Technology and Analytics in Emerging Markets (TAEM) Minitrack

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Introduction

Technology and analytics are rapidly revolutionizing the global economy. These transformational changes have gained a strong foothold, particularly in emerging markets (EMs) where automation driven by artificial intelligence (AI) and the growth of digital platforms are stimulating industrial development at a scale and pace never before witnessed in history. By leveraging advanced technological infrastructures and highly skilled developers, gigantic tech companies in EMs, such as Tencent, Alibaba, Samsung, and Naver are poised to be at the forefront of digital breakthroughs. Alibaba, Baidu, and Naver, for instance, have joined the race to develop and release their own versions of ChatGPT—a revolutionary AI-enabled conversational bot. Government agencies in various EM countries continue to invest heavily in technological resources and infrastructures, capitalizing on their national technology and AI strategies to drive the fourth industrial revolution.

These developments mean that an unprecedented amount of data on individuals and business operations from EM countries is now available. The effective and efficient analysis of such data and the extraction of actionable insights are made possible by computational innovations in econometrics and machine learning, along with the availability of powerful computational resources, such as cloud computing and GPU.

In EMs, these advancements provide information systems and marketing scholars with unique opportunities to conduct analytics-based research. Industry practitioners in these countries are also rapidly building technological and analytics capabilities for competitive advantage, and EM entrepreneurs are creating new business models in this technology-enabled ecosystem.

Despite the progress made in EMs, however, the unique characteristics of these regions introduce interesting challenges to technology and analytics research. First, the sheer volume of data from EM necessitates the development of a scalable analytics framework. Second, data integrity needs to be carefully examined to ensure quality research. Third, a deep understanding of the contextual features of EMs (e.g., languages, cultures, social norms, legal systems) is important. Finally, analytics-based perspectives require support by sound theories to ensure the generalizability of EM-based scholarship.

The main purpose of this minitrack is aimed primarily at bringing business analytics/IT researchers and industry practitioners together to discuss future directions on how technology and analytics will reshape EMs and the global economy. It is anticipated to offer a pathway to initiating and strengthening collaborations between academia and industry in EMs.

Topics of interest include, but are not limited to:

1. Effects of AI and analytics on competitiveness and innovation in EMs
2. Development of ChatGPT in EMs
3. Technology-enabled online platforms in EMs
4. Mobile and social media analytics in EMs
5. Image, video, and text data analytics in emerging businesses
6. Empirical studies on AI and machine learning-based startups
7. Generative AI and large language model services in EMs
8. AI-powered bots and the fight against fake news and misinformation in emerging economies
9. The Internet of Things (IoT) and sensor data analytics in EMs
10. Healthcare analytics in emerging countries
11. Quantitative marketing analytics in EMs
12. AI-empowered digital entrepreneurship in EMs

URI: https://hdl.handle.net/10125/106603
978-0-9981331-7-1

13. AI and analytics in personalized K-12 and higher education in emerging countries
14. Scalable analytics methodologies for EM data
15. Data integrity issues in EM data