

IT Workforce Competence Development in the Knowledge Society: Challenges and Research Directions

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AMCIS 2012 PANEL PROPOSAL

TITLE

IT Workforce Competence Development in the Knowledge Society: Challenges and Research Directions.

ABSTRACT

As organizations have increasingly invested in information technology (IT), they have looked for an IT workforce not just with technical skills but also with managerial ones. It has thus been paramount for the IT workforce to pursue a balance between two streams - the technical and the managerial one. Accordingly, the IT professionals have had difficulties to deal with the increasing technical and managerial challenges that they have been submitted to. In this context, one problem has arisen very often: the turn-away – in which the IT professional abandons the field, assuming a position in a different functional area in the same organization or in another, most often in an executive position.

OBJECTIVE

This panel aims to discuss the critical skills – technical and managerial – that are necessary for the superior performance of the IT professional, in order to create an ideal IT workforce capacity building model. Besides, this panel intends to discuss the IT professional career itself, so as to better understand the turn-away of these professionals, in order to retain and keep them motivated within the IT arena. A group of scholars from developed and developing countries will share from their research and professional practice in this area.

AUDIENCE

This panel is targeted to academics and practitioners interested in the area of IT skills and roles evolution, as well as in capacity and competence building for human resources. It aims at providing a glance of the challenges and opportunities in this arena. People from different parts of the world are particularly encouraged to attend, to shed light on potential differences among regions.

PANEL LAYOUT

The panel will initiate with a brief introduction by the moderator about the general issues on the topic, as well as their relevance for today's business environment. Each panelist will follow with a brief position statement, as described under each panelist bio. A round of questions by the moderator and interaction among panelists will follow. The session will end with an open interaction between panelists and the audience, and the conclusions summary done by the moderator.

PANELISTS (all already confirmed)

Jane Fedorowicz

Jane Fedorowicz, the Rae D. Anderson Professor of Accounting and Information Systems, holds a joint appointment in the Accountancy and Information & Process Management departments at Bentley University where she teaches courses on enterprise system configuration, business processes and internal controls. She is principal investigator of a National Science Foundation project team studying design issues for police and government agency collaboration using public safety networks. She also served as principal investigator for the Bentley Invision Project, an international research team housed at Bentley examining interorganizational information sharing and the coordination infrastructures supporting these relationships in supply chain, government, and health care. Her interdisciplinary research supports a sociotechnical perspective on organizational collaboration in both the public and private sectors. The Association for Information Systems recognized her contributions to the Information Systems field by naming her an AIS Fellow in 2006. Dr. Fedorowicz has published over 100 articles in refereed journals and conference proceedings, and coauthored a textbook entitled "Business Processes and Information Technology". She has served in a governance capacity for a number of professional associations, including the Association for Information Systems (AIS), the American Accounting Association (AAA) and the Institute for Operations Research and the Management Sciences (INFORMS). Dr. Fedorowicz earned MS and PhD degrees in Systems Sciences from The Tepper School at Carnegie Mellon University in Pittsburgh, Pennsylvania.

Dr. Fedorowicz panel topic:

Many companies are moving toward or exploring new IT work arrangements such as BYOD (Bring Your Own Device), cloud computing, data analytics, and social media support, all of which require up-to-date IT knowledge on the part of working professionals whether or not they are formally trained in IT. With the influx of new graduates who grew up amidst technology, more knowledge of IT permeates the organization, and more demands are made on IT professionals to understand the business needs of these knowledgeable and demanding users. As a result, today's IT staff must be able to incorporate business process knowledge with the fast-paced advances made in user-facing technologies. Jane Fedorowicz will discuss opportunities to research how companies (and governments) approach these advances, with an emphasis on how companies can prepare for and provide internal control over their use.

Geoffrey Dick

Geoffrey N. Dick is currently a Professor of Information Systems at North Georgia College and State University. He has been on the board of the AIS SIG Ed for most of the last 10 years, three times elected president. He is a reviewer on the global textbooks project, a Director of the International Telework Academy and a screening editor for the *Journal of Information and Management*. His research (around 80 publications) is mainly in the areas of telecommuting (his PhD) and on-line education – he is the recipient of an ICIS prize for best paper in education and in 2009 was awarded the

Emerald Management Review Citation of Excellence for one of 50 best papers, published in the top 400 business journals, worldwide. He is a visiting professor at Georgia Southern and recently has been a visiting fellow at the University of Malaya, the Tec de Monterrey in Mexico and Agder University College, Norway.

