 1996). Within this model, it is assumed that at stages within this process, individuals are able to show a level of self-awareness, and during this process will experience a certain level of anxiety “caused by the loss of old familiar patterns and processes” (French & Delahaye, 1996:25) Here it is being suggested that again, unlearning is an integral part of individual change and transition.

Conner (1992) likewise offered a model of change based on the Kubler-Ross model (1969 in Conner, 1992), made famous as the model explaining stages encountered in relation to death and dying. It is suggested that organisational change in some respects mirrors this process. Conner (1992) has adapted the stages however to fit more closely with the notion of the introduction of a change within the workplace. The stages are:

- I. Stability –the time before the change occurs; status quo
- II. Immobilization –the initial response to change; confusion or disorientation is likely
- III. Denial –a stage of inability or unwillingness to accept that the change will occur
- IV. Anger – the stage where those encountering change express frustration, hurt and anger at the change, often manifested by emotional outbursts
- V. Bargaining – the stage at which the individual can no longer deny the existence of the change and therefore begins negotiating in an attempt to avoid any negative implications
- VI. Depression – at this stage, the full weight of the change is felt, and individuals may feel resigned to the change
- VII. Testing – to regain a sense of control after the previous stage, the individual will then explore new ways to work within the change
- VIII. Acceptance – whilst the individual still may not like the change, at this stage, they have accepted its existence and aims once again for producing within this changed environment

In summary, two of the individual change and transition models appear to recognise that unlearning must occur before new learning can commence. These steps are termed ‘letting go’ and ‘adjustment’.

These models by French and Delahaye (1996) and Conner (1992) recognise that there is an emotional element to unlearning, with terms such as ‘anxiety’, ‘anger’ and ‘depression’ being used.

A Model for Unlearning

Based upon the existing literature and research in relation to unlearning and individual change, and taking into account the factors impacting unlearning at both an individual and organisational level, a model (shown as Figure 1) is offered to draw together these concepts. The model suggests that, at both an individual and organisational level, there are a number of factors considered to be parallel that will impact upon learning and unlearning.

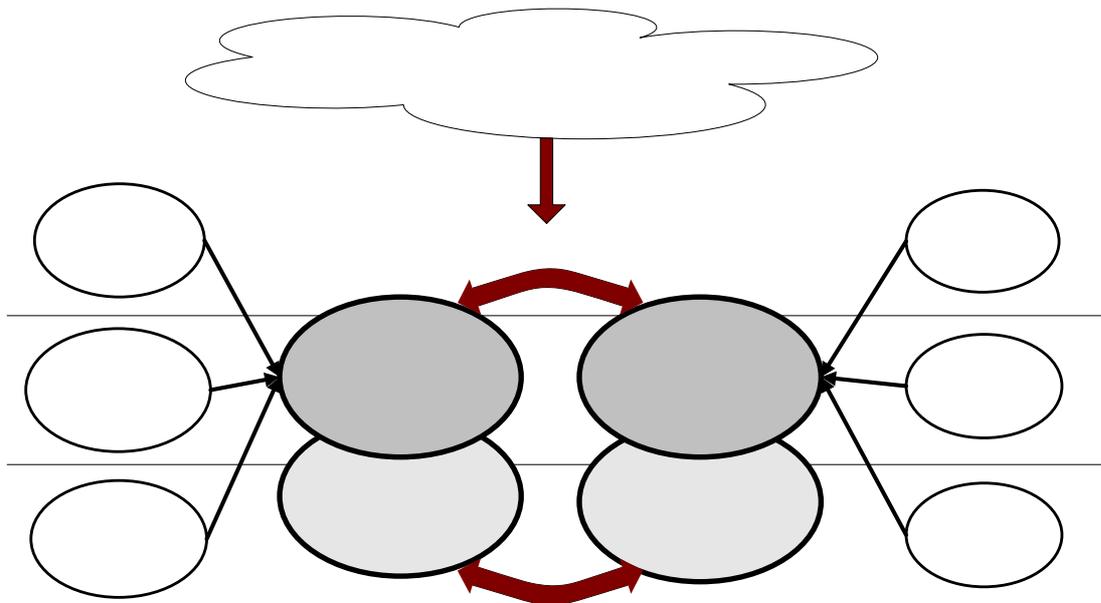


Figure 1. A model for individual and organisational unlearning

External Environment

At the individual level, researchers and writers have identified the difference between explicit and tacit knowledge (Durrance, 1998; Newell, Robertson, Scarbrough, & Swan, 2002; Nonaka & Takeuchi, 1995; Roy & Roy, 2002). Explicit knowledge refers to the easily expressed and easily documented knowledge or information. At an organisational level, such ‘explicit’ knowledge is generally found to be ‘captured’ in organisational manuals of procedures and processes or in job descriptions. The model suggested utilises the term ‘inert knowledge’ (Delahaye, forthcoming) to indicate the relatively stable nature of such information.

Tacit (or implicit) knowledge, on the other hand, relates to information not easily explained or documented, and is often referred to as know-how. Importantly, it is this tacit knowledge which often makes the difference between an average and an excellent employee – not necessarily what they do, but how they do it. Generally, it is common to see tacit knowledge discussed only as it exists within individuals. It is suggested however that in a broad sense, the recently discussed issue of organisational memory within the organisational learning literature in many ways reflects tacit knowledge at an organisational level. A great deal more has been written about organisational memory in the information technology field than in the general management literature. These take more of a systems focus to the issue of organisational memory, inferring that information and data can be captured and stored to aid organisational memory. However, this is in contrast to the recognition of the contribution of tacit knowledge to organisational memory. In contrast however, Anand, Manz & Glick (1998) discuss systemic memory (equated with organisational memory) as distinct to group or individual memory, and suggests that being able to access “soft knowledge” (ie. tacit knowledge, belief structures etc) is essential for organisations to function effectively.

