DATA PROTECTION

Another aspect of information security is data protection. One of the effects of increasing globalization of business activities and cross–border data transactions has been to raise awareness of the need to safeguard personal details which are held in either manual or electronic systems.

Several basic principles of data protection have now been established and codified in law. For example, in the UK, anyone processing personal data must comply with the enforceable principles of good practice.

These are that personal data (which includes facts and opinions, and information regarding the intentions of the holder of the data towards the individual) must be:

- fairly and lawfully processed
- processed for limited purposes (for example legitimate business purposes)
- adequate, relevant and not excessive
- accurate
- not kept longer than necessary
- processed in accordance with the data subject's rights
- secure
- not transferred to other countries without adequate protection.

Every organization, whether government, public or private sector, needs to devise its own specific security arrangements. The following provides a useful checklist of good practice in information security management.

Good practice in information security management:

- Draw up a security policy document
- Allocate specific security responsibilities
- Institute security awareness and training programs for staff

- Have a formal reporting procedure for security incidents, and make sure that staff are aware of it
- Implement good antivirus controls, updated daily (a problem here can be with mobile staff who spend a lot of time on the road and forget to update)
- Identify risks to business operations and develop disaster plans
- Control proprietary software copying ─ make sure that only software developed by or licensed to the company is used
- Safeguard organizational records to protect them from loss or falsification
- Comply with your country's data protection legislation and ensure that the information you record is only used for general business purposes
- Monitor compliance with security policy throughout the organization and review arrangements periodically.

HOW DO YOU MANAGE KNOWLEDGE?

One of the problems in trying to define knowledge management is that it is sometimes difficult to see how it differs from information management. Swan et al. (2000) see the two as being very closely associated, with each interacting with the other. See Figure 5.
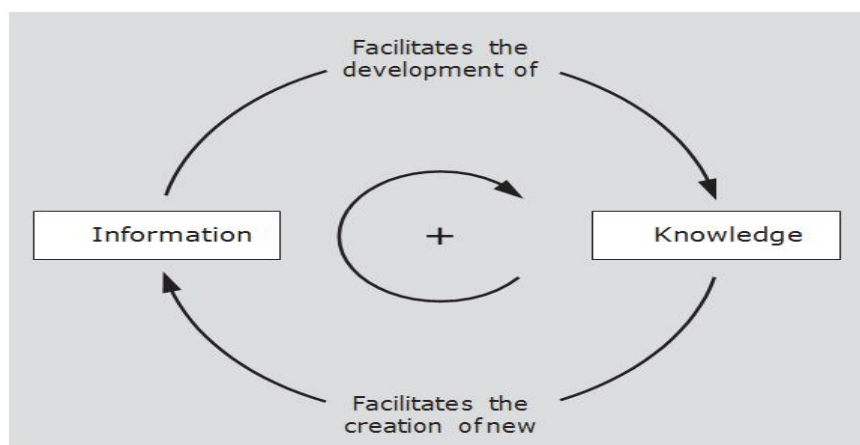

Figure 5. *The dynamic relationship between information and knowledge*

KNOWLEDGE MANAGEMENT

Knowledge Management is the **explicit** and **systematic** management of **vital knowledge** and its associated **processes** of creating, gathering, organizing, diffusion, use and exploitation.

It requires turning personal knowledge into corporate knowledge that can be widely shared throughout an organization and appropriately applied.

EXPLICIT KNOWLEDGE

This is formal, easily identifiable and general knowledge, the sort you find in mathematical expressions, or specifications and manuals. Because it is explicit and obvious, it can easily be transmitted between individuals.

TACIT KNOWLEDGE

This is difficult to articulate, as it is personal, 'hidden' knowledge, embedded in an individual's experience and colored by their personal beliefs and values.

BUILDING BLOCKS OF KNOWLEDGE CREATION

These are the two basic building blocks of knowledge creation. The assumption is that *knowledge is created through the dynamic interaction between explicit and tacit knowledge.*

For organizations to succeed, they need to find ways to make explicit and share the wealth of tacit knowledge that is locked up within individual employees' experience.

Nonaka and Takeuchi saw the explicit/tacit relationship as a spiral process, in which interaction takes place repeatedly. Willard (1999) reworked and simplified their original spiral (see Figure 6), and sees the sequence in this way:

- Someone has a bright idea, and finds a way (sometimes easily, sometimes with great difficulty) of expressing that idea. This means that the idea moves from the tacit *(personal knowledge and experience)* to the *explicit* — expressed in a way that everyone can understand.
- The person who had the idea combines this with other known elements to form some kind of context (so we have *explicit* added to *explicit*).
- This is then communicated to colleagues, who begin to 'get the picture' and start to think about it on the basis of their own knowledge (so the *explicit* idea moves to *tacit* reflection and analysis).
- Through discussion the idea grows and develops, and colleagues all contribute to the implicit understanding that builds up (adding *tacit* to *tacit*).
- New ways are found to express the idea, more people are informed and the idea is increasingly combined to present a bigger idea (and so on).
- The new understanding is now institutionalized — turned into a working procedure or implemented as a working practice or rule.
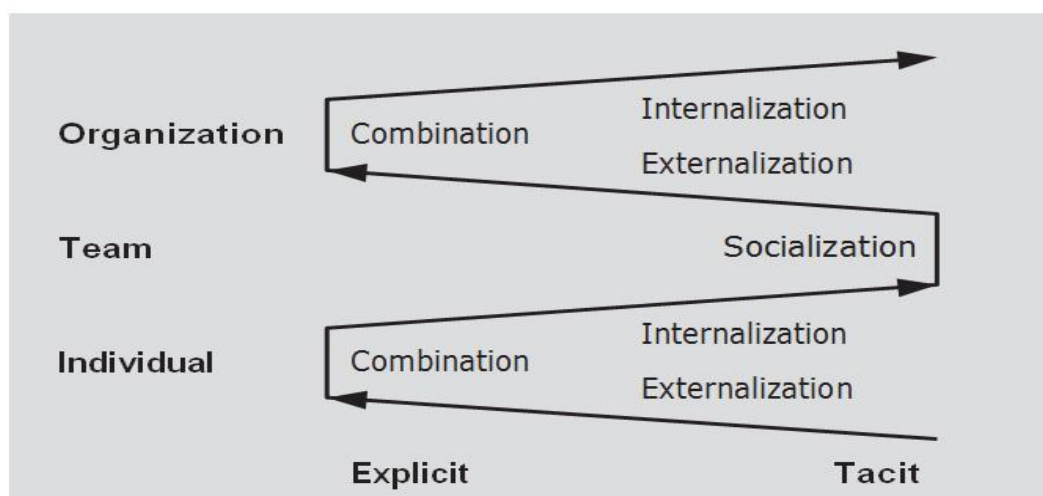

Figure 6. *The knowledge spiral*

Source: *Willard* (1999)