Dr. Dick's panel topic:

Against a background of an expected higher demand for IT professionals in the workforce, and the need to encourage college graduates to take up IT positions, current IT professionals are often placed in a position of conflict - managing user expectations, dealing with managerial demands to meet unrealistic deadlines but maintain system integrity, the need to train and make competent incompetent users, and face a continuing demand for new technology and ways to use it for business advantage. This places IT professionals under a great deal of stress - on one hand they need to deal with the day to day job demands (the first few points mentioned above) and on the other stay abreast of developments - for example the opportunities offered by cloud computing, big data and business analytics. Even if the IT task is outsourced the IT managerial team face similar stresses. Geoff Dick will discuss the need for research into work exhaustion in IT professionals and means by which they can remain current in their field and able to provide management with salient and useful advice.

Luiz Antonio Joia

He holds a Ph.D. in Production Engineering (Major: Technological Innovation and Industrial Organization) from COPPE/UFRJ (Rio de Janeiro Federal University), His experience spans for over 20 years in major technology-based companies, holding executive and academic positions in the areas of Information Technology and Business Development, including academic coordinator of the MBA in Strategic Management of Information Technology and the MBA in Project Management - FGV Management. academic coordinator of the Master of Business Administration of EBAPE/FGV, consultant and advisor to the World Bank in the area of Educational Technology Applied to Training of Human Capital, member of the Advisory Board of the Management Decision (Emerald), Journal of Intellectual Capital (Emerald) and Electronic Government (Inderscience), coordinator of e:lab (Laboratory for Research into Government and E-Business), guest member of the Technical Committee of WG 8.5 (Information Systems in Public Administration) of IFIP (International Federation for Information Processing), guest Brazilian representative at the Interamerican E-Government Training Network (Red Interamericana de Formación en Gobierno Electrónico), IDB/OAS, and ad-hoc consultant to CAPES and contributor to several national and international magazines. His areas of interest include: Strategic Use of IT, E-Business & E-Government, Educational Technology (E-Learning) and Evaluation of Public Policy on Usage of Educational Technology, Intellectual Capital and Knowledge Management in Public and Private Organizations, Information Technology and Development, Paradoxes Technology, and Actor Network Theory and Information Technology. He is currently at the Brazilian School of Public and Business Administration of the Fundação Getulio Vargas, in Rio de Janeiro, Brazil.

Dr. Joia's panel topic:

Organizations have had difficulties to motivate and retain their IT workforce, as well as to achieve the desired IT-Business strategic alignment. Thus, the IT professionals have had difficulties to keep themselves motivated in their work environment, as well as to deal with the increasing technical and managerial challenges they have been submitted to. In this context, one problem related to those professionals has arisen very often: the turn-away – in which the IT professional abandons the IT arena, assuming a position in a different functional area in the same organization or in another, most of time playing an executive role. This fact deserves in depth investigation as it seems to point out that the IT workforce training does not comply with the professional demands that the IT professionals are submitted to, which produces frustration that can lead these professionals to abandon the professional area they have once chosen to work within. In this context, Luiz Antonio Joia will address the antecedents of the IT professionals turn-away, via research developed among IT professionals in Brazil.

Moderator:

Guillermo Rodríguez-Abitia

As a Fulbright scholar, he obtained a Ph.D. in Information Systems, by the University of Texas at Arlington. For more than 23 years, he undertook many roles at Tecnológico de Monterrey, Campus Estado de México, including professor of Information Systems, Director of the Computer Center, director of the graduate programs in Computer Sciences and in Information Systems, as well as Department Chair of the Academic Department of Information Systems and Director of the Center for the Development of Electronics and Information Technologies. He has numerous publications in specialized journals, and he has had multiple participations as a panelist, and as a speaker in Mexico and many other countries. He has been an active participant in different academic and professional associations, including being a founder member of the Latin American and Caribbean Chapter of AIS. In AIS, he has served as a member of the council, helped found the Spanish journal RELCASI, and co-chaired AMCIS 2006 in Acapulco, Mexico, among many other activities. He currently leads the Unit for Research, Development and Innovation, within the General Direction of Information and Communication Technologies of the Universidad Nacional Autónoma de México (UNAM).

EQUIPMENT NEEDED.

This panel will only require an LCD projector and a screen.