KNOWLEDGE MANAGEMENT AND LEARNING

An important aspect of knowledge management is the way people (and organizations) learn and how they approach problem solving. This is a good point to revisit Argyris and Schön's theories–in–use (the private, self–generated theories that govern our behavior).

Argyris and Schön (1974) built a model of the processes involved in the theory in practice (see Figure 6) that has three elements:

- **Governing variables (or values):** there are likely to be a number of these and any action taken is likely to impact on them.
- **Action strategies:** what people do to keep their governing values within an acceptable range.
- **Consequences:** what happens as the result of an action. Consequences can be intended or unintended.

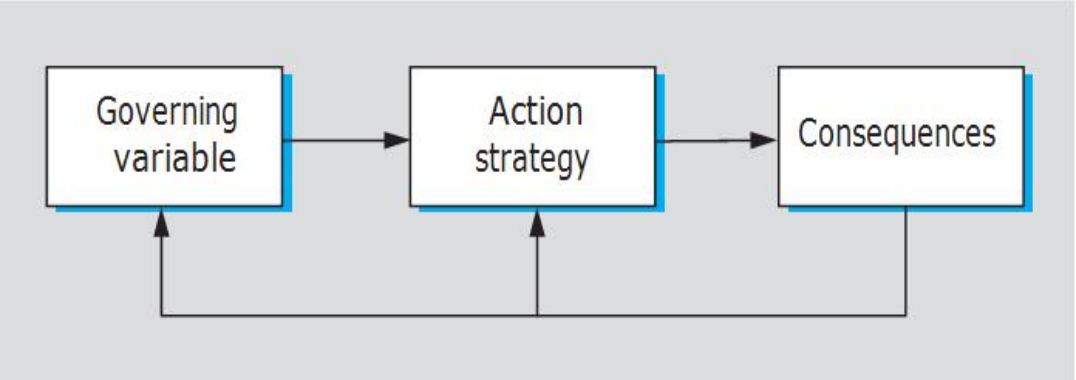

Figure 7. ***Theory–in–use model***

Source: *Smith* (2001)

Where the consequences of your action strategy are in accord with your governing values, the theory–in–use is confirmed. But what happens if the consequences work against your governing values?

Argyris and Schön suggest that there are two responses to this mismatch, which they describe as **single–loop learning** and **double– loop learning**.

SINGLE–LOOP LEARNING

When something goes wrong, a common response is to look for another strategy that will work better, but still within the framework of existing governing variables or values — the plans, goals or rules of behavior that we are familiar with. This is single– loop learning.

Looked at in organizational terms, error and correction in a single– loop learning environment will work within the organization's existing policies and objectives, but otherwise carry on with these unchanged.

DOUBLE–LOOP LEARNING

A more radical approach is to examine critically the governing variables or values themselves, to test how valid they still are. This in turn can lead to a change in the whole framework in which the action strategies and consequences are developed — a double–loop (see Figure 8).

Double–loop learning will occur when errors are corrected in ways that involve the modification of the organization's underlying norms, policies and objectives.

Argyris and Schön argue that double–loop learning must be maximized if organizations are to make informed decisions in rapidly changing contexts. It is an approach which accords very well with the underlying values of knowledge management.

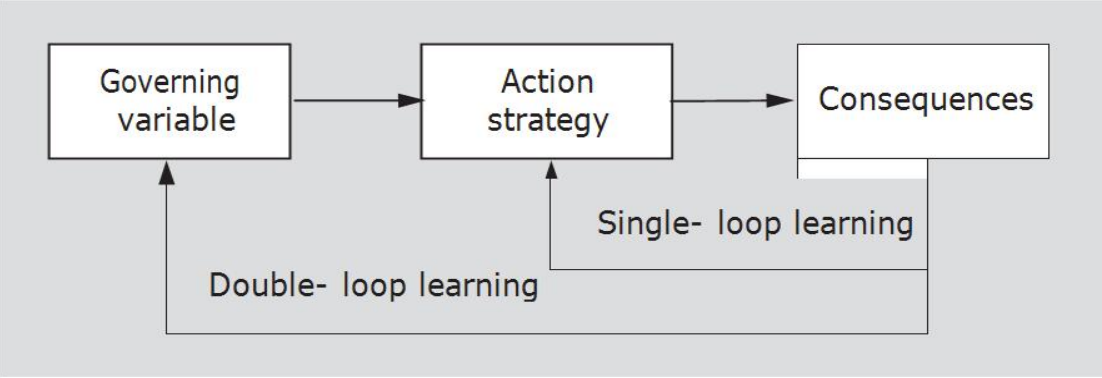

Figure 8. ***Double–loop learning***

Source: *Smith* (2001)

BENEFITS OF KNOWLEDGE MANAGEMENT

Several business benefits have been identified as accruing from knowledge management (Newing, 2000):

- identifying new markets from high–level intelligence gathering and pooling of knowledge by experts
- more responsiveness to market needs by harnessing external knowledge
- using customer knowledge to improve existing products and create innovative new ones
- faster time to market
- better quality products
- reusing knowledge gained in other parts of the world for other customers with similar problems
- continuous learning and development of best practice
- reducing costs associated with finding and reinventing knowledge by quickly retrieving explicit knowledge already stored
- improving customer service by applying knowledge at the point of first interaction with the customer
- reduction of risk by using wider expertise.

