

**KNOWLEDGE MANAGEMENT AND THE
GROWTH OF COMPETENCE**

Achieving competitive advantage in the firm





Written and published by: TimelessTime Ltd
4 Newlands Park Way
Newick
Lewes
BN8 4PG

Telephone: 07554 420419

Facsimilie: 08700 547967

Email: info@timelesstime.co.uk

Internet: <http://www.timelesstime.co.uk>

Design and layout: TimelessTime Ltd

Copyright ©: TimelessTime Ltd 2010

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, mechanical, photocopying, recording or otherwise without the prior permission, in writing of TimelessTime Ltd.

Note: This document is intended only as a discussion of selected issues relating to the subject matter. It is neither a definitive statement nor a legal document, nor does it purport to suggest any detailed commercial strategy. For this reason, readers are advised to liaise with the appropriate authorities and, if necessary, seek suitable legal and/or technical advice prior to making business decisions. Whilst TimelessTime Ltd has exercised every care in the preparation of this document, no responsibility can be accepted for any omissions or errors contained herein.



Synopsis

Intuitively we know that knowledge in a firm is good. In the East, those with knowledge are revered. But why is it that knowledge has value, and specifically, why is it that knowledge in a firm is useful to that firm? Something also tells us that knowledge for its own sake is of little value. It needs to be applied, to become competence, to realise its true value. This brief 'intuitive' look starts the process of building a framework for knowledge and its conversion to competence.

We also know intuitively that knowledge has to be managed. To acquire knowledge randomly is likely to be a poor use of time and effort. So what is knowledge? Why is it useful to a firm and how does a firm set about managing its knowledge to achieve stakeholder benefit?

This paper has two distinct parts. The first looks at knowledge and builds a knowledge framework to see where knowledge fits in the firm. The second looks at how the firm can manage its knowledge and develop competence from it. Overall this paper determines how the firm maximises its competitive advantage through a progressive process of knowledge acquisition and exploitation.



Introduction

Knowledge is defined as “*the facts, feeling or experience; this state of knowing; familiarity gained by experience or learning and erudition or informed learning*”¹. Knowledge management addresses the storage, sharing and exploitation of information. Within the firm, knowledge management includes the processes and techniques used to enable acquisition, storage, retrieval and transfer of knowledge to take place. Without transfer, knowledge is locked in one place, becoming perhaps a source of power for the holder but of little use to the firm as a whole. Knowledge forms part of a process of learning.

Learning is about experience resulting in changed behaviour and is different for everyone. Individuals have a preferred method of learning and everyone perceives things at different times and in slightly different ways. Therefore learning can be viewed as a process whereby the person undertaking an activity experiences a change in performance related to their experience².

Daloz sees learning as a journey³. He uses the following analogy. When leaving home all is familiar and safe. As the journey progresses the terrain becomes unfamiliar, confusing and strange. The uncertainty causes a change in the individual and things are perceived in a new way. Continuing on it becomes apparent that the end point of the journey appears similar to the start. Nothing is really different, but the new experiences during the journey results in a change of perspective.

There are several research threads in knowledge management in firms:

Personal Mastery	Developing the capacity to clarify what is most important to us and achieve it.
Shared Visioning	The ability of an organisation to create a deeply meaningful and broadly-held common sense of direction.
Mental Modelling	Developing the capacity to reflect on our internal pictures of the world to see how they shape our thinking and actions.
Team Learning	Developing capacity for collective intelligence and productive conversation.
Systems Thinking	The ability to see the whole, understand interdependencies, and better recognise consequences.

¹ Thomson, M (2005) *Collins English Dictionary*, Aylesbury, Harper Collins

² Ribeaux, P. & Poppleton, S.E. (1978) *Psychology at Work: An introduction*, London, Macmillan.

