Guest Editorial Preface

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Governments the world over, are increasingly preoccupied with bridging the digital divide because they believe there is a direct correlation between low digital gaps and economic development. This special issue of *International Journal of Innovation & Digital Economy* (IJIDE) on ‘digital divide’ brings together articles from different countries and cultures to highlight the changing character of the digital divide in a global context. The primary objective of this special issue is to provide a trajectory of digital divide evolution, debates, case studies, issues, and mitigation strategies to demonstrate the current status of the subject.

The digital divide has evolved from being perceived merely as disparities among people to access and is now perceived in the context of quality of access (broadband and/or lack of it), usage of ICTs and the content they contain, digital natives (early adopters), digital immigrants (laggards), and digital gaps occasioned by web 2.0 technologies such as social networking sites, RSS feeds, mobile communications, cloud computing and more. The digital divide continues to generate intense and robust debates among government, development agencies, academia and civil society since the concept started to gain public understanding in the 1990s largely because of (r) evolution of the internet and the World Wide Web. Prior to 1990s the ‘digital divide’ then known as ‘digital gap’ is thought to have emerged in the United States in the 1970s when conservative politics started to embrace the classical liberal laissez-faire free market values, and technological determinism motivated and influenced by the convergence of computing and telecommunications which was perceived as a technological foundation for economic growth. Later, fusion of information technology with free market economics saw the Democratic Party capture and exploit the ‘digital divide’ as a policy issue when Vice-President Albert Gore became a prominent advocate of the development of a National Information Infrastructure (NII) as an economic growth strategy in the mid 1990s.

The concept of digital divide therefore evolved in the corridors of power though it is not quite clear when exactly the word ‘digital divide’ was first used. Among the people associated with the word was Larry Irving, a one time Assistant Secretary for Communications and Information, at Commerce, who is thought to have used the concept in 1995. The origin of the concept is also attributed to Jonathan Webber and Amy Harmon of the Los Angeles Times during 1995 when they reportedly used the term to describe the social division between those who were very involved in technology and those who were not. But the Benton Foundation believes that former US President Billy Clinton was the first to use the term in an address to the National Information Infrastructure (NII) Advisory Council in 1993. Sometimes Albert Gore is the one reputed to have used the phrase ‘digital divide’ for the first time in 1996 in a May White House ceremony when he observed that ‘as part of our empowerment zone initiatives we launched this cyber-Ed Truck, a book mobile for the digital age [which] is rolling into communities, connecting schools in our poorest neighborhoods and paving over the digital divide.’
Despite the mystery that surrounds the origin of the phrase ‘digital divide’, it has taken its place in ICT and development literature and is coming of age. It is now generally assumed that bridging the digital divide is inextricably intertwined with social, economic and political development. Since the concept of ‘digital divide’ started to get increasing attention in government, development agencies, academics and civil society environments, it has become a subject of great public and professional debate in local, national and international forums. The issues discussed include quality of access & connectivity (including availability & adequacy); rights of access; technology adoption, acceptance & use; the digital divide factors encompassing the physical, digital, human and social relationships; the typologies of digital divides including the global divide which refers to divergence of Internet access between industrialised and developing societies; the social divide which is concerned with the gap between information rich and information poor in each nation; and the democratic divide which signifies the difference between who do, and do not use the panoply of digital resources to engage, mobilise and participate in public life. The debates on digital divide have extended to cover measurement systems, information poverty, social inclusion, development, gender divide, language divide, digital divide and race, digital divide and culture, and class/economic divide.

The digital divide debates have equally discussed and interrogated mitigation strategies such as establishing telecentres especially, in developing countries, enhancing digital literacy, creating an information society environment, empowering people through education & training, improving technological infrastructure, raising awareness, putting in place enabling policies such as universal access, telecommunication liberalization/regulation, universal service (to cater for all including those with disabilities), strengthening citizen participation and empowering them with ICTs, using open source software to create relevant content, and enhancing open access. E-government is now emerging as one of the latest basket of strategies to catalyze the effective use of ICTs to enable people engage in active citizenships. The debates have also extended to methodologies for studying the phenomenon including discourse analysis, and usage of ICTs in communities. There is a shift in the issues of digital divide from merely concentrating on digital divide per se but also as it relates with social inclusion, as well as knowledge management because of the perception that access to relevant well organized content is the main motivation for access.

As the digital divide continues to evolve so does new issues for debate. John Cassidy of the New Yorker and James Goodale, former Vice Chairman of The New York Times have some reasons to believe that the recent global financial crisis was a product of a digital world and that the speed of digitally connected markets may have contributed to the debacle. They claim that senior management may have failed to understand the complex nature of computer-generated derivatives traded by junior traders. In particular, they believe that the collapse was contributed by the digital age – which gave the end-users the tools to create portability and mobility to devices that aided in the collapse. They argue that without the information superhighway and the ease of accessibility, the global markets would not have had access of moving the trillions of dollars, as compared with their counterparts a decade ago. The other issue that is being debated especially in the context of Africa is about whether the digital divide with the developed world is narrowing or widening. Proponents of the view that the digital divide is narrowing cite Africa’s leadership in mobile phone growth in the world. However, those who hold the view that the digital divide is widening, point out that access to technology is positively correlated with economic development and wealth creation, and since the dawn of the last century, wealth gaps between developed and developing countries including Africa have continued to widen and so have the poverty gaps.

