

EDITORIAL

I have always been pleased that Behaviour and Information Technology (BIT) has lived up to its tag line of an International Journal. Published only in English, it would not be unreasonable to see papers from the UK, North America and Australia/New Zealand predominate both in terms of readership and authors. However, our figures show that authors and readers are strong throughout Europe and in Asia as a whole.

This geographical spread is welcome as an indicator that BIT is not narrow in view and also a recognition that information technology itself is global, often in ways quite hidden to users. I recently became a member of the Intech science centre in Winchester, England (www.intech-uk.com/). This ‘museum’ of technology is extremely hands-on for children of all ages (and yes I took advantage of my senior’s discount). There are several joys visiting such a stimulating set of exhibits. At any time, there are lots of enthusiastic visitors trying out everything, from controlling pucks using mind control to interactive demonstrations of the problems of citing cell phone masts. I was particularly struck by a group of teenage boys watching while Finley, my four-year-old grandson, played with a simple bouncing marble game, which involved predicting its trajectory over a series of four bounces. Given that Finley is a tech enthusiast (<http://www.slideshare.net/SystemConcepts/who-needs-an-ipad>) I was quite surprised about how much he enjoyed the mechanical exhibits. And, in another environment, such bulky, noisy lads might have seemed threatening but all they wanted to do was take their turn to play the same game.

Having originally trained in physics, I guess I knew most of the science behind the exhibits (even if I would have to have dug deep for some of the explanations). But I was truly astonished by the real time exhibit, which showed how a request from a computer in Winchester to access the Kremlin website in Moscow, was routed to a couple of hubs in the UK, then to a hub in the USA before coming back to more hubs in Europe, and finally landing in Moscow where the web server was located (all within milliseconds). Seeing this packet switching route on a world map really brought it home to me just how worldwide the web really is.

Which brings me to the point that not only is information technology global but so too are its questions and problems, research issues and indeed research methods.

The eight papers in this issue of BIT come from countries all over the world and range from Bosnia and Herzegovina, to Norway in Europe, to Taiwan and Australia in the East.

Technology adoption

The technology acceptance model (TAM) is one of the most widely used models worldwide in Information Science but is seldom linked to personality variables. In a study from Norway, Gunnvald B. Svendsen from the Telenor Corporate Development, Tromsø; Jan-Are K. Johnsen from the University Hospital of North Norway, Norwegian Centre for Integrated Care and Telemedicine, Tromsø; Live Almås Sørensen from the Norwegian Defence Education Command, Oslo; and Joar Vittersø from the Department of Psychology, University of Tromsø, report a study on the degree to which users’ assessments of the core constructs of TAM are influenced by their personality. They assessed personality using a short version of the IPIP Big Five inventory (a web-based survey method was used where users read a description of a software tool before completing personality and TAM inventories). The results indicate that personality influences behavioural intention (BI) both directly and mediated through the TAM beliefs. Personality can also influence the TAM beliefs without influencing BI.

The next paper reports a TAM study from Italy. Guendalina Capece and Domenico Campisi from the Department of Business Engineering, University of Rome explored how employees’ satisfaction using e-learning technology influences organisational learning effectiveness. Their case study involved a questionnaire survey of 5395 employees in a multinational company operating in the energy sector, who completed a questionnaire at the end of online learning activities. Their main finding is that the use of e-learning technology plays a full mediating role in the relationship between e-learning system service and measured employees satisfaction (organisational effectiveness in implementing knowledge improvement). The authors discuss the implications of this for companies with a distributed layout unable to implement conventional classroom learning and conclude that well-conducted e-learning programmes can be effective both for the company and the employee.

But it is not just at work that technology is becoming an integral part of our lives. Michaela Kauer, Heike Theuerling and Ralph Bruder from the Technische Universität Darmstadt, Institute of Ergonomics, Darmstadt, Germany, look at the growing importance of information technology in private life and argue that models developed especially for working environments do not fit well in this new environment. They argue that in this environment, the TAM is not clearly defined and that integrating it with the need-based approach from user experience research is valuable. They report an initial empirical investigation of the integrated

model using the Nintendo Wii. Their results show that identification adds great explanatory strength to the model in the case of hedonic systems and that a differentiation between usage modes is valuable for a better understanding of technology acceptance.