**INDIVIDUAL
LEARNING
INDIVIDUAL
UNLEARNING**

A number of different scholars and researchers have expressed opinions as to whether or not organisations can really remember. Paoli & Prencipe (2003) consider closely the debate as to whether it is organisations or individual who have the memories, in essence identifying two groups; those who believe you can study memory *of* an organisation and those who believe it is only possible to consider memory *within* an organisation. Argyris & Schon (1978) acknowledge the role of organisational memory recognising that "...in order for *organizational* learning to occur, learning agents' discoveries, inventions, and evaluations must be embedded in organizational memory." (Argyris & Schon, 1978:19). Again, this lends support to the proposed model which equates organisational memory at the organisational level with tacit knowledge at the individual level.

Finally, the third level considered within the model focuses at an individual level on frames of reference and organisationally on culture. Mezirow (2000) defines frames of reference as those deep-seated underlying values and belief systems that guide, shape and dictate the every day attitudes and behaviours of the individual. He goes on to suggest that what we do and do not perceive, comprehend and remember is profoundly influenced by our frames of reference. Interestingly, Mezirow (2000) also suggests that changing frames of reference invariably involves an emotional content. This is an appealing parallel to the elements of anxiety, anger and depression suggested by French and Delahaye (1996) and Conner (1992) in the change models.

At the organisational level, the equivalent of frames of reference has also been utilised to depict the many stories, rituals, commonly-held beliefs and way of operating inherent in organisational culture. A great deal of recognition has been given to the impact organisational culture can have on the ability of the organisation to make decisions, learn and grow. As Paoli and Prencipe (2003) suggest, organisations are seen as "being characterised by knowledge structures, frames of reference, givens, causal maps, shared mental models, and the like, through which they perceive, categorise, and give meaning to events. These mechanisms act as filters in the process of assimilation of new information. Moreover, they have a bearing on and actually constrain decision-making processes as well as the generation of actions." (Paoli & Prencipe, 2003:148). Again, interestingly, there are issues of emotion in changing organisational cultures. Argyris (1999) suggests that organisations often revert to defence mechanisms when organisational culture is challenged.

How does unlearning occur?

Based upon the proposed model, it is suggested that a number of factors at both an individual and organisational level impact upon unlearning. However, this does not address the issue of how in fact unlearning occurs. As this is quite a complex area, this paper focuses specifically on the unlearning process at an individual level.

If we are to consider the unlearning of an individual, it is important to view the adult learning literature in terms of what it can contribute to the more specific area of unlearning. For learning, the advantage of explicit knowledge is that the individual has a conscious awareness of the content or can be made aware. Indeed, the usually accepted principles of learning (see for example Delahaye, 2000; DeSimone & Harris, 2002), such as part learning, active learning and multiple sense learning, assume that the content to be learned is available and can be accessed. Yet there is little in the literature about 'principles of unlearning' for explicit knowledge. The assumption is that, whether the understanding of unlearning is based on the Replacement Model of Hedberg (1981) or the Parenthetic Model of Klein (1989), the learner merely had to concentrate on the learning of the new, using the principles of learning and the unlearning would take care of itself.

At the other level of the model, those of tacit knowledge and frames of reference, there are more compelling reasons to consider unlearning as crucial to the process of growth and development. Whereas changing explicit knowledge can be based upon the previously explained principles of adult learning, there are additional complexities added due to the fact that tacit knowledge and frames of reference are much less easily accessed and, as a result, changed. There has been a great deal written about the different types of learning that exist. Single and double loop learning, and more recently,

triple-loop learning has long been discussed within the learning literature (Argyris & Schon, 1978; Foldy & Creed, 1999; Romme & Witteloostuijn, 1999; Snell & Chak, 1998). Single loop learning, introduced by Argyris and Schon (1978) has been described as incremental learning, focussing on correction of error. However, double loop learning involves questioning the assumptions and processes underlying errors, and addresses these. Unlearning, therefore can be argued to be an integral part of double loop learning as it too, calls for the letting go of previous assumptions and frameworks in order to learn. Triple loop learning has been more recently identified and discussed (Foldy & Creed, 1999; Snell & Chak, 1998), and suggests that it involves “new processes for generating mental maps” (Snell & Chak, 1998:339). Deutero-learning is another concept suggested by Bateson (1972), very similar in many ways to triple-loop learning (Snell & Chak, 1998). Bateson (1972) describes deutero-learning as learning how to learn. It could also be paralleled with the concept of generative learning defined by Senge (1990:14) as “learning that enhances our capacity to create”. If this is the case, unlearning would need to occur prior to or at least simultaneously with triple loop or generative learning, and may offer some insights into possible ways to address the changing of tacit knowledge and frames of reference.

Conclusion

As the pace of change continues to accelerate, the importance of learning and unlearning at both the individual and organisational levels are recognised as critical to ongoing success of organisations. The model proposed in this paper offers some links between concepts considered to be important during the processes of learning and unlearning, at both the individual and organisational level. It suggests that it is important to address the interface between individual and organisational learning in order to better understand the relationships and interactions. Furthermore, based upon the literature in the areas of individual change and transition, and levels of learning, links are drawn between models of change, types of learning and the critical issue of unlearning. One of the key issues identified by this paper is the importance of considering the emotional element involved in any change or unlearning, at both the individual and organisational level. Whilst the literature to date has provided a sound basis for development of this model, it is also clear that more research is required to inform the debate about unlearning at the individual and organisational levels.

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