

Exploring the Impact of Information Technology Capability and Cloud Service Adoption on Hospital Agility Using Resource-Based Theory

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Abstract--The aged population, changed health behavior style, new infectious diseases and new international/domestic medical regulations or policies make the healthcare industry a turbulent environment. It also shows the growing importance of agility. The relative researches indicated that information technologies are important tools to improve organizational agility. However, the healthcare industry adopts information technologies much later than other industries and has insufficient personnel in the area. Under the changeable regulations of the National Insurance Administrator and the medical cloud project announced by the Minister of health and welfare, how hospitals to allocate resources and access to information technology to cope with the gap between strategy and Information Technology Capability. Therefore, this study uses resource-based theory to explore the relationship between Hospital IT Capability, Cloud-Computing Adoption and Hospital Agility. In addition, the current cloud computing services more are provided free, but there are also paid for services, would hospital investment amount in cloud computing services affect the effectiveness of the use of cloud computing is the need to explore.

This study has three main dimensions of development and an adjustment variable, there are ten hypothesis in the research model. Development of structured questionnaires, the questionnaire is divided into basic information and ask term two main parts, 41 questions in the total. The main object of study is the 142 hospital that the Ministry of Health and Welfare announced can be used cloud platform to exchange electronic medical records. Questionnaire respondents are required to understand the overall hospital information technology capabilities, strategy and agility, so the questionnaires is send to the president and vice president.

The study concluded that Hospital IT capability significantly positive effect Hospital agility; Hospital IT capability significantly positive effect Cloud-Computing Adoption; Cloud-Computing Adoption is only significantly positive effect “MOA” and Cloud-Computing Spending is no significantly adjustment effect. Comprehensive results of this study, hospitals must continue the development and adoption of new information technology and should effectively manage and use of information technology resources in order to increase the effectiveness of the use of cloud computing services.

Keywords— Hospital Agility , Hospital Information Technology Capability , Cloud-Computing Adoption Extent

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