³ Beardwell, I. & Holden, L (1997) 2nd ed. *Human Resource Management - A Contemporary Perspective*. London, Financial Times Pitman Publishing, p292



*“Learning is the acquisition of knowledge and doing something different as a result”*⁴. This builds on, and verifies, theories suggested by a significant numbers of writers. All the research reviewed in writing this paper confirms that for a company to be effective it must encourage individuals to acquire knowledge *and* to change their behaviour as a result - this is the only way that an organisation can develop. For the newly acquired knowledge to be of true value it needs to be shared and be readily accessible by the organisation as a whole.

There is a clear distinction between ‘knowing how’ and ‘knowing that’. ‘Knowing how’ refers to an individual’s ability to undertake the task, it does not presume understanding. ‘Knowing that’ suggests that the individual has information in their mind allowing activities other than those which have been learned to be undertaken, they are able to manipulate data and use it in a new situation. This is a far higher level of knowledge and requires a greater level of learning. Knowledge therefore is made up of several parts, each acquired in different ways.

Knowledge is something acquired. It comes from a motivation to learn. It has two distinct components; that which the holder ‘just knows’ (tacit knowledge) and that specifically learned (explicit knowledge). It comes from experiences and from learning and reflecting on information received. But how does one make sense of it all? How can a CEO or principal place knowledge in some frame in which it can be managed?

This paper begins by setting out a framework to place knowledge in context and to create a tool useable by managers. It then sets about determining how knowledge might be managed in order to fit with that framework and hence maximise return on knowledge investment in the firm.

The Knowledge Framework

It’s not so much a ‘knowledge framework’ as a framework for the whole business. Knowledge in itself is worthless unless applied. Knowledge is to know ‘how’ or ‘what’. If acted upon by a skill, knowledge results in competence. Competence is to have the ability to do something. When an artisan⁵ does something within a firm, assuming of course that their activity is applied towards the business, a saleable good or service results. The artisan becomes an ‘input to production’ of the firm and his or her efforts generate added value. Competence adds value to the firm. If the competence in one firm is greater than that in another, the first firm can add more value and has competitive advantage over the second. Translated into profits, a greater competence adds more to shareholder funds thereby growing the net worth of the enterprise that has it.

⁴ Mayo, A & Lank, E (1994) *The Power of Learning: A guide to gaining competitive advantage*, London, IPD

⁵ A skilled worker who applies manual dexterity or creative thinking to produce the end result



This gives us the first element of the framework. Assuming that the firm seeks competitive advantage, the aim is to maximise competence. That alone is a rather open statement and we shall see later how this is refined.

Element 1 - Competence equals Skills acted upon by Knowledge.

So knowledge in its own right is not useful. It must be acted on by skills.

The introduction established that there are different forms of knowledge. Knowledge comes from simply reading information and reflecting on it. Knowledge comes from experience. Experience, together with the mental abilities of the reader, processes the information and from it comes knowledge. This in itself might be the perfect machine but something is missing. Without some context which makes the information, experience and intelligence relevant, the knowledge may or may not turn out to be useful. The final input is therefore context. In a firm, this context is the business of the firm. This then gives the second 'equation' of knowledge.

Element 2 - Knowledge is Information reflected on by Experience and Personal Intelligence and is directed by Context.

This shows that knowledge has a clear purpose and direction and is not simply idle knowledge acquired on a whim.

Finally, the context itself must be constructed. Context construction is a very specific and key management task. It is essential to knowledge management. Without it knowledge has no defined purpose and hence cannot be managed for the good of the firm. Without context, knowledge (and its product, competence) will not create added value and competitive advantage.

The context comes from the environment of the firm. The firm exists as an entity. It trades in a market and forms part of an industry supplying that market in which there are competitors. That may in itself be enough for some individuals who are extremely well trained and experienced and have the task of direction (directors and managers) but for most employees, they need objectives to be set that narrow the context to their role. Context can therefore be constructed.

Element 3 - Context is the conditioning that comes from Firm, Market and Industry refined by Objectives.

The system cannot function in a closed loop way without putting in place some checking at the output ('has the right knowledge been acquired?') based on objectives set at the input ('what knowledge do we need to acquire?'). Without objectives the knowledge management system cannot be measured for effectiveness.

