## THE HONG KONG POLYTECHNIC UNIVERSITY DEPARTMENT OF MANAGEMENT AND MARKETING Departmental Research Seminar



Search Differentiation for Health Information Technology: Insights from the HITECH Act By

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Date : 21 Dec 2023 (THU) Time : 10:30 am - 12 noon Venue : M714

## Abstract

Hospitals implement health information technology (HIT) for clinical care to address the rising operating cost over recent years. We integrate behavioral and institutional perspectives to explain how hospitals differentiate in technological search relative to industry peers (i.e., search differentiation) for HIT portfolios. In the context of the U.S. healthcare industry, we theorize that hospitals' search differentiation for HIT portfolios is jointly driven by idiosyncratic learning in response to cost-based performance shortfalls and isomorphic pressures in relation to changing policy uncertainty as the Health Information Technology for Economic and Clinical Health (HITECH) Act unfolded. Based on a panel dataset from 3,319 hospitals in 2007-2014, we demonstrate that when cost increases relative to aspiration level, a hospital differentiates its search for HIT by exploring more novel technologies relative to peers for clinical care. As policy uncertainty declines from the conceptualization to the enactment phase of the HITECH Act, a hospital's search differentiation for HIT increases to a greater extent in response to cost-based performance shortfalls as lower uncertainty reduces the need to imitate peers' search. As policy uncertainty further declines from the enactment to the enforcement phase of the HITECH Act and reaches its lowest level, however, the hospital's search differentiation for HIT increases to a smaller extent in response to cost-based performance shortfalls and professional norms to promote implementation of common technologies. Overall, we provide a more holistic picture on how the uncertainty in a dynamic regulatory context intertwines with organizational learning from performance feedback in shaping search differentiation for technology.

**Dr John Qi Dong** is an associate professor with tenure at Nanyang Business School, Nanyang Technological University in Singapore. He conducts computational and empirical research at the intersection of information systems and strategic management. His research appears in premier journals such as *MIS Quarterly, Information Systems Research, Journal of Management Information Systems, Journal of the Association for Information Systems, Strategic Management Journal,* and *Journal of Management.* He is the recipient of numerous awards, including the Association for Information Systems Early Career Award in 2020 and the Association for Information Systems Mid-Career Award in 2023. Currently, he serves as an associate editor for *MIS Quarterly* and as a senior editor for *Journal of the Association for Information Systems. MIS Quarterly* named him "Outstanding Associate Editor" in 2022.

## All interested are welcome.



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