Editorial

25th anniversary edition

Journal of Information Technology (2010) **25**, 333–335. doi:10.1057/jit.2010.38

At the *Journal of Information Technology* (JIT), we print an editorial only for special issues and special occasions. This issue sees the completion of our 25th full volume and as such we are treating it as cause for celebration – hence our silver anniversary cover.

It is all too obvious that the world of information technology (IT), has been transformed since 1986. Indeed, the technology then was hardly pervasive – personal computers were in their infancy. While there were many predictions, nobody could say with confidence how the technology and its use in organisations and society would play out. E-mail was clunky, expert systems were attracting much attention and artificial intelligence was the sexy field in which to work. Nobody talked of knowledge management, business process re-engineering, websites or browsers, enterprise systems or social networking. Indeed, though outsourcing had existed since the very start of business computing, in 1986 the term had not yet entered common currency. So, the last 25 years have given those working in the field of information systems (IS) an enormously stimulating roller coaster ride.

So, with the dominant issues in the field changing by the year it has been exhilarating but also very challenging to take the *JIT* on a journey to establish its identity and place among the leading journals in information systems. And just as the past has been unpredictable, the signs are that the future will not be easy either for academic journals or for the field of information systems. Time, then, to do some reflection. This issue aims to capture that unpredictability while this editorial takes some of the points in the articles and relates them to the journal's aspirations for the future. While we may not be able to say precisely where we are going or where we will be 25 years from now, we know the compass by which we shall navigate.

Starting, then, with this issue, we asked Allen Lee if he would, as a senior scholar, write both a retrospective and a prospective assessment of the information systems field. He has produced – *Retrospect and Prospect: Information Systems Research in the Last and Next 25 Years*. Here, he poses a challenge – that our development of knowledge should be more constructivist and design science oriented than at present but from within our typical locus in universities, viz in the business schools and commerce faculties. Unlike, say, organisational behaviour, the field has not been stable for long enough for all its knowledge to be built cumulatively by hypothetico-deductive research. But, this is a provocation to the established disciplines and also a challenge to the IS journals. Can we achieve and retain sufficient respectability in the eyes of our peers while operating under different epistemic norms? Allen Lee shows that taken-for-granted concepts such as 'information',

'theory', 'system', 'organization', and 'relevance' need to be rethought and poses the challenge that the future development of the IS field may be better modelled on the research disciplines found in the professions, including medicine, engineering, architecture, and law.

His insights and provocations are commented upon and extended by four interlocutors. Writing as a declared IS 'native', Mats Lundeborg is sympathetic to Lee's perspective and focuses on the ramifications for research approaches, in particular commenting on problematising 'theories in use' and 'espoused theories', balancing prescriptions and general direction, and working with different levels of abstraction. Richard Baskerville welcomes Lee's revisiting of systems theory but also argues that, in Lee's perspective, technology seems more conceptually separated from organisational systems than reality might allow, and invites a further extension of Lee's concerns on 'organization'. Baskerville also offers a nuanced deliberation on the role of theory in IS, and points to the challenges involved in the anxiety to 'scienc-ify' the IS field, and the gulf between what and how IS is researched, and how it is taught, agreeing the need to anchor future scientific studies to problems of practice, but by anchoring bridges on both sides of the gulf.

In his response to Allen Lee's paper, Robert Davison argues that in some respects the changes need to be more radical than Lee suggests, including in the way Ph.D. students are trained, in the selection criteria for new teachers, and how leading journals support different types of research. Davison goes on to argue that emerging markets, particularly India and China, may also change approaches and assumptions in the IS field, though he worries that at the moment, a Western intellectual hegemony is being perpetuated in these countries rather than being reshaped. He employs a number of insights into the culture and politics of the IS field to support this contention, and suggests more context-sensitive problem shaping and research is necessary, and more questioning of dogmatic beliefs and taken-for-granted assumptions that are rife in the IS field.

