

## Mini-Track on Data Analytics in Behavioral Research

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### 1. Introduction

The data analytics in behavioral research mini-track presents novel research papers that deal with objective measures for understanding IT adoption, acceptance and usage. Specifically, studies that have used analytical approaches and objective measures to understand human behavior with information systems. User behavior with systems is too complex to be understood from subjective measures alone. This mini-track papers provide a full range of epistemological, methodological, and analytical approaches. The five papers from researchers to foster a growing body of exploratory, theoretical, experimental and field research that could advance the use of objective behavioral measures for understanding IT adoption, acceptance or system usage.

### 2. Five Mini-Track Papers

The first paper by Yaqoub Alsarkal, Nan Zhang and Heng Xu is on “*Your Privacy Is Your Friend's Privacy: Examining Interdependent Information Disclosure on Online Social Networks.*” The focus of this study is on co-disclosure as a new source of privacy threat inherent to the online social networks OSN context for private information. Authors provide an innovative measurement for quantifying the extent to which others’ co-disclosure could lead to actual privacy harm. The results demonstrate the significant harm caused by co-disclosure and illustrate the interesting differences between the identity elements revealed through self- and co-disclosure.

The second paper by Mohammad Al-Ramahi and Cherie Noteboom is on “*A Systematic Analysis of Patient Portals Adoption, Acceptance and Usage: The Trajectory for Triple Aim?*” The focus of this study is on objective measure to understand patient portal adoption, acceptance and usage. They use a LDA algorithm to systematically analyze users’ feedback (i.e., online users’ reviews) from the actual use of a common mobile patient portal, EPIC’s Mychart and improvement for self-care patients from portals.

The third paper by Michael Hefley, Gabrielle Wethor, Matthew L. Haleis is on “*Multimodal Data Fusion and Behavioral Analysis Tooling for Exploring Trust, Trust-propensity, and Phishing Victimization in Online Environments.*” The focus of this study is on providing a data collection and fusion approach alongside new open-sourced behavioral analysis tooling that addresses trust, trust-propensity, and victimization issues faced by online users and discusses empirical, evidence-based, insights into active end-user trust behaviors. Their approach is evaluated in terms of comparative analysis, run-time performance, and fused data accuracy tools for exploring and analyzing phishing victimization.

The fourth paper by Dong Yoo and James Roh is on “*Value Chain Creation in Business Analytics.*” The focus of this study is on the theory of information value chain, this study develops a BA value chain model and tests it with 268 data scientists. Results show that organizational resilience, absorptive capacity, and analytical IT capabilities are critical antecedents to analytical decision-making quality which in turn influences BA net benefits.

The fifth paper by Luvai Motiwalla, Mousa Albashrawi and Hasan Kartal is on “*Understanding Mobile Banking Success Through User Segmentation.*” The focus of this study is on understanding the success factors of mobile banking use with objective and subjective measures study. Data analytics was used to process system log file to segment users by their usage behavior before determining their success factors with survey. Results indicate better understanding of IS success factors with use sample segmentation.

### 3. Summary & Fast Track Journals

In sum, this mini-track provides a great forum for integrating relevant, vital academic user behavior research activity with the broader international community and provides a fast-track for a special issue of *Information Systems Frontiers and Information Systems Management Journals* on “*Data Analytics in Behavioral Research*” seeking theory building, theory testing, and emerging applications in data analytics for

understanding user behavior in information systems. We encourage novel research submissions that deal with objective measures for understanding IT adoption, acceptance and usage.

The special issues seek new work from researchers to foster a growing body of exploratory, theoretical, experimental and field research that could advance the use of data analytics approaches for understanding IT adoption, acceptance or system usage. Advance analytical approaches including machine learning that analyze user behavior from data log files, eye-movements, brain imaging (e.g., fMRI, EEG) and other psychophysiological tools are welcome.