

# Chapter 29

## The Mediation Role of Knowledge Sharing Between Organizational Learning and Technological Innovation Practice

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### ABSTRACT

*This article investigates the mediation role of knowledge management according to the dimensions of knowledge donating and knowledge collecting. The collected data was based on a total of 157 managers from the manufacturing industries will be evaluated by applying the PLS-SEM and fsQCA. The empirical outcomes based on PLS-SEM analysis demonstrate that organizational learning positively impacts on knowledge donating and knowledge collecting. This study confirms that both the knowledge donating and knowledge collecting act as mediators in mediating the positive relationship between organizational learning and the technological innovation practice. The fsQCA results indicate that the conditional support for the proposed antecedent and outcome expectation of the organizational learning. Moreover, the findings of fsQCA analysis also show that the complex solutions with three combinations sufficiently explain the technological innovation practice.*

### 1. INTRODUCTION

The technological innovation practice currently represents one of the most important elements of organizational innovative practices and capabilities that supporting the competitiveness of an organization in a turbulent environment (Coccia, 2017; Haneda & Ito, 2018) and facilitating the superior organizational

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performance (Azar & Ciabuschi, 2017). However, prior research calls for more studies to investigate the issues that are compounded by the association of technological innovation practice with intangible organizational attributes and elements that encompassing the sources of knowledge, production techniques, routines, processes, and capabilities (Langley, Smallman, Tsoukas, & Van de Ven, 2013).

Organizational learning will determine the success of technological innovation practice (e.g. Mandinach & Cline, 2013) because organizational learning is a part of the “intangible” resource that is difficult to be imitated and replicated and it does facilitate the firm to achieve competitive advantage. Due to the important of organizational learning in the study of the technological innovation practice, many studies have called for identifying the mediating factor between the relationship between organizational learning and the practice of technological innovation (e.g. Coccia, 2017; Wilden & Gudergan, 2015). A number of studies pointed out that knowledge management can be a key mechanism between learning and innovative practice (Burg, Berend & Raaij, 2014; Sanz-Valle, Naranjo-Valencia, Jiménez, & Perez-Caballero, 2011) since the knowledge management is a valuable intangible resource generator which dynamically contributes to achievement of competitive advantages (Birkinshaw & Sheehan, 2002). The role of knowledge sharing has always been largely ignored in the field of knowledge management (Titi Amayah, 2013; Henttonen, Henttonen, Kianto, Kianto, Ritala, & Ritala, 2016). The different dimensions of knowledge sharing still remain in the ‘Pandora Box’ which calling for further research, especially in individual level constructs and act as mechanisms are limited (Lee, Leong, Hew, & Ooi, 2013; Schneckenberg, Truong & Mazloomi, 2015; Kim, Lee, Paek, & Lee, 2013). Accordingly, the purpose of this study is to investigate how knowledge sharing among employees is enhanced by organizational learning and how it influences technological innovation practice based on the context of manufacturing industries in Malaysia.

The relationship among organizational learning, knowledge management, and innovative practices that highlighted in the previous studies are still remained under-investigation (Schneckenberg et al., 2015). Theoretically, majority of the studies adopt absorptive capacity and dynamic capability theories based on organizational level, operation level, or business level (Patterson & Ambrosini, 2015; Ritala & Hurmelinna-Laukkanen, 2013). Prior research calls for investigating the individual level by adopting these two theories. From the strategic management literature, limited recognitions are given to explain the nature of the capabilities (organizational learning) and routines (knowledge sharing) in affecting the superior innovative performance by drawing on micro-foundations of dynamic capabilities theory (e.g. Töytäri, Karänen, & Rajala., 2017). In due respect, drawing on the view of absorptive capacity argument (Knowledge sharing) (Cohen & Levinthal, 1990) and micro-foundations of dynamic capabilities theory (organizational learning) to develop a conceptual framework to examine the determinants of the technological innovation practice in which technological innovation is the foundation strategy of the firm to maintain competitive advantage (Teece, 2007; Teece, Pisano & Shuen, 1997). In other words, the conceptual framework was developed to measure the relationship between organizational learning and the technological innovation, and their underlying mechanisms in terms of knowledge sharing.

This study has contributed some implications to the literature. Firstly, this study will evaluate the relationship between organizational learning and technological innovation practice in the context of manufacturing industries in Malaysia as advocated by various scholars to study the relationship in different contexts (Garrido & Camarero, 2010; Sanz-Valle et al., 2011) in responding to the changes in the business environment (Coccia, 2017; Wilden & Gudergan, 2015). Secondly, this study extends the literature by clarifying knowledge sharing (including knowledge donating and knowledge collecting) plays an effective mechanism role in mediating the relationship between organizational learning and

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