Staying in Europe, Semina Halilovic and Muris Cacic from the School of Economics and Business, University of Sarajevo, Sarajevo, Bosnia and Herzegovina, examine the antecedents that affect information systems (IS) users' behaviour and influence their decision to either continue or discontinue with IS use. They used two models: the expectation-confirmation model of IS continuance (ECM-IS) and the extended expectation-confirmation model of IS continuance (EECM-IS) – the ECM-IS model being extended by the additional construct of conditions of support. They report that factor analysis showed both models demonstrating good factor, convergent and discriminant validity based on the data they collected from questionnaires completed by users of the integrated accounting and budgeting software Finova. The ECM-IS model explained 49% of IS continuance intention, and EECM-IS 59%. Users' perceived conditions of support, satisfaction and perceived usefulness contributed to the users' continuance intention.

The last paper on technology adoption comes from the other side of the world, in Taiwan. Yao-Sheng Chang and Chyan Yang from the Institute of Business and Management, College of Management, National Chiao Tung University, Taipei, Taiwan, ask why we blog. They applied the TAM with media choice factors to explain and predict blog acceptance behaviours. The media choice factors include media richness, critical mass, social influence and media experience. The authors conducted an online field survey and applied the structure equation modelling method to investigate the empirical strength of the relationships in the proposed model. Five hundred and twenty-one experienced blog users took part. The results indicate that technology acceptance and media choice factors influence blog acceptance behaviours. The authors conclude their paper with some recommendations about blog behaviour.

Digital living

The first paper in this section about digital living comes from Australia. Amy Chan, Peter Caputi and Jessica Browne from the School of Psychology, University of Wollongong, and Rohan Jayasuriya from the School of Public Health and Community Medicine, University of New South Wales, Sydney, explored the relationship between novice learners' counterfactual thinking (i.e. generating 'what if' and 'if only' thoughts) about their initial training experience with a computer application and subsequent improvement in task performance. Forty-two undergraduate students with minimal experience in using computer spreadsheets underwent basic training in using Microsoft Excel. All participants were also assessed on their anticipated positive

and negative emotions regarding goal attainment at the outset. After completing their first task, one group of participants received instructions to generate counterfactual thoughts regarding their initial task performance, whereas participants in a control condition did not. The counterfactual group showed only marginally greater improvement in task performance (measured by task completion time and accuracy) than the control group. However, the authors also found that positive anticipated emotions were associated with improvement in task performance but only for the counterfactual group. The authors conclude that encouraging novice learners to think 'what if' and 'if only' should be included in information technology skills training to enhance learning outcomes.

Hsien-Tang Ko from the Industry Support Division, Institute for Information Industry, and Chi Chang and Nan-Shiun Chu from the Market Intelligence & Consulting Institute, Institute for Information Industry, all from Taipei, Taiwan, report a study on consumer demand for digital television (DTV) application services. They conducted both theoretical and empirical analyses and showed that their integrated model which includes basic products/services, value-added services, interactive services and BI can be used to explain consumer demand for DTV application services.

The final paper comes from the USA and addresses the intention to share media files over peer-to-peer (P2P) networks. Roger Blake from the Department of Management Science and Information Systems, University of Massachusetts, Boston, and Eric Kyper from the Department of Management, School of Business and Economics, Lynchburg College, Lynchburg, explain that since most file-sharing over P2P networks used to involve music files, studies of the BIs to share files often focused on piracy. However, with improved technology and increased bandwidth, large files such as videos are routinely shared. The authors explain that as industry-led efforts have had some success stemming illegal file-sharing, and as new and legitimate applications of P2P file-sharing are emerging, it was important to include media files of all types in their study. They used two models. The theory of planned behaviour (TPB) is the underlying theory for both models, one of which is based on the original TPB and one on the decomposed TPB. They tested both models using previously validated instruments and found that both models could explain a significant portion of the variance in the intentions to share media files over P2P networks. However, the model based on the decomposed TPB explained more of the variance. A second advantage of this model is that it can be more readily translated to managerial actions, which the authors also discuss.

Tom Stewart
 Founding Editor
 tom@system-concepts.com

Copyright of Behaviour & Information Technology is the property of Taylor & Francis Ltd and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.