

## Technology mobility

Currently, technology and Information and Communication Technology (ICT) become a core, and essential tool in any sector to improve job performance and productivity as well to ensure that job is efficient and effective. Using technology and ICT is unlimited to specific software package or home; however, the shift now changed to the use of numerous and various software called World Wide Web or “Web”, to enhance and improve communications, collaboration, cooperation and connection between various stakeholders to improve job productivity and performance.

Furthermore, using the Web via vast stakeholders will improve data management, support availability of Internet mobility, simulate creativity and innovation, encourage factor of globalization phenomena and enhance customers’ satisfaction via communication, collaboration, cooperation and connection.

The Web is divided into several types such as Web 1.0, Web 2.0 and Web 3.0. Web 1.0 refers to connecting information and shared read-write hypertext space, whereas Web 2.0 is known as the participative Web, as it allows users to connect via social networking with more interaction and less control. Web 3.0 refers to connecting intelligence and is known as semantic Web, in other words, is to identify a Web-based data so that searches can be more effective, and the information is part of the network. Web 3.0 is considering the future website for every sector including the business.

This special issue will cover topics in relation to cutting edge information and knowledge, ethics, e-government services, Web 2.0 including social media and security. These topics are very important to enhance job performance in both academic institutions as well as companies.

This special issue of *Journal of Information, Communication & Ethics in Society* entitled Technology Mobility, comprises seven papers that provide cutting edge information and knowledge of ethics, ICT knowledge, e-government services, social media and security. The guest editors invited the first paper, selected papers 2–5 from the IADIS 9th International Conference on Internet Technologies & Society 2019 and 6th International Conference on Educational Technologies 2019 which was held in Hong Kong, and included the two last papers, originally submitted to the regular issue, owing to their adequacy to the topics of this special issue. The papers from the conferences have been extended significantly and peer-reviewed further to achieve a final high publication standard.

The first paper is entitled “Contemporary Global Challenges and Ethical Mindsets” by Theodora Issa and Tomayess Issa. The guest editors invited the authors to present their work in this special issue, as this paper aims to provide a framework that might be used to tackle the multifaceted challenges facing humanity, which are increasing in seriousness and complexity. The Millennium Project (TMP, 2009), had identified such challenges and over time periods until and including 2050, which pose the question, how would societies cope with these challenges averting any disastrous results? The question contemplates the suggested ethical principles, and the three central beliefs of “end-based”, “rule-based” and “care-based”. In some cases, individuals might not be blamed to think that “it is only a miracle” that might save humanity. This paper, and through the use of literature review, intends to provide an insight into these challenges, the suggested ethical principles and the three central beliefs, providing brief overview



of the concept “miracle” leading to discussion on ethical mindsets, its components and their dimensions (Issa, 2009), concluding with framework for the way forward tackling these challenges. This might seem to be forward thinking, but it is a call for researchers to conduct more research in this area, and for governments to fund such research, to allow for the establishment of a method to refine the mindsets of individuals around the world to change into “ethical”; thus, the world becomes better equipped to face and reduce the challenges and threats that are being faced by the world. The limitation of this paper might lie in the fact that it is only a conceptual paper, but it calls on researchers to conduct further research by using the suggested framework.

This paper identified the challenges and global threats by TMP for the periods 2005–2010, 2010–2025 and 2025–2050.

For the period 2005–2010, the first of these challenges was the right of people and organizations to pollute if they engage in pollution trading, then the challenges question the legitimacy of intervening in the affairs of other countries, the right for “designer babies”, questioning what are the ethical ways to develop artificial intelligence, should religions give up the claim of certainty and/or superiority to reduce religion-related conflicts, should scientists be held personally responsible for the consequences of their research should national sovereignty and cultural differences be allowed to prevent international intervention designed to stop widespread violence perpetrated by men against women, and would humans have the right to clone themselves.

