

Tobin builds knowledge infrastructure

Engineering is a knowledge business and pro-active knowledge management coupled with Continuing Professional Development are key strategic tools in strengthening that business, writes Eamonn Harrigan, Finance Director with Tobin Consulting Engineers where a KM strategy has been successfully implemented.

Our embrace of a knowledge management approach had its roots in a strategic development initiative launched within the firm in 2001. This culminated in the launch of the Tobin Consulting Engineers Strategic Plan 2004-2009 which identified seven strategic objectives. One of these objectives is “Maximising the value of Tobin’s knowledge assets, knowledge infrastructure, and knowledge processing capabilities”. The proactive KM strategy came about originally through recognising that the value in our business is primarily based on the knowledge of our skilled professionals. We add value to our business by capturing, leveraging and disseminating that knowledge through our organisation.

“Walking goodwill”

The firm’s initial commitment to KM was premised on the fact that we are a knowledge business. For this type of business there are no substantial physical fixed assets or inventory. Rather the real assets of the business are the people, their knowledge and contacts. This “walking goodwill” is the value of the business and therefore any enhancement of this through proactive KM coupled with Continuing Professional Development benefits the company. In addition, with the pace of technological change it is clear that all employees should be encouraged to upskill on a regular basis.

There were six important initial steps in establishing the KM strategy:

- Setting up of a KM Group
- Reorganisation of Directory and Subdirectory structures on company servers
- Amendment of our CPD system to capture and collate knowledge
- Reorganisation of the company hard and soft copy libraries
- Regular in-house seminars/presentations by employees with specific skills/knowledge
- Development of a Tobin Intranet which acts as the main point of entry to the KM system. The ongoing improvement of this intranet has given the firm a framework on which to base the KM system.

Culture change

There were several challenges to be faced in the process:

- Technical difficulties – a substantial investment was required in software

- Change management – a subtle culture change was required to encourage, facilitate and reward knowledge sharing. This is an ongoing process and takes significant time and effort.
- Time availability – in a busy working environment it is difficult to persuade key personnel of the value of using time to further company-wide improvements which do not immediately show added value.

It is a costly process because the initial resources required are of necessity at a high level. In common with any other business initiatives in order to be successful there is a need for top management commitment and this time is of its nature expensive. The process needs to be developed at this level and pushed out to other levels in the organisation in a series of clear tasks if the costs are to be controlled.

Involving the engineer

It was and is onerous to take on this project. Due to its perceived “soft” nature, it can be difficult to engender interest among engineers. In a busy demanding workplace a demand for further time input from an engineer must be carefully thought out. Engineers involved in project work do not have a surplus of available time and the roll-out must be carefully managed to convince employees of the benefits and the practicality of the system.

The initial impact of the strategy was immediate based on the reorganisation of the company server. A standard subdirectory structure was set up for each project and, with a small amount of training; this very quickly began to show value in terms of locating quickly and easily all necessary documentation. This also supported the document control requirements of our ISO 9001 2000 system. A second early and very clear benefit was the identification, through the CPD system, of in-house experts. This system enables us to build small teams around these experts to ensure the knowledge is disseminated. It allows us to grow the business but also ensures that the company is not over-dependent on any one individual. Another key impact was the identification of skills gaps thereby giving focus to both our recruitment and training strategies.

The KM focus has benefited the firm from the individual perspective of each engineer and collectively as an organisation.

Individual Engineer Benefits

- Ability to identify easily who to contact
- Recognition for one’s knowledge and skills
- Enables career development through planned knowledge development
- Improves both internal and external marketability

Organisational Benefits

- Identification of critical areas of knowledge
- Recognition of skills gaps
- Identification of in house experts

- Organisation of existing knowledge to make it easily and quickly accessible
- Encouragement and recognition of knowledge sharing
- Assists development of Communities of Practice – interdepartmental groups with a common interest
- With a geographical spread of offices the KM system provides a structured system of linkages.
- Enables expansion of the services offered
- Prevents/reduces reinvention of the wheel
- Makes it easier and quicker for new staff to integrate and to learn company systems
- Lack of KM can be a severe hindrance to growth

Strategic measures

It is difficult to precisely allocate a correlation between KM implementation and bottom line improvement. The KM initiative in Tobin Consulting Engineers is part of an overall series of strategic measures contained in the company strategic plan. KM is one of seven strategic objectives which have combined to deliver improved performance. The overall strategic plan implementation has led to increases in turnover year on year and more importantly in profitability. The other objectives are also intrinsically linked to the KM objective and none of these objectives are self-sufficient.

Knowledge Management is an ongoing process. The Tobin Intranet is a key tool in the ongoing development of KM. This is being redesigned and actively promoted to employees as a means of knowledge sharing.

Ongoing process

In tandem with the KM drive the Project Management system is being improved and incorporates project initiation, implementation and closure. A formal review process is part of project implementation and this process identifies project specific issues and therefore lessons learned. This data is now being captured and will form the basis of a lessons learned database – to include both project-specific lessons and generic lessons.

Further development of the Communities of Practice concept is planned to enable us to create centres of expertise in particular areas which cross geographical and interdepartmental boundaries.

The firm as a whole is going through a planned growth phase and the KM initiative has been essential in supporting this. In a smaller firm KM is really taken as read – everybody knows everybody and has a good idea of their skills and competences. As the firm has enlarged this personal contact with all employees becomes much more difficult and must be supplemented with more formal methods of capturing and disseminating knowledge. By developing our KM process we have ultimately assisted the planned growth of the firm.

Lessons learned

To sum up, our experience yielded a number of important lessons on KM implementation:

- Careful planning is essential
- Expensive in terms of time and finance
- Needs a champion or several – it is very important to get a few key people to enthusiastically take on KM at the outset. This will both drive and drag others along.
- Must be properly developed into clear steps before being rolled out
- Must be rolled out in bite size pieces – early wins are essential to provide encouragement. Improved information access at an early stage gives tangible benefits – people can find information more easily. It is more difficult to demonstrate the benefits from capturing the “soft” or tacit knowledge. There is however great value in extending KM beyond “where is” knowledge and into “how to” knowledge.
- Each step must deliver an identifiable benefit – this will be difficult to quantify but employees must at least intuitively understand the benefit in order to generate enthusiasm
- KM should be part of overall strategic development – it permeates the whole business management system and should not be seen as a stand-alone process.
- KM process is one of continuous development.
- KM includes many day-to-day activities (telephone calls, conversations, brainstorming...). The system should promote, facilitate and support these and other interlinked activities. It would be a mistake to assume there is a single IT solution to implement a KM system.
- Properly managed KM can mitigate the impact of the loss of key employees.
- The rewards in financial terms and in the way the culture of a company can be changed are significant and worth the effort.

