

THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

Department of Information Systems, Business Statistics and Operations Management

IS SEMINAR ANNOUNCEMENT



The Value of AI-Generated Metadata for UGC Platforms: Evidence from a Large-scale Field Experiment

by

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TIME	10:30 am - 12:00 noon
VENUE	4/F Meeting Room (Room 4047), LSK Business Building

ABSTRACT

AI-generated content (AIGC), such as advertisement copy, product descriptions, and social media posts, is becoming ubiquitous in business practices. However, the value of AI-generated metadata, such as title, remains unclear on user-generated content (UGC) platforms. To address this gap, we conducted a large-scale field experiment on a leading short-video platform in Asia to provide about 1 million users access to AI-generated titles for their uploaded videos. Our findings show that the provision of AI-generated titles significantly boosted content consumption, increasing valid watches by 1.6% and watch duration by 0.9%. When producers adopted these titles, these increases jumped to 7.1% and 4.1% respectively. This viewership boost effect was largely attributed to the use of this GAI tool increasing the likelihood of videos having a title by 41.4%. The effect was more pronounced for the groups more affected by metadata sparsity. Mechanism analysis revealed that AI-generated metadata improved user-video matching accuracy in the platform's recommender system. Interestingly, for a video for which the producer would anyway have posted a title, adopting the AI-generated title will decrease its viewership on average, implying that AI-generated titles may be of lower quality than human-generated ones. However, when producers chose to co-create with GAI and significantly revised the AI-generated titles, the videos outperformed their counterparts with either fully AI-generated or human-generated titles, showcasing the benefits of human-AI co-creation. This study highlights the value of AI-generated metadata and human-AI metadata co-creation in enhancing user-content matching and content consumption for UGC platforms.

BIOGRAPHY

Dr. Goh Khim Yong is an Associate Professor of Information Systems and Head of the Department of Information Systems and Analytics at the National University of Singapore (NUS). He received his Ph.D. degree in Business Administration (Marketing: Economics and Quantitative Methods) from the University of Chicago, Booth School of Business. He holds a B.Sc. (First-Class Honours) degree in Computer and Information Sciences and a M.Sc. degree in Information Systems from NUS. Dr. Goh's research and teaching interests include 1) consumer and firm behaviors in social-mobile media and digital platforms, 2) marketing and advertising in digital media environments, and 3) pricing and product strategies in digital and AI innovations. His research work has been published in top-ranked journals such as Management Science, MIS Quarterly, Information Systems Research, Journal of Marketing Research, Production and Operations Management, Journal of the Association for Information Systems, ACM Transactions on Management Information Systems, IEEE Transactions on Engineering Management, Information and Management, Journal of Interactive Marketing, etc. He is a Distinguished Member of the Association for Information Systems and was nominated and awarded Best Paper in Track and Best Overall Conference Paper Awards several times in recent years at the International Conference on Information Systems. He has served on the editorial board of Information Systems Research as an associate editor, and in the program committees of the International Conference on Information Systems and the Pacific Asia Conference on Information Systems as a program chair, track co-chair, and associate editor. In his research and consulting activities, Dr. Goh has worked on projects with various digital platforms, businesses, and organizations from Singapore, United States, China, Japan, Korea, and Australia, spanning industry vertical sectors such as e-commerce, interactive digital media, social media, news print media, retailing, advertising, government, food and beverage, healthcare and pharmaceutical sectors.