So far it sounds like a perfect world! We need to remember that managers deal with real people. Knowledge acquisition is a creative activity. Unsworth



and Clegg⁶ postulated that creative activities need several things to be in place for success. Enablers are needed for the employee to engage with the knowledge management system and succeed in their objectives. There are six such enablers: available time resources; autonomy (to be ‘allowed’ to get on with knowledge management); responsibility; requirement (coming normally from role or promised future role); culture and personal motivation. Conceivably if these are not present in adequate measure, knowledge will not be exploited and competence will not be enhanced over the competition.

This argument then gives us an integrated model containing all the ‘equations’ above.

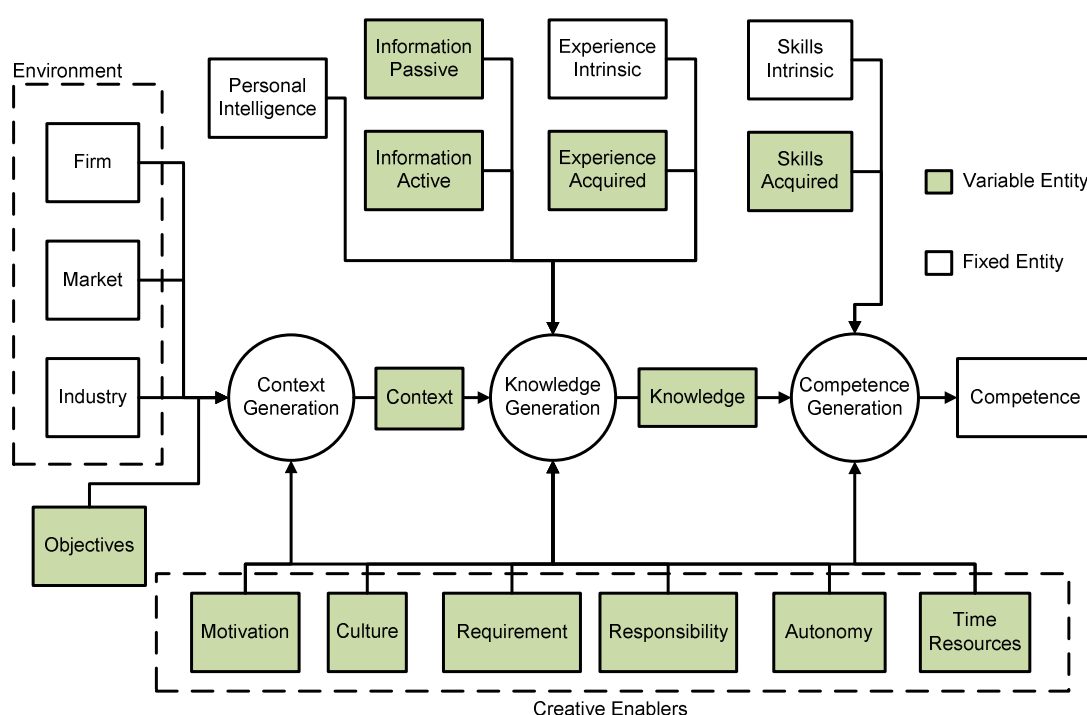


Figure 1 - Integrated Knowledge Management Model

In this diagram⁷ entities are shown as squares and rectangles. Activities are shown as circles. Arrows entering an activity are processed to yield an output entity from the activity. The equations defined above are now expressed integrated in a single model (Figure 1). On the far left, objectives are input and on the far right, competence is output.

The model is robust. The model holds for a single person. And it can be aggregated to apply to a group or a firm. The key thing to identify are those entities that the CEO or principal might have control over and those elements of the model that are fixed for any one employee. For the purposes of this model we assume that the firm, market and industry are determined. Whilst

⁶ Unsworth K.L. and Clegg C.W. (2010), *Why do employees undertake creative actions?* In Journal of British Psychological Society, Volume 83, Part 1, March 2010.