The implications of digital divide have extensively been debated. The digital divide has been found to allow those who have access to the
internet more opportunities of getting involved in social-economic and political development activities. Prominent authors on digital divide such as Pippa Norris have long postulated the Internet being a powerful new force capable of transforming existing patterns of social inequality, strengthening linkages between citizens and representatives, facilitating new forms of public engagement and communication, and widening opportunities for the development of a global civic society. Theoretically, connectivity should lead to positive contribution to economic development because ICT makes markets more transparent through greater access to information, and enhances efficiency through reduced transaction costs. Yet there have been questions as to whether, the Internet will transform conventional forms of democratic activism, or only serve to reinforce the existing gap between the technologically rich and poor; whether it will level the playing field for developing societies, or instead strengthen the advantages of post-industrial economies or whether interest groups, and governments will use the Net to encourage interactive participation. Empirically, lack of access has been found to limit people’s ability to participate in social-economic and political activities such as democratic governance. Similarly, limited access to the internet impacts negatively on education because without effective access at school, home, at work or public access centres, people are constrained to develop the skills needed to compete for high-skill, information-technology, or IT, jobs that are generated in a digital economy environment.

Governments across the world are beginning to take action to try to bridge the digital divide. One approach has been to enhance broadband connectivity to rural communities. Governments are also “pushing” technology to the communities and also facilitating “pull” factor where the state encourages, and financially support, local organizations or authorities to aggregate demand to make business case for connectivity. In the UK for example, government agencies are working with the telecoms operators in bringing broadband into areas that would take forever for the market to reach. Besides, the government is implementing projects aimed at wiring communities and also providing local primary schools with laptops. The government further is enabling communities to adopt use of ICT by empowering them to acquire knowledge and develop skills; develop confidence and self-esteem which reinforce family and community cohesion, enable communities to pursue leisure interests and opportunities, enable communities to publish and broadcast their opinions and ideas and supporting and developing small businesses. In Africa through the New Partnership for Africa’s Development (NEPAD) an e-schools project is being implemented in many countries in southern, eastern, central, northern and west Africa aimed at connecting all schools on the internet and allowing communities access to such ICT facilities.

The digital divide it would seem will continue to evolve as new technologies emerge. As this happens, different and new innovative mitigation strategies will have to be developed to address the challenges that new technologies will engender. Realistically, it will be prudent not to be quickly swayed by the rapid technological changes (which may be fads) into developing or even investing a lot of resources in mitigation strategies until it is proven that such new technologies can meaningfully be integrated into the socio-economic fabric of society. Against this background this special issue on digital divide presents five topical papers. These papers interrogate further divide issues that have already been reviewed. They also bring forth case studies from Europe, Asia and Africa.

The first paper ‘Next generation networks: a new digital divide?’ by Rohan Kariyawasam’ argues that the ongoing efforts by the industrialised world to upgrade current telecommunication and internet networks to Next Generation Networks (NGNs) with far larger capacities capable of delivering more advanced digital services (similar to the advancement of 2G mobile networks to 3G and the delivery of real-time video applications to mobile telephones) will exacerbate the inequalities between those who
have access to advanced technologies and those who do not, sometimes known as the Digital Divide. The author further observes that there is no one overriding definition of the term, the ‘International Digital Divide’ with economists, social scientists and lawyers often defining the term in different ways, though they in principle agree on factors that might influence its definition (access to telecommunication lines, the ratio of internet hosts to GDP, the level of development of the human capital base etc.). The lack of a clear definition the author argues will have knock-on effects in the loan documentation of aid agencies involved in infrastructure development and capacity building. The author therefore provides a brief overview on the rise and structure of the internet and evolution to Next Generation Networks. This if followed up by setting out some basic indicators of the Digital Divide (linkages) and clarifying the significance of these linkages. Finally, various definitions of the Digital Divide available in current literature are reviewed so as to arrive at one overriding new definition of this most elusive of terms.

The second paper ‘Ethnographic approach to user-centred evaluation of telecentres’ by Bidit Lal Dey, D. R. Newman and Renee Prendergast, uses an ethnographic approach to examine the services offered by two telecentres in Bangladesh. An intervention was initiated that enabled groups of farmers to use mobile ‘phones to access services. Based on farmers’ experiences and opinions the paper develops a framework which explicates the dynamic nature of use and appropriation of ICT services. The third paper ‘For All of our languages we are not natives here: Challenging the idea of the digital native, rethinking the digital divide’ by Martina Gillen, seeks to explore the concept of the digital divide by critiquing the notion of the digital native and its relationship to the legal conception of technology transfer and sited knowledge. The fourth and final paper in this issue Deconstructing the ‘digital divide’ in Africa’ by Stephen Mutula examines the debate about whether the digital divide between Africa and the developed world is narrowing or widening. The author points out that the school of thought that believes the digital is narrowing points to Africa’s leadership in mobile phone growth in the world. The opposing views argue that access to technology is positively correlated to economic development and wealth creation and since the dawn of the last century, the gap between the rich and the poor within and between developed and developing countries has continued to grow. The author argues that the debate does not seem to appreciate the notion that the digital divide is not about a single technology, but rather about a number of technologies (PCs, mobile phones, Internet, etc) driven by a complex set of factors that exist beyond wires. The author therefore makes attempts to deconstruct the concept of the digital divide beyond access to PCs, telephones, Internet, and cable TV arguing that the digital divide phenomenon as currently conceived is misleading and flawed, and so are the indices for its measurement. The author suggests that a new model for mapping the phenomenon is necessary if efforts to bridge the divide between developed and developing countries.

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REFERENCES