

THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

Department of Information Systems, Business Statistics and Operations Management

IS SEMINAR ANNOUNCEMENT



AI Voice in Online Video Platforms: A Multimodal Perspective on Content Creation and Consumption

by

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DATE	26 October 2026 (Monday)
TIME	2:30 - 4:00 pm
VENUE	4/F Meeting Room (Room 4047), LSK Business Building

ABSTRACT

Video-sharing platforms like TikTok have introduced AI voice to assist creators in video creation. This creates a new form of multimodal human-AI collaboration, where AI assists with audio narration while creators retain control over textual and visual content. Yet, the impact of such modality-specific AI assistance on multimodal content creation and consumption remains unclear. We investigate how AI voice adoption affects video production quantity, multimodal content novelty, and viewer engagement using a unique dataset of 554,252 videos from 4,691 TikTok creators. Using multimodal machine learning methods and a stacked difference-in-differences model with propensity score matching, we find that AI voice adoption increases creators' video production by 26%. AI-voice videos exhibit lower acoustic novelty but higher textual and visual novelty. Moreover, AI-voice videos receive lower viewer engagement. We find that these production and engagement effects vary with vocal identity congruence. Creators whose established vocal identities are more congruent with the AI voice experience larger increases in video production and smaller declines in viewer engagement following adoption. We further complement the main analyses with video characteristic analyses, randomized online experiments, and qualitative interviews to examine the underlying mechanisms. Our findings provide practical implications for creators and video-sharing platforms.

BIOGRAPHY

Xiaoke Zhang is a PhD candidate in Management Information Systems in the Accounting and Information Systems Division at the Sauder School of Business, University of British Columbia. Her research centers on AI-assisted creation, with a focus on understanding how AI adoption reshapes creative work, and how AI can be effectively designed and governed to better support creators.