

## ICT SKILLS DEVELOPMENT: DEVELOPING COUNTRIES<sup>1</sup>

By Jacqueline Birt, Paul Wells, Marie Kavanagh, Alistair Robb, and Poonam Bir

IT's impact on the business world is being felt across all countries—emerging, developing and developed countries. In fact, the impact may be even more significant in emerging and developing economies. The *Global Information Technology (GIT) Report 2015* (World Economic Forum 2015) notes that the ICT revolution is well underway in parts of the world, including developing countries, and has the potential to transform economies and societies as well as address some of the most pressing global challenges of our time. The International Telecommunication Union's annual "*Measuring the Information Society Report*" released in November 2016 showed that nearly all of the 175 countries, developed and developing, included in its composite benchmark ICT Development Index (IDI) improved between 2015 and 2016. The improvements were more notable in developed and high-income developing countries. The report further stated that improvements were greater on ICT use than access, mainly due to strong growth in mobile broadband uptake globally.

The GIT Report also stated that within countries there are digital divides due to people's ages, limited digital literacy, lack of access, or geographical remoteness. Therefore, even in developed countries all segments of the population do not benefit from ICT at the same level. Such a digital divide within developing countries is expected to be wider due to demographic and several socioeconomic factors, such as income, education, race, gender, geographic location (urban vs. rural), age, skills, awareness, and political, cultural, and psychological attitudes (Nour 2015). Thus, even in developing countries where IDI values are low, there are segments of the population and businesses that are benefitting from the ICT revolution in terms of ICT usage and skills development. For instance, India's 2016 IDI value was only 138; however, Tata Communications, an Indian ICT company, is the world's largest global network company.

There is no doubt that there is growing global awareness in developing economies about ICT benefits and a recognition of ICT as a tool that can solve many issues, and that without ICT skills investment countries will fall behind. According to Gebremeskel, Kebede, and Chai (2016), many economies, such as China, South Korea, and Singapore, have developed at a fast rate with the help of ICT (ITU 2017). Several developing countries, such as Uganda, Ethiopia, Kenya, and many other African and Asian developing economies, have also started to place considerable emphasis on the importance and availability of ICT for education and other sectors (Gebremeskel, Kebede, and Chai 2016). ICT is also increasingly used in classrooms, for example, Plasma-based educational access in Ethiopia and internet

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<sup>1</sup> This article is an edited extract from the International Accounting Education Standards Board (IAESB) literature review on ICT skills development. The [full literature review](#) covers the digital age and opportunities for accountants, issues for the accounting profession, education and ICT development, and developing countries and ICT skills. The literature review is part of the IAESB's examination of megatrends to help inform the direction of accounting education in the digital era consultation process (see [IAESB strategy and work plan for additional details](#)).

use in Kenya and Ghana (Gebremeskel, Kebede, and Chai 2016). The governments in these countries have endorsed diverse ICT policies for education and economic/sociocultural developments with the belief that knowledge is the driving force for technology development (Gebremeskel, Kebede, and Chai 2016). The Indian government launched a campaign called “Digital India” in July 2015, that consists of three core ICT components expected to drive growth. The components are the creation of digital infrastructure, delivery of services digitally, and digital literacy (Digital India 2015). Most developing countries have ongoing ICT projects in wide-ranging areas—health, education, rural development, and e commerce—initiated by governments, businesses entrepreneurs, and nongovernment organizations (Avgerou et al. 2016).

The importance of ICT in business is also finding its way into continuing professional development (CPD) programs for accountants in these countries. A study by De Lange, Jackling, and Suwardy (2015) examined accountants’ perceptions of CPD in the Asia-Pacific region, including China, Malaysia, and Singapore, and the areas of their CPD over the past 12 months. Of participants, 46.9% completed CPD in IT or software/hardware skills development.

CPD offerings in some countries are general or preliminary, for example, courses on spreadsheets, databases, and accounting software. However, professional accounting organizations in many countries also host conferences and workshops similar that are more advanced and/or specific. For example, the South African Institute of Chartered Accountants’ annual technology conference provides workshops on XBRL. Similarly, the Malaysian Institute of Accountants organizes an annual Fintech & Digital Economy Conference and the Knowledge Academy in Thailand runs IT cybersecurity courses, accounting software, and digital forensic courses. The Chinese Institute of CPAs is collaborating with other accounting organizations, such as the Institute of Chartered Accountants of England and Wales, CPA Australia, and the Hong Kong Institute of CPAs, for joint training and qualification programs including ICT (CICPA 2015).

### **Authors**

Jacqueline Birt, PhD, CPA, is an Associate Professor in Accounting at the University of Queensland. Jacqueline is a member of the IAESB CAG and also President-Elect of AFAANZ (Accounting and Finance Association Australia and New Zealand) where she holds the portfolio of Education. Her research interests are predominantly in international accounting and accounting education. She is a Deputy Editor of the Accounting & Finance Journal and an Associate Editor at the Accounting Research Journal. Jacqueline has been the recipient of several research and teaching awards.

Paul Wells, PhD, CA, is a Senior Research Lecturer in Accounting at Auckland University of Technology where he teaches Accounting Information Systems. He is an associate editor for Accounting Education and on the editorial board for the Journal of Accounting Education. Paul’s research interests primarily involve accounting education and perceptions of the profession, while his professional interests are in accounting curriculum design and development and the use of technology in professional accounting education and practice.

Marie Kavanagh, PhD, is Professor in Accounting at the University of Southern Queensland. She has extensive experience in teaching and learning including program development and delivery at both post graduate and undergraduate level. Throughout her career she has been involved in program review and curriculum development, teaching and learning policy and procedure development and encouraged participation in teaching excellence and ALTC citation awards. She has published in these areas in both national and international journals. She is also Northern Australia convenor for Enactus Australia facilitates students undertaking and delivering entrepreneurial projects in community. She has won various teaching awards at a university and national level.

Alistair Robb, PhD, is a Senior Lecturer in Information Systems at the University of Queensland. Alastair's ongoing research interests are in the areas of data integrity, deceptive behavior in computer-mediated communications, Information Systems governance, eXtensible Business Reporting Language (XBRL), and Distributed Ledger Technology (DLT). More recently, Alastair's research in DLT has focused on the types of transactions that best suit Blockchains, as well as the types of fraud Blockchain can best prevent. Further, his research into Blockchain considers the implications of the technology for the accounting, auditing, and legal professions.

Poonam Bir, PhD, has extensive academic and industry experience, of which twenty years have been as a full-time lecturer at Monash University. She currently teaches at the University of Melbourne and Victoria University. Her experience includes teaching and developing accounting and auditing subjects at both post graduate and undergraduate levels. She incorporates the use of computers and audit softwares in teaching and assessing Auditing, at both post graduate and undergraduate levels. Her research interests include comparability of financial reports, corporate governance, financial reporting issues, International harmonization, convergence and adoption of accounting standards, leases and eXtensible Business Reporting Language (XBRL).

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**International Accounting  
Education  
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529 Fifth Avenue, 6th Floor, New York, NY 10017  
T + 1 (212) 286-9344 F +1 (212) 286-9570  
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