⁷ Source: TimelessTime Ltd.



the firm's Board might elect to change these, this is outside the scope of the model. We also assume that the person is fixed. Whilst the CEO or principal might make the individual redundant and recruit a new employee with greater personal intelligence, we assume the aim is to develop the current staff. And finally each employee comes to the firm with existing skills and experience coming from his/her previous foundation training and subsequent learning. In the model we express these as 'intrinsic' attributes.

In the model also, the way information acts is considered to be through two entities: 'information passive' and 'information active'. The differentiation simply illustrates that knowledge can be tacit coming from passive information that is 'picked up' rather than learned or can be vibrant and active coming from active information development. It is the latter on which this paper will now concentrate.

This model shows the linkage between competitive advantage (and with it added value and shareholder returns) coming from competence and the objectives an employee is set. There are three primary activities in the process: the generation of context coming from the firm and its business, the generation of knowledge and the development of competence from that.

If one firm can exploit knowledge better than the next, it gains competitive advantage. The key element in this model is therefore Knowledge Generation and its driver, knowledge management. The remaining half of this paper focuses on how a firm can manage knowledge.

The reader is directed to other TimelessTime papers covering objective setting, motivation and the raft of human resources management activities that the rest of the model needs for success. These enablers are summarised in the next section.



Practical Knowledge Management

We know that the model in Figure 1 is intuitively right. We know that if the climate is not right, little learning occurs. We know that if our learning is not directed, employees may learn but not the right stuff. And we recognise the difference between information and knowledge and the difference between skill and competence. The model simply integrates it all in one usable, end-to-end structure that can now be applied.

Let's look then at some applications. The following are some practical 'must dos' to manage knowledge in a firm and build competence. The discussion is grouped into enablers, entities and activities.

The Enablers

Enablers must be present in adequate supply for each part of the model to work.

- Individuals must be motivated to learn and grow competence. See other TimelessTime papers on motivation.
- The culture must be right. Learning and competence building will fail unless there is the right environment where the firm's people ecosystem rewards learning effort.
- There must be a requirement. Little will happen if an employee is encouraged to learn in an area where he or she knows they will never apply the competence gained.
- Employees need to know they are responsible for their learning. It is not someone else's responsibility to teach them but rather to facilitate their learning.
- Learning is best achieved when the learner has the autonomy to decide what is most relevant and hence what they need to learn.
- Time resources must be made available. That doesn't always mean that the firm has to set aside time. The employee may also need to give the time for mutual benefit.

These enablers are common to many other desirable developmental activities within the firm. Indeed they are rather essential for the firm to prosper. It is however pointless developing a knowledge management system without sufficient of these enablers present.



The Entities

There are three primary entities that need to be managed: information, experience and skills. And there is one driver: context coming from objectives.

Practically, the model works like this:

- For a given experienced person, knowledge can be increased by increasing the person's access to appropriate information. They use their experience to reflect on the information and develop knowledge from it. The Internet helps here but it is too vast for most people. A managed repository of information is essential and it is this that is often mistaken for 'knowledge management'. There are many computer applications that help here including MS SharePoint and others where structure is avoided and information is mined using meta-data.
- To maximise the benefit from the managed information, an employee needs a bigger experience. They use this to modify the way they process the information. This is why firms rotate new graduates round all the departments over the period of a year or so when they first join. The experience adds to the existing knowledge and helps process the firm's information to new knowledge. Without such rotation the graduates would be slow to realise full benefit.
- It's possible that without new information to process, a person may increase their knowledge and ultimately their competence simply by being appointed to a new role. The new experience allows existing information to be used in a new way. This is exactly what happens when someone moves from one firm to another and is a reason why big firms foster internal recruitment and promotion. For SMEs it is more challenging and opportunities to participate in external activities may be key.
- For a given knowledge, competence can be built by learning new skills. Traditional 'training' often focuses here to teach word processing skills or accounting skills but for more complete competence growth, the three entities of information, experience and skills need to be grown in equal measure.
- Finally the information made available, the new experiences and the new skills need to be driven by a context that comes from the objectives of the firm.