CHALLENGES AND CRITICAL SUCCESS FACTORS

Even if your organization has taken on board, the message that using your corporate knowledge more intelligently can be a vital component in competing in the marketplace, it may well face a number of basic problems before it can get underway (Bonaventura, 1997).

BARRIERS TO KNOWLEDGE MANAGEMENT

There may be, for example:

- no model for knowledge creation and dissemination within the

organization: you've never done it before so where do you start?

- no processes or systems focused on supporting those activities — they weren't part of the original systems specification so where do they fit in now?
- Von Krogh et al. (2000) believe that managers ought to be supporting knowledge rather than trying to manage it, as it is basically unmanageable and not amenable to traditional management techniques.
- Individual staff may be unwilling to accept new lessons, insights and ideas, and many organizations can be quite challenging places for people learning to overcome the barriers of sharing knowledge with others.

INDIVIDUAL BARRIERS

Individual barriers can include the following:

- People approach new experiences based on their experience and beliefs about the world. There will be some situations which are so new and different that they will not have developed a response to them and will find them too challenging.
- Some people will see new knowledge as a threat to their self-image and respond negatively to it.

ORGANIZATION BARRIERS

The organization itself may contain its own barriers:

- New ideas will have to be made explicit in a 'language' that people in the organization can understand.
- **ORGANIZATION BARRIERS**
- The organizational memory and understanding of how things work can be good for bonding people together — but also make it more difficult for an individual to disagree with a 'party line'

- Organizational procedures may make cross–functional interactions difficult.
- KEY QUESTIONS FOR MANAGEMENT

Bonaventura (1997) describes how, where there are no existing models on which knowledge creation processes and systems can be based, management will typically just issue a general call for more ‘learning’.

KEY QUESTIONS FOR MANAGEMENT

Bonaventura puts forward some questions for the management of any organization (particularly those in the knowledge intensive sectors of the global economy) to ask of itself:

- What do our culture and our actions as managers say about the value of knowledge in the organization?
- How is knowledge created, embodied, and disseminated? What is the relationship between knowledge and the kind of innovation that we need to achieve our objectives?
- KEY QUESTIONS FOR MANAGEMENT
- What commercial benefits do we expect to gain from more effective knowledge management?
- Where are we in terms of the maturity of our knowledge systems?
- What role does IT play in our knowledge management program?

Skyrme (1998) has identified several recurring characteristics within organizations that demonstrate best practice in knowledge innovation, which also translate into key questions for management:

- Is your knowledge strategy separate or clearly linked to your business strategy?
- How much is knowledge discussed in your organization, and how well is it understood? Is it a key element in your plans and budgets?
- Is the knowledge facet of your business articulated as a real,

compelling vision? Is there a framework that guides management decisions?

- Are there knowledge champions throughout your business? Does your chief executive officer (CEO) link the importance of your organizational knowledge to your business success?
- Do you have systematic processes for capturing, organizing, and sharing knowledge throughout your organization?
- Are people and information readily accessible through your computer and communication networks? Do these networks extend to customers, suppliers, and experts?
- Do you measure the contribution of knowledge to your organization's performance?

Only when an organization has realistic answers to these questions can it start to develop real advantage from its knowledge assets.

- THE EMPLOYEE PERSPECTIVE

So much for management — but what about the staff? As Morling (2000) points out, asking or telling employees to 'share knowledge' is a waste of time.

For an employee, the benefits of knowledge management relate less to organizational performance than to the general human desire for interaction with other people and some kind of shared interest or expertise within quite small groups, where opinions and ideas are freely exchanged, respected and trusted.

These small groups of shared interest or expertise (knowledge 'communities') can fulfill a useful role by creating a balance between the enterprise on the one hand and the individual on the other.

A common mistake that management makes in trying to implement knowledge management is to focus on the individual as the source of

knowledge — somebody who can deposit a 'knowledge package' of their expertise and experience into the system for use by all.

This fails to recognize the role of collaboration in developing ideas, or that for many people the real reward of sharing knowledge is the immediate response from the people they have shared it with.

Morling's company, has developed a system of 'communities', defined as:

...a group of people sharing a common interest or practice, whose purpose is to share knowledge and experiences, help each other to learn, act as a support network and sometimes as an informal center of excellence.