Chrisanthi Avgerou extends Davison's concerns by arguing for richness and diversity in the IS field. She questions Lee's suggested programme, wondering about the validity of the detection of common theories-in-use for a few fundamental concepts across the whole IS field, and also wary of its consequences. She argues that, in fact, the coexistence of alternative theories for an observed phenomenon is the norm rather than the exception, both in the natural and the social sciences. Moreover, there are institutional obstacles to publishing some types of research, for example, well founded socio-theoretical research, and design research. These obstacles should not be misdiagnosed

as across the field epistemological weaknesses. Aygerou also argues that Lee probably underplays the historical, social, and intellectual evolution of the five fundamental IS concepts he addresses, and worries that choosing between becoming a science of the natural and science of the artificial in systems theory terms 'is a dilemma dangerously narrowing our research routes. IS has historically developed a broader epistemological scope, including science of the social, the economic, the socio-technical'.

Our second paper is *Houston, we've had a problem Offshoring, IS employment and the IS discipline: Perception is not Reality*. Here, Rudy Hirschheim and Mike Newman present their thoughts on a different challenge to the field – the perception that jobs in information systems are going offshore. One result is declining enrolments. How accurate is the perception? What are the implications for redesigning courses to meet the needs of the next generation of IS workers? What are the consequences for the IS field? This last question relates both to the existence of IS departments as a substantial unit of a school or faculty and to the focus of academic activity, particularly research. If certain types of work are migrated offshore then it will be less important to teach and research knowledge relevant to them.

This paper attracted five responses within the deadline set. Erran Carmel takes a macro-perspective and argues that the business model needs to be changed. He suggests that IS students can be imported to fill higher education and job gaps in the United States and western countries that experience the same phenomenon described by Hirschheim and Newman. Carmel offers three initiatives in order to attract immigrant students and human capital. Erik Beulen supports the notion that the number of IS jobs in developed countries will decline sharply in the near future but sees no reason to be unduly pessimistic. Job losses will be in IT supply delivery. These can be partially offset by focusing on education and job development in areas such as strategy creation and information exploitation, including information economics and project management. The implication is that IS education programmes will need to be redesigned vigorously, and in work organizations IS job rotation will need to be more extensive. In a third response, Amar Gupta argues for a broadening of the focus to include different knowledge-based industries, and associated legal, intellectual property, accounting, taxation, and other relevant issues. This has implications for broadening the mindsets and activities of IS professionals, for what IS journals publish, and for what other issues and fields, that are IS laden, we should be interested in. Gupta also suggest that the offshoring phenomenon is considerably more complex than the straightforward 'us' vs 'them' all too often portrayed in the public realm, and ignores how, over time, a more hybrid model is developing.

In another response to the Hirschheim and Newman paper, Michelle Kaarst-Brown offers differing views on how the IS field should deal with the misperceptions that, she agrees, do exist. She suggests that the idea of IS faculty becoming more active in promoting a different picture of the IT jobs available is over-optimistic about both IS academics' marketing skills and the time and resources available. She also points to the difficult challenges to IS provided by the turf wars and cultural barriers residing in university and education institutions. She also suggests that

Hirschheim and Newman miss an important cultural consideration in their analysis of why IT jobs are not perceived as attractive – that students (or their parents) are unable to truly understand the 'IT Occupational culture' until they have actually done the job: 'Just as not everyone wants the occupational culture attributed to careers in medicine or law, not everyone wants what they perceive to be the IT occupational culture'. Ultimately, for Kaarst-Brown, IS faculty can help with these challenges, but before then a larger, more systemic solution is needed, starting with strong leadership and resources provided by university management.

In a final response, Rajiv Sabherwal offers a broader view of the problems underlying low IS enrolments. For him, while perceived job opportunities is an important consideration for students deciding on college majors, it is only one of three major factors. Selection of IS as the field of study is also inhibited by some prospective students not understanding it. Moreover, prospective students often consider IS curricula and careers as technical, difficult, or boring, despite some of the most successful companies of the modern era (e.g., Amazon, Apple, Google) obtaining and using information in innovative ways, and creating and deploying new ITs. These issues need to be more central in the IS curricula, while IS departments 'should highlight that the IS profession is not all about technology, but instead involves sustained interactions with people'. Thus, for Sabherwal, a number of practical changes to the IS curriculum are needed to increase IS enrolments, not least being to emphasise information, ITs, and ISs, instead of focusing on ISs alone; to channel the excitement related to emergent technologies and practices; and to highlight the opportunity to work with people and technology.

