Human Capacity - Building for the Future

Over the last decade many cadastral agencies have made significant investments in hardware, software and in upgrading their data. New land information systems have been created and the story has now moved from â€˜design and buildâ€™ to â€˜sustain and maintainâ€™. Part of the process of upgrading systems has involved â€˜capacity buildingâ€™. This was seen mainly in the context of training people to push the right buttons. Now it is about training managers and developing skills in business and human resource management.

In many mapping and cadastral agencies, senior managers have traditionally come from the ranks of the juniors with promotion based on age, experience and proven competence. New members of staff have been recruited from the universities and worked their way up through the organisation, acquiring managerial skills as they went along. Management has been â€˜caughtâ€™ not â€˜taughtâ€™. Today senior managers are being recruited from outside the geomatics industry because internal candidates lack the necessary skills and experience.
This is due in part to weaknesses in the university system. It is indisputable that many university geomatics departments have extremely capable staff with appropriate technological skills. There are many good teachers and many good researchers. But do the courses that they offer provide adequate training in business and management? If a cadastral agency, for example, decides to improve the management skills of its staff, can local geomatics departments offer any help with the training?

In many countries the answer is simply â€˜noâ€™. Many geomatics departments are struggling to keep up with technology and are forced to train their students on out-of-date hardware and software. Single pieces of equipment may have been acquired as part of a research contract, but the more time that academic staff must spend on research the less time they have for teaching. A lack of equipment is especially acute in many former communist countries.

If the long-term sustainability of cadastral and other mapping agencies is to be secured then there must be a change in the content of many geomatics courses and much more emphasis on business and management skills. Funding is needed not only to provide better equipment but also to allow teaching staff to spend time in industry, getting to understand the new culture in which their students will be working. In the old days university staff were encouraged to take a â€˜sabbaticalâ€™ but the pace of change is now so fast that a year off every seven years is too long and too infrequent.
But who should pay for this continuing professional development and for the continuous upgrade of technology in university geomatics departments? Vice-chancellors are unlikely to be sympathetic to special pleading and, given the tight budgets that they are required to operate, they can always find more attractive projects than subsidising geomatics. Universities in many parts of Europe need help, especially in countries that have been or are in transition. But sustainability does not come cheap. The bottom line is that the industry itself must invest much more in its own future by finding the necessary funds to pay for its seed corn.