The Activities

There are three activities: context generation, knowledge generation and competence generation. Each processes the entities input. When a new



employee starts we generally have them attend an induction. Done right, this sets out the firm's objectives and lets them experience something of the industry and the market. We take them round the office or plant and have them meet others. This is all about helping them develop context for their role and for future learning.

Context generation is aided by weekly and monthly team meetings and by periodic company-wide meetings and other team brief activities. This is management's chance to update the context. The annual or six-monthly appraisal discussions help the employees discuss their roles and the context with their line manager. These activities are all part of the Context Generation.

The knowledge generation is fuelled by information management. This could be an Intranet which everyone contributes to. Experts could be encouraged to contribute more than most. Provided that their context is correct, they should be able to drive the information machine to the benefit of all. The knowledge generation also need new experiences. Management need to encourage employees to take development days every month. These are days away from daily routine when they are encouraged to solve persistent business problems or create new systems – all new experiences. Even swapping jobs with someone provides a new experience.

And finally competence generation makes use of skills training and is possibly the most routine of the generators. Training providers abound. New skills are applied in the workplace and make use of new knowledge. We should remember also that on-the-job training is often as useful with an employee transferring to a new role under the tutelage of an expert.

In the Final Analysis

Firms grow competence to outsmart their competitors – to grow competitive advantage. Competitive advantage helps win more business over the competition and allows the firm to prosper compared to others. Above we've discussed the process. It would be incomplete without some closure of the loop and hence some measurement. We need a means of determining how much of each entity is needed.

Competence can be measured (see other TimelessTime papers on this). That means that a firm can determine how many units of a given competence are needed to sustain its current performance. A firm knows that with six Practitioner electricians it can turn over £1M per annum. It can benchmark against its competitors or look back in its own history for trends to determine that if it added an Expert and a further three Supervised Practitioners it could achieve £1.5M.

The firm can set objectives for competence growth and hence knowledge management. It can determine if the initiatives (adding information, experience and skills) are working. It can determine if the activities are



effective. The reason that many principals don't measure is the desire for instant results. Competence growth is a long term investment.

In Summary

This paper set out to give a working framework for knowledge management – one of the buzz words of the decade. It showed that knowledge management is not in fact the desirable end result – it is competence growth. Knowledge management is a key part of this and explains the frequent confusion.

In the paper, we also established that knowledge and information are often confused. Knowledge is a product of a management activity into which goes information. It is in information management that we apply computers and lots of data.

This paper set out to discuss knowledge management. It developed an end-to-end model for competence growth. The model is intuitively right and supported by various studies. It can be applied to grow the added value and competitive advantage in all firms.



The Author



Sue Berry is a Director with TimelessTime, and has over 25 years of HR experience across many industry sectors in large multinationals and smaller enterprises, with the last six years being spent as the head HR practitioner in each establishment. With a BEd(Hons) in sociology and environmental science she is a qualified teacher, holds a Masters degree in Human Resource Management and is Chartered Fellow of the Chartered Institute of Personnel and Development.

Prior to founding TimelessTime she gained operational HR experience in a wide variety of niche markets including aerospace, electronics, chemicals, service industries, the Health Service, academia, nor-for-profit NGO's and the charity sector. She has published two books and written several papers related to various aspects of HR.

Sue may be contacted by telephone on 07554 420419 or by email at sueberry@timelesstime.co.uk

TimelessTime

TimelessTime is a limited company, based in Sussex and was founded by Sue Berry. With over 25 personal experience she has teamed with other like-minded professionals who can support the work of TimelessTime offering an extended portfolio of support for organisations of all sizes.

Unlike large organisations TimelessTime can be extremely versatile and nimble with the support service offered to all out clients. We understand that managers don't work in a 9-5 manner anymore. TimelessTime is a fact of life as is flexible working for senior business professionals. TimelessTime can help you redress your work-life balance by providing the support you need when you need it.

For more details about the concept of TimelessTime please visit www.timelesstime.co.uk