

Mini-Track Introduction: Technology and Analytics in Emerging Markets (TAEM)

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Technology and analytics are transforming the global economy, especially in emerging markets (EM). With younger populations, EM countries are quickly adopting digital platforms such as social media, mobile platforms, and the Internet of Things (IoT). Tech companies in EM such as Tencent, Alibaba, Samsung, and Naver are playing major roles in the global tech scene. Governments in EM countries are heavily investing in the technology infrastructures and are pushing national artificial intelligence (AI) strategies to be at the forefront of the 4th industrial revolution.

An unprecedented amount of data on individuals and business operations from EM countries is now available. The computational advances in econometrics and machine learning, as well as the availability of powerful computation resources such as cloud computing and GPU, allow researchers to effectively and efficiently analyze such data and to extract actionable insights. Leveraging these advances, tech companies in EM are agile in adopting innovations.

Moreover, these advances in EM provide information systems and marketing scholars unique opportunities for analytics-based research. Industry practitioners in EM are also rapidly building analytics capabilities for competitive advantage, and EM entrepreneurs are creating new business models in this technology-enabled ecosystem.

The main purpose of this mini-track is to bring business analytics researchers and industry practitioners together to discuss future directions on how technology and analytics will reshape EM and the global economy. This mini-track is anticipated to offer a pathway to initiating and strengthening collaborations between academia and industry in emerging markets.

Topics of interest for this mini-track include, but are not limited to: (1) technology-enabled online platforms in emerging markets; (2) mobile and social media analytics in emerging markets; (3) image, video, text data analytics in emerging businesses; (4) empirical studies in AI and machine learning-based startups; (5) AI-powered bots and fight for fake news and

misinformation in emerging economies; (6) Internet of things (IoT) and sensor data analytics in emerging markets; (7) economics of blockchain and cryptocurrency technologies in emerging markets; (8) Big data and healthcare analytics in emerging countries; (9) quantitative marketing analytics in emerging markets; (10) AI-empowered digital marketing in emerging markets; (11) AI and analytics in personalized K-12 and higher educations in emerging countries; and (12) experimental studies in digital advertising in emerging markets.

In this year of the mini-track, we received six quality papers on the topic of technology and analytics in emerging markets. Each paper was rigorously reviewed by expert reviewers, and we accepted three papers.

The first paper, authored by Sung-Hyuk Park, Minhyung Lee, Kitae Kim, and Dongwook Shin, studied a budget performance-based nonlinear programming model to find an optimized solution for advertising budget allocation problems. As the emerging field of digital advertising grows fast, this paper has the potential to make substantial contributions to the literature on technology-enabled advertising. The second paper, written by Kyootai Lee, Han-gyun Woo, Wooje Cho, and Simon de Jong, investigated human decision-making when aided by AI assistance and observed fascinating unexpected behaviors. As more AI-powered decision tools become available, this study will have an immediate impact on organizations, particularly those in emerging markets.

The mini-track co-chairs would like to thank the authors who submitted their quality work to this mini-track and the reviewers who took their time and effort to provide constructive feedback on the submitted papers. We hope that this mini-track can serve as a platform for both academics and industry practitioners to discuss the future of technology and analytics in emerging markets.