

## The Diffusion, Impacts, Adoption and Usage of ICTs upon Society Mini-track Introduction

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ICTs are wide ranging from the infrastructure of Broadband (high speed internet), mobile devices, online social networks, sharing platforms and other devices and systems offered by the internet. To examine the acceptance and use of these ICTs, studies on adoption, usage and diffusion have been conducted by Information Systems (IS) researchers. Such studies offer useful insights into many issues surrounding ‘how’, ‘when’ and ‘what’ technologies are being introduced and their impacts.

The aim of this mini track is to provide an opportunity for global researchers to share their most recent research findings related to how ICTs are used, adopted and diffused within society and their impacts on individuals, organizations and wider social communities. The mini track helps academics, industry and government agencies to obtain state-of-the art insights into the current use of ICTs, challenges experienced by organizations, governments and individuals in adoption and diffusion, strategies to overcome the challenges, and the consequences of ICT adoption within societies.

This mini track has constantly attracted researchers working in this area, with this

year being no different. This year, we are honored and delighted to offer seven high quality, innovative papers to this conference mini track.

The first paper, *Gender Stereotyping's Influence on the Perceived Competence of Siri and Co* explore the hypothesis that people regularly assign human traits to computer. They expect that similar stereotypes might also apply for virtual assistants. They test this hypothesis by conducting a controlled experiment which simulates a realistic interaction with differently voiced virtual assistants. The results indicate that gender stereotypes indeed play a role in the perception of the interaction. Male-voiced assistants are perceived more competent than their female-voiced counterpart which has practical implications in the design and development of devices that utilize these assistants.

The second paper, *Explaining multidimensional Facebook benefits: A task-technology fit approach* aims to develop and empirically test a model that explains Facebook benefits in a multidimensional way using a task-technology fit approach. Data collected from 240 Facebook users was analyzed using partial least squares technique (PLS). The results support the

model empirically. This research integrates benefits, use, and task-technology fit into a single model to provide a more comprehensive perspective of Facebook use. Also, a multidimensional view allows the consideration of utilitarian and hedonic benefits as dimensions of value that can spawn greater continued use.

The third paper, *Exploring the Relationship between IT Infrastructure and Income Inequality through Diffusion of Innovations Theory* explores the relationship between the diffusion of IT infrastructure and income inequality through Rogers's Diffusion of Innovations Theory. Using quantitative data through hierarchical regression, the empirical results show this theory's tenets do not necessarily hold, because there is a significant negative relationship between infrastructure diffusion and income inequality growth. This paper contributes to research by expanding economic and sociology work to the IS domain, and provides suggestions for practice, such as more focused IT infrastructure investments.

The fourth paper, *Self-Regulation, Mind Wandering, and Cognitive Absorption During Technology Use* hypothesizes that there is a U-shape relationship between mind wandering and cognitive absorption. Based on a cross-sectional study of 323 individuals, the results reveal that the relationship between mind wandering and cognitive absorption is curve-linear. As mind wandering increases, cognitive absorption decreases to a certain point, after which, cognitive absorption increases as mind wandering increases. The results also show self-regulation has a significant effect on mind wandering and cognitive absorption.

The fifth paper, *An Approach to Building ICT Capabilities in Nonprofits*, investigates and assesses adoption through a systematic and contextualized approach. An action

research methodology was used to investigate a non-profit organization in Western New York during a five-month timespan. The contribution of this study is in applying a modified adaptation of the capabilities framework to understand the nature of the grass-root level impact within the non-profit from the technology adoption and use.

The sixth paper, *Probing Athletes' Perceptions Towards Electronic Judging Systems – A Case Study in Gymnastics* studies athletes' perceptions towards the transition to electronic judging systems. The research finds that gymnasts are quite positive towards the implementation of electronic judging systems, although they expressed some uncertainties (i.e. how these systems influence the artistic side of gymnastics) and risks (i.e. technical problems) of the technology. Gymnasts find that electronic judging systems contain affordances that could efficiently mitigate challenges associated with human-based judging.

The seventh paper, *Investigating the use, adoption and diffusion of Online Social Network adoption (Facebook vs Twitter), within the Older Adult Population (50+) in Hertfordshire UK*, aims to identify, understand, examine & explain the adoption, use & diffusion of Online Social Network's (OSNs); namely, Facebook vs Twitter within the older population of UK using a quantitative approach, a combination of hard copy and online questionnaires. The analysis revealed that older adults do not use OSNs for entertainment purposes, but more for effective purposes such as, communication or obtaining news information.