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The Impact of IT spending and Vendor Interaction on Innovation Deployment in Hospitals

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The Impact of IT Spending and Vendor Interaction on Innovation Deployment in Healthcare

Completed Research Paper

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ABSTRACT

This paper examines the impact of financial investment and vendor interactions on the availability of electronic health record (EHR) systems to healthcare workers and patients, which in turn impacts technology usage and hospital performance. We used hospital-level data from the American Hospital Association (AHA) IT Supplemental Survey, the AHA Annual Survey Database, and the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey to test the EHR systems deployment model. The results show that both financial investment and vendor interactions significantly influence the availability of the HER in hospitals. Especially, collaboration with dominant vendors can lead to the high availability of the system and better performance.

This study makes both theoretical and practical contributions. Theoretically, this paper applies the technology-organization-environment framework and primarily examines the organizational factors to develop the EHR system deployment model in hospitals. Secondly, this study fills the literature gaps and uses IT managers' vendor experience to represent linkage structure and communications practice. The results prove the essential role of vendor experiences in system deployment. Thirdly, we investigate the EHR functions available to both healthcare workers and patients and their adoption situation. The system use of two types of stakeholders exerts different impacts on the hospital's performance. Practically, the findings of this study shed insights on how to facilitate the system deployment process at hospitals. In addition to sufficient funding, hospitals should work closely with experienced and dominant vendors and deliberately develop internal capabilities to understand system functions and provide services to patients and healthcare workers.

Keywords

vendor interaction, IT spending, Electronic Health Record Systems, healthcare