THE SEVEN C's OF COMMUNITIES

- **Context** — the community sets the context for knowledge sharing and creation
- **Contribution** — members know where and how to contribute
- **Creation** — knowledge is created through the interaction of members
- **Collaboration** — members collaborate to build on each other's ideas
- **Consensus** — members agree on best practices and how to take ideas forward
- **Content** — knowledge is captured as reusable content
- **Capitalization** — the organization can exploit new knowledge and best practices.

TIPS TO GET IT WORKING TO GOOD EFFECT

Communities do need a certain amount of nurturing to develop. If you've

identified a potentially useful knowledge community within your organization, here are some tips to get it working to good effect:

- Identify a core group of people with the motivation and commitment to get it started
- Make sure that the group has a leader who can manage the context of the community, so that when the context shifts the community can respond like a team would
- Hold regular meetings
- Enlist management support
- Ensure access to appropriate technology
- Give the group self–governance
- Pay attention to team building, especially by helping new members of the community to feel welcome and comfortable and able to participate actively and constructively.

KNOWLEDGE MANAGEMENT IN PRACTICE

Theory is one thing, practice quite another. Some of the world's most successful companies have adopted a knowledge management approach as the best way to maximize the value of their own knowledge assets and to build good strategic partnerships and customer relations.

- ### APPROACHES TO KNOWLEDGE MANAGEMENT

Skyrme (1998) reports that in analyzing the way that over 100 organizations apply knowledge management, two main approaches have been identified:

Sharing existing knowledge so that organizations don't reinvent the wheel because the knowledge they need is available but not known to them.

Creating new knowledge and converting it into new products, services and processes, enabling better, faster innovation.

Skyrme found that in both approaches, organizations tend to focus on a few knowledge 'levers' to strengthen their knowledge-building efforts:

- **Customer knowledge** — develop deep knowledge-sharing relationships, and understand the needs of your customers' customers
- **Stakeholder relationships** — improve knowledge flows between suppliers, employees, shareholders
- **Business environment insights** — systematically scan your political, economic environment, etc. and monitor what your competitors are doing
- **Organizational memory** — share knowledge through best practice databases, directories of expertise, intranets
- **Knowledge in processes** — embed knowledge into business processes and management decision making

The knowledge created within an organization must add value (Tissen et al. 1998). If the creation of knowledge is to be successfully directed, then the people involved in it must be too.

- **IMPROVING KNOWLEDGE MANAGEMENT**
- Create knowledge databases of best practice, expertise, client profiles, legislative developments
- Create a knowledge map (a visual representation of information and relationships)
- Actively manage processes for collecting, classifying, storing and disseminating information
- Develop knowledge centers that are focal points for specific knowledge, and knowledge webs — networks of experts
- Introduce collaborative technologies like intranets or groupware
- Appoint a senior executive to be responsible for the knowledge initiative.

STEPS TO KNOWLEDGE MOBILIZATION

To summarize, let's try and pull together all the different aspects of making the most of knowledge assets. Paul Miller (1998) provides a good overview of the process which he calls 'knowledge mobilization', shown in Figure 9.

Figure 9. ***The 12 steps to knowledge mobilization***

Source: *Adapted from Miller* (1998)

STEPS TO KNOWLEDGE MOBILIZATION

Let's look at these steps in more detail, with examples provided by Miller (1998) that illustrate how some organizations have put theory into practice:

- **Start with a business strategy** — before you start changing things, you must understand the business strategy to which knowledge mobilization can contribute.
- **Create a knowledge-sharing culture** — easier said than done! But if

your culture is one that says ‘knowledge is power’ and your pay and benefits system rewards the notice of knowledge, then the system has to change.

- **Get the right structure** — flatter organizational structures (rather than many hierarchical levels) encourage knowledge sharing.
- **Create a dedicated team** — changing culture is a major initiative and needs a dedicated team to push it forward. This team will raise the knowledge profile and publicize the organization's commitment to knowledge sharing.
- **Help people to feel secure** — employees don’t willingly share knowledge if they feel their jobs are under threat, and organizations must acknowledge this.
- **Reward those who share knowledge** — knowledge contributions need to be recognized in the pay structure.
- **Ensure commitment from the top** — the role of the CEO is essential to culture change. Employees need to see top management promoting knowledge sharing if they are expected to do so.
- **Capture soft knowledge** — connect people with people, and create multilevel networks to capture soft knowledge.
- **Handle technology with care** — technology can enable knowledge mobilization, but it’s useless without the necessary culture.
- **Maximize employee know-how through active learning** — cascade learning throughout the organization — cross-functional knowledge sharing increases awareness of roles and responsibilities.
- **Persist and measure** — when people leave, they take their training and know-how with them. Organizations need to capture that knowledge.

Share with other companies and get a win-win strategy — be open to the idea of sharing non-sensitive information with other companies.