Our third paper is entitled *The use of history in IS research: an opportunity missed?* It is by Frank Land – who, with Igor Aleksander, was a founding Editor of *JIT*. The paper offers a perspective on a dimension that has, Frank Land argues, been substantially missing from IS research – the historical dimension. It would be hard to argue against this basic contention. The more general moral it represents is that IS has not been as catholic in its approach to research as it should have been. The pressure to establish design science as legitimate is further evidence of this. And Allen Lee and others' crusade in the 1990s and early 2000s to gain acceptance in the top journals of case study research further makes the point that the process of developing and diversifying our approach to research has been a continuing journey. It may be many years before we are fully confident that we can accept all relevant types of research.

So, while these three articles represent a critique of aspects of IS, Mary Lacity, and her colleagues make a different contribution to this celebratory issue. The *JIT* has been one of the principle outlets for research on outsourcing. It is, therefore, fitting that two of the leading researchers in the field, Mary Lacity and Leslie Willcocks, together with their colleagues should offer a compendious overview of outsourcing research – what has been studied, by whom, and with what findings.

Ulrike Schultze, likewise, offers a review but in this case more as stimulus to other researchers to develop and publish on a topic that has received little attention in IS – the concept of presence in virtual worlds. Thus far, virtual

worlds have not figured in IS literature in a big way because they have not acquired significant application in business. She draws from a range of cognate disciplines to explore and explain the relevance of research on presence. It is appealing to think that this article might be sufficiently seminal that in 25 years' time the Journal might be publishing an overview of research on virtual worlds comparable to the Lacity *et al.* review of outsourcing.

This issue is completed by a fascinating teaching case by Janis Gogan and Ashok Rao. Set in India, it examines an unusual technology innovation relating to the security of share certificates and other important documents. It challenges students to consider the entrepreneurial opportunity afforded by the technology product and the market conditions. For the purposes of teaching about IT and entrepreneurship this case will be invaluable. The insights it offers into business in India will be valuable also to students in the West.

So, our celebratory issue highlights a number of issues that are important to the Journal. For the last 10 years we have made it our mission to publish not solely good empirical research articles. Rather, we have recognised that most academics are time-poor and that we can assist each other by sharing intellectually respectable work that is often the by-product of our research. Thus, we publish state of the art reviews, such as Lacity *et al.* in this issue, with the view that they should provide a new researcher with a readily accessible map of a research topic – what has been studied, what are the key theories and findings, where has it been published, what needs to be done. We also publish debate and perspective articles – opinion pieces – and in this issue we have sought feedback and comments on two articles, Lee's and Hirschheim and Newman's. We look to provide articles that have important points to make even though they might not be fully established through thorough research. These can help lecturers and professors as they could form the basis for a graduate seminar. We also publish teaching cases based on authors' original research so that instructors continue to have a stream of up to date cases with which to teach the essential topics of the field. We can report that, given the demand we have

experienced for this feature of the journal, we are in the process with our publishers Palgrave Macmillan of addressing this aspect more radically in early 2011. Watch this space!

We have adopted our policy of publishing this range of articles because we believe it valuable to readers and a sensible and respectable use of scholars' efforts. It is clear to us that the need is there, the website statistics on access to teaching cases and state of the art articles demonstrate this. It is likely that the need will increase. As universities experience more and more serious financial cuts, the pressure for fewer academics to deliver more will become overwhelming. It will be all the more necessary for us to share our learning and to use peers' teaching aids. If declining numbers of academics in IS are to be able to continue developing new approaches to research and pursuing new topics, then they will need all the time they can steal from other commitments.

Against the background of this editorial policy, our authors, editorial board, reviewers, and publisher have together helped us to grow the Journal's reputation and to secure a place among the Association for Information Systems' list of eight approved journals. The quality of submissions is continually increasing, and so too the volume of articles deserving publication. We have exceeded our page budget in three of the last four years. We have steadily increased our impact factor. All of these are essential to the future of IS. The progress we have made is a tribute to all involved because a journal is a community effort. We have been particularly fortunate that the Journal is owned by the Association for IT Trust. The trustees, Professor Frank Land, Professor Igor Aleksander, and Catherine Griffiths, continue to be involved in the Journal and support its development. While none of us knows what the next 25 years will bring, we hope that with continued support from the community and continued editorial flexibility and innovation we will still be publishing interesting, thought-provoking and useful contributions to our field.

Leslie Willcocks and Chris Sauer