

THE EFFECT OF INFORMATION TECHNOLOGY AND DYNAMIC CAPABILITIES ON HUMAN RESOURCES COMPETENCIES AND INNOVATIVE PERFORMANCE

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Abstract

The objective of this research is to study the relationships and influences of information technology capabilities, dynamic capabilities, human resources competencies and the innovative performance of listed companies in the Stock Exchange of Thailand (SET), the largest capital market in the country. A quantitative research method was carried out using questionnaires as the instruments for data collection. Questionnaire respondents were either the president, managing director, assistant managing director, general manager, or human resources manager of their respective companies. The research results revealed that all observed variables of these companies are presently at a high level. PLS-SEM was used to assess the structural models and verify the research hypotheses. The research results revealed significant influences among three pairs of variables: (1) IT capabilities had a positive effect on Dynamic capabilities, (2) IT capabilities had a positive effect on HR competencies, and (3) HR competencies had a positive effect on innovative performance. Thus,

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this research provides useful information for companies, emphasizing the importance of supporting and developing IT capabilities and HR competencies to increase the organization's innovative performance, in turn supporting survival in a rapidly changing and highly competitive environment.

Keywords: Information Technology Capabilities, Dynamic Capabilities, Human Resource Competencies, Innovative Performance

1. INTRODUCTION

At present, organizations are focused on achieving, and learning how they can achieve, a sustainable competitive advantage. Organizations are constantly affected by changes, both inside and outside the environment of the organization. To achieve a competitive advantage, an organization must continue to develop, as a failure to do so would make the organization unable to resist its competitors and therefore to be unable to survive. The current business environment is dynamic, driving business organizations to compete (Altınay, Madanoğlu, De Vita, Araslı, & Ekinci, 2016). The two main characteristics of environmental dynamism are unpredictability and instability, with the current environmental dynamism being a result of the introduction of new technology, variation in customer preferences, and fluctuations in product demand and material supply (Rojo, Stevenson, Lloréns Montes, & Perez-Arostegui, 2018). The larger the economic progress, the greater an organization's need to develop their capabilities to gain a competitive advantage.

Investing in information technology (IT) is an important decision for any company as it allows access to new IT, creating a competitive advantage (Arora & Rahman, 2017). IT will help to develop and change management in many areas, either in the service area, in building knowledge, or in driving forward to generate a lead in a particular area. However, IT investments can also bring risks to the accommodation business as new technologies tend to become rapidly obsolete and are complex to implement (Hua, 2020). Organizations realize the uses and applications of IT to continuously drive themselves towards their goals. Therefore, IT capabilities are essential in maintaining an organization's ability to continuously receive information regarding context changes (Cepeda & Arias-Pérez, 2019). This information will help an organization to sense opportunities before its competitors and assists in making excellent decisions in a turbulent environment.

Dynamic capabilities are another approach strengthening an organization by integrating technology, resources, and