As for the period 2010–2025 the challenges this time too were extremely diverse, the first of the challenges was questioning the ethicality of extending lifespan, no matter what the cost. Then, challenges in relation to the ethicality of recreating extinct species, space junk, preserving the rights of the future generations. Do we have the right to alter our genetic germ line so that future generations cannot inherit the potential for genetically related diseases or disabilities? As the brain-machine interface becomes more sophisticated and global, do the demands of collective intelligence outweigh those associated with individual identity? When does information pollution become a crime? Would the advent of global ethical norms unduly constrain the differences among groups or the evolution of values?

Finally, the challenges for the period 2025–2050 would commence by questioning the human being’s right to genetically change themselves and future generations into a new or several new species. Then, posing the question, is it ethical for society to manage the creation of future elites who have augmented themselves with artificial intelligence and genetic engineering? This is followed by yet another question: Is it right for humans to merge with technology, as one way to prevent technological hegemony over humanity? More questions, detailed some more challenges such as: With accelerating advances in psychoactive drugs and virtual reality, should there be limits to the pursuit of happiness? Should elimination of aging be available to everyone or just to those who can afford it? Is it right to pursue research that will result in the creation of intelligent technological “beings” that will have the capacity to compete with humans or other biological life forms for an ecological niche? Should artificial life (life-mimicking software, sentient robots, etc.) or animals whose intelligence has been increased to near human levels, have rights? Considering the economic and other consequences of an aging population, should we have the right to suicide and euthanasia? Do we have a right to colonize other planets and use their resources? If technology develops a mind of its own, what ethical obligations should its creator(s) have? Do we have a right to genetically interfere with new-borns or embryos because

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their genetic code shows a high probability for future violent behaviour? This paper managed to analyse these challenges and threats by using Moral Philosophy Principles.

The second contribution is entitled “Social media and student performance: the moderating role of ICT knowledge” by George Amoako, Robert Dzogbenuku and Desmond Kumi.

This study sought to determine the impact of social media usage on university student academic performance in Ghana. A quantitative research method was used for the study. With the aid of a simple random sampling technique, quantitative data were obtained from 373 out of 400 respondents representing 93 per cent volunteered participants. Data collected was analysed using Structural Equation Modelling to establish the relationship among social media information, social media entertainment, social media innovation, social media knowledge generation and student performance. The findings of this study indicate that social media information, social media innovation and social media entertainment all had a significant positive influence on social media knowledge generation, which has wide learning and knowledge management implications. Furthermore, the study indicated that Information Computer Technology Knowledge moderates the relationship between social media and student performance. This paper will serve as a profitable source of information for managers and researchers who may embark on future research on social media and academic performance. The findings that social media information, innovation and entertainment can likewise enhance social media knowledge generation can help managers and university teachers to use the vehicle of innovation and entertainment to communicate knowledge.

The third contribution is entitled “The online users’ perceptions toward electronic government services” by Mark Anthony Camilleri. This research examines the individuals’ perceived usefulness and ease of use of the government’s electronic services (e-government). It also explores the effect of the social influences as well as of the facilitating conditions on the individuals’ intentions to use the government’s digital and mobile services. Various measuring items from the Unified Theory of Acceptance and Use of Technology and from the Theory of Acceptance Model (TAM) to investigate the participants’ utilitarian motivations to engage with the government’s online services are adapted. The analysis involved a two-step, structural equation modelling approach that included a confirmatory factor analysis that verified the constructs’ validity and reliability. The study findings revealed that there were direct and indirect effects that predicted the individuals’ readiness to use the e-government services. The results suggest that the respondents’ perceived usefulness and ease of use of this digital technology were significant antecedents for their behavioural intention to use it. The strength of these relationships was affected by the moderating variables, include age, gender and experience. Yet, these demographic variables did not have a significant effect on the link between social influences and behavioural intention. Finally, this research implies that the public services should continue improving the facilitating conditions including the provision of service quality and capability; as well as secure accessibility to their e-government systems via digital and mobile technologies. In conclusion, this contribution identifies its limitations and suggests possible research avenues to academia.

