

The UK Information Systems Perspective: A Personal View

David AVISON

Professor of Information Systems at ESSEC Business School, Paris

ABSTRACT

This brief paper provides an overview of the information systems discipline in the UK. It does not pretend to be 'objective'. It is my interpretation of the UK IS 'scene' which I hope will be of interest to French readers

Key-words: Academic societies, Curricula, Journals, Courses.

RÉSUMÉ

Ce bref article fournit une vue générale sur la discipline des systèmes d'information en Grande-Bretagne. Il ne prétend pas être « objectif ». C'est mon interprétation de la « scène » des systèmes d'information anglais, laquelle intéressera les lecteurs français.

Mots-clés : Corps académique, Programmes scolaires, Revues, Cours.

I will look first at IS teaching in UK universities. Information systems is a fairly new discipline, with academic departments being formed first in the UK at the ex-polytechnics in the 1970s. Polytechnics were associated in particular with meeting skills shortages in industry. Comparatively large IS groups were formed at that time at Bristol, Hatfield, Leicester, Manchester and Thames Polytechnics, amongst others. Most universities, the old and 'new' (that is, the ex-polytechnics) now have courses in IS. There are 90 university departments teaching IS courses in the UK. Presently, the leading universities in the discipline are probably (in alphabetical order) Brunel, LSE and Salford. They are strong research as well as strong teaching groups.

Again, there is no agreed content for a course in information systems. The main areas of difference between courses concern the emphasis placed on technological aspects on the one hand and the organisational and social on the other. Hence IS academics who do not belong to an IS department, are fairly equally split between computer science departments and management schools in the UK (in the US, the majority are based in business schools). Some IS academics belong to very small groups.

It was partly because of the isolation felt by some IS academics that the UKAIS was formed in 1995. There are many parallels with AIM in France. The cost of membership has remained stable at 25 pounds (around 40 euros), research students paying only 10 pounds (around 16 euros), and the membership has remained steady at

around 250-300 fee-paying members (there are around 600 academics teaching IS in the UK). Of the members, only about 20% are female.

There are seven members of the Board of the UKAIS which meets four times a year and there is an annual general meeting for all members. The president has a two-year reign and there is usually a contested election for president and for membership of the Board. The UKAIS supports an annual conference, PhD consortia, workshops, regional groups and a quarterly newsletter. However, its formation was also a reaction to the lack of recognition of IS as a growing and important academic discipline in universities and also because of poor government funding for IS research and teaching. It therefore attempts to act as a pressure group for IS academics.

A recent survey suggested that more than 300 students were studying for a PhD in information systems in the UK. In fact, the UK PhD consortium had been running since 1991 (four years previous to the UKAIS being formed). It is a bigger event than the AIM consortium. It normally runs for three days each year and enables PhD students in the UK to present their research to their peers and faculty. Typically, there will be around 25 to 30 research students and 9 to 12 faculty at the consortium. Experienced research supervisors comment on the students' work (usually in groups of 8 staff and students) and they also give plenary sessions about the PhD process (for example, literature search, organising your supervisor, research methods, getting published and the viva). The consortia have proved very successful. Many successful PhD

students do not enter academia, being tempted by industry and business, nor has it proved particularly attractive to more senior people, so that there are many unfulfilled academic posts in universities at all levels

IS research in the UK is very varied. Topics include managing organisational change, economic aspects, productivity tools, information systems development, database modelling (and modelling in general), personal computing, office technology, competitive implications, expert systems and the impact of IT on the nature of work. Traditionally much IS research that has been published was based on the interpretation of questionnaire/surveys. UK-based journals (amongst others, most notably the *Scandinavian Journal of Information Systems*) have led the way in attracting and publishing alternative approaches to IS research, including action research, hermeneutics, ethnography, critical thinking, agency theory, speech act theory, structuration theory, post-modernist theory, grounded theory, feminist theory, personal construct theory and phenomenological research.

UK IS graduates are employed in many employment settings. They may perform a non-IS role in an organisation which in addition requires some IS/IT knowledge and experience. On the other hand, they may be employed as the 'e-commerce expert', webmaster, IS developer and so on. Their employment potential has been consistently high and few are tempted to start a PhD and, as we have seen few then choose an academic life.

In 1997 we had a two-day research supervisors' workshop. This was partly

a response to feedback from PhD consortia which suggested that many criticisms of PhD students related to poor supervision and we wished therefore to improve the general standard of supervision. There were about 40 academics present at this event. Experienced supervisors discussed their methods of supervision, some *laissez-faire*, but others much more structured and programmed, somewhat similar to the DEA in France. Feedback from this event was very positive, but we have tried to hold other supervisors' workshops in later years without success. There were not enough applicants. This is a particular regret of mine. There are a large number of PhD consortia internationally and they do highlight an inconsistency in the level of supervision that research students receive. I am organising an event of this kind for IFIP at Athens in June 2003.