The fourth contribution is entitled “E-Business management assessment: framework proposal through case study analysis” by Pedro Isaías, Luisa Carvalho, Nildo Junior Cassundé and Fernanda Cassundé. This paper proposes an e-Business assessment framework for organizations that aim to enhance the effectiveness of their online presence and maximise the benefits that result from it. The framework is based on three main pillars derived from academic literature research: e-marketing strategies, customer relationship

management (CRM) strategies, and business model strategies. This paper reviews literature from e-Marketing, CRM and business model strategies, leading to the generation of an e-Business assessment framework. Secondly it takes 19 case studies and analyses them using Atlas. TI, through qualitative content analysis, to validate that framework. Pragmatic advice for practitioners derives from research results considering that this framework enables managers to characterise the company in terms of its e-Business approach, making it possible to determine the level of depth of competitive online strategies. Lessons for an improved e-Business approach can be derived from this paper.

The fifth contribution is entitled: "Social Media Use in Academia: Towards Topology Development & Investigation of Dominant Use Motive" by Shivinder Nijjer and Raj Sahil. This research attempts to develop a topology and thereby determine the dominant use motive for faculty's use of social media (SM). This study is divided into two parts namely: a research design has been adopted for topology development based on the application of Uses & Gratifications Theory. TAM model is applied to discern the dominant motive for SM use in academia. This study developed seven item topologies, conforming to the basic three use motives viz. hedonic, utilitarian and social. The work shows faculty attach more value to the instrumental utility of SM, while the hedonic function is also significant. Discerning dominant motive implies that SM use at the workplace should not be banned, rather effectively regulated use will instil the faculty to enhance work outcomes. The conceptualisation of topology for SM use in academia at the workplace can aid in designing an effective organisation policy, and design of an internal SM platform. This study is unique towards topology development for academic faculty and has many important implications for management and academia, especially towards policy design for SM use at the workplace.

The sixth contribution is entitled "What Do You Know About Me? Digital Privacy and Online Data Sharing in the UK Insurance Sector" by Anca Yallop and Ian Blakesley. This paper explores consumer perceptions about digital privacy and their subsequent motivations to disclose personal data for insurance purposes. The study uses an exploratory research approach based on in-depth interviews to generate metathemes to provide an understanding of consumer perceptions about digital privacy and data sharing in the insurance sector. Consumers were extrinsically motivated to disclose data by financial reward and convenience; however, subsequent intrinsic motivations may be an influence on the initial motivations. Consumers perceived transactions as "fair" if they received the expected rewards, retained control of the data, and the data was not unilaterally used to their detriment. Concern for privacy was generally low, provided antecedent conditions were met. Since the study uses an exploration for discovery approach, the main limitation of this study is its small sample. However, this research aimed to identify metathemes and issues that may be the focus of future research in this area and is therefore not proposing to suggest strong conclusions and definitive answers.

Finally, the last contribution, entitled "Examination of cyber aggression by adult consumers: ethical framework and drivers" by Mei Han and Arturo Vasquez. This study aims to explore why consumers would engage in cyber aggression against companies, and to that end it examines consumers' ethical orientation and other possible drivers of cyber aggression. To examine how ethical orientation affects consumers' intention to engage in cyber aggression, a scenario-based  $2 \times 2$  (deontological: moral/immoral  $\times$  teleological: good result/bad result) between-subject experimental design is employed. Moreover, twenty-six possible drivers in related literature are identified and included in a questionnaire administered to 226 college students. The results show that adult consumers' deontological and teleological evaluations significantly affect their ethical judgement about engaging in

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cyber aggression, which further impacts their intention to perpetrate an act of cyber aggression. Moreover, the study identifies six factors contributing to cyber aggression engagement: personal aggressiveness, ease of perpetration, Internet negativity, personal gains, helping the company and recreation.

Guest editorial

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