Like the AIM conferences, the UKAIS conference has been a very successful annual event. It has grown from around 80 participants to 150. A feature is the refereeing process which is not rigorous and permits less experienced academics and research students to present their first conference paper. Most submissions which are related to information systems and therefore appropriate to the conference are accepted. There is a supportive atmosphere at the conference. The proceedings are produced professionally in book form. There are also regular meetings in the regions (there are now seven regional groups). Regional meetings may consist of one day workshops, evening seminars and similar events.

The UKAIS has an excellent web site (<http://www.cs.york.ac.uk/cgi-bin/ukais>) and publishes a quarterly newsletter, mailed to members but also obtainable via the web site. Membership provides reduced-price personal subscriptions of major journals (for example, that of the Information Systems Journal is halved). Again, AIM could negotiate similar deals with journal publishers.

The UKAIS has been much less successful in its impact as a pressure group on outside bodies. One aspect has been the UK research assessment exercise. This relates to UK government funding of research to university groups. This is organised through panels of peers assessing research groups in universities. It has been a source of contention that information systems has not been a separate unit of assessment. IS academics have been assessed mainly in the business and management panel, but also in the computer science panel and the library and information management panel. So IS academics in the UK have seemed a disparate group. In 2001, the third RAE in over ten years, the Library and Information Management unit of assessment was perhaps the most appropriate panel as there were two panel members sympathetic to IS (Trevor Wood-Harper and Ray Paul). However many IS academics have still been included in either the business or the computer science panels for assessment.

Research monies are difficult to obtain from government sources. Indeed most monies for research comes from business and industry. There are two relevant government funding bodies. These are the Economics and Social Research

council (ESRC) and the Engineering and Physical Science Research Council (EPSRC). Many IS academics are of the view that IS is not very successful because it 'falls between' the two funding bodies – it is neither a conventional social science discipline nor a conventional engineering or science one.

Again, IS academics have not made a general impact on UK business and government. To give a comparison, I was particularly impressed by the meeting on e-business that took place before the AIM conference in Nantes in the presence of the minister and leading business people. IS academics in the UK have not made this type of impact. Yet according to the professional body, the Alliance for Information Systems Skills there are 600,000 IS professionals in the UK with many unfulfilled posts, so the need is there.

Another equally disappointing group in this respect has been the UK Committee of Professors and Heads of IS departments. This is an invited group of experienced IS academics, meeting largely informally, to discuss matters of interest with a view to acting as a pressure group. Meetings have been interesting to academics, but it has made little outside impact.

The UKAIS has also suggested an agreed definition and core syllabus for information systems. The core syllabus includes:

- Theoretical underpinnings of IS;
- Data, information and knowledge management;
- Integration of information systems with organisational strategy and development;

- Information systems design;
- Development and maintenance of IS;
- Information and communication technologies as components of IS;
- Management of information systems and services;
- Organisational, social and cultural effects of technology-based IS;
- Economic effects of technology-based IS.

Perhaps this gives greater emphasis to management aspects rather than technological aspects.

Other courses might be added to the above list to give a particular 'flavour' to a university degree or postgraduate qualification or offered as options:

- Information security and privacy;
- Medical informatics (or another speciality);
- E-commerce, multi-media (or another 'fashionable' topic);
- Project management;
- Software engineering;
- Database management;
- Artificial intelligence and expert systems;
- Marketing and other business courses;
- Consultancy.

Accreditation of courses has been debated frequently, but courses in IS are not accredited by professional bodies apart from the more technical ones which might be accredited by the British Computer Society.

Two pioneers in our field in the UK have been Enid Mumford and Frank Land. Both have stressed the human and social aspects in information systems work, Mumford being influenced by her time at the Tavistock Institute in London. Her work and influences are perhaps best seen in Mumford (1996). Here Enid discusses writers (like Mary Follett), company policies (like 4C international), the Tavistock tradition, and cases where she was involved (e.g. Rolls Royce). A much-quoted paper is Land (1985) which looks at some of the fundamentals of our subject. Frank Land was a pioneer at Lyons Electronic Office (LEO) a first commercial computer system in the UK. He also set up the first Masters course at LSE in the UK. Another influential figure has been Peter Checkland. Though not part of the information systems movement, his work on systems thinking (Checkland, 1981) has helped to place the emphasis on organisational understanding (soft thinking) rather than technical solutions (hard thinking) that the subject attracts in the UK. The best selling IS text is apparently Avison and Fitzgerald (2002) on information systems development. This is one of (if not the) main foci of the subject in the UK and this book covers a number of methodologies, techniques and tools (an equivalent American text tends to concentrate on one approach).

There are a number of journals that are internationally recognised but are published from the UK. They include European Journal of Information Systems, Information Systems Journal, International Journal of Strategic Information Systems and Journal of Information Technology, which have all been publi-

shed for over ten years. The Butterworth-Heinemann series of texts in information systems is also edited in the UK. It replaces the McGraw-Hill series developed over ten years but now defunct.

Despite all the reservations in the above discussion, the academic world of information systems is strong in the UK. We have a very active academic association, several notable journals, a series of texts, many courses at all levels that are well attended with high quality students and an unsatisfied demand for teachers and researchers in the discipline.

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