## Chapter 67

# The Importance Role E-Collaboration Capability and Information System Maturity on Knowledge Sharing and SMEs Marketing Performance

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### **ABSTRACT**

This article discusses the effect of e-collaboration capability and information system maturity on knowledge sharing and SMEs marketing performance. This study was conducted at SMEs in Central Java which had used information system and technology in collaborating with partners and customers. There were 160 respondents in this research who were the owners or managers of SMEs in Central Java, Indonesia. This research used structural equation modeling analysis. AMOS version 21 was used to process the data. The result of this research showed that all proposed hypotheses were accepted. First, e-collaboration capability has positively and significantly influenced knowledge sharing. Second, knowledge sharing has positively and significantly influenced SME marketing performance. Third, e-collaboration capability has positively and significantly influenced SME marketing performance. Fourth, information system maturity has positively and significantly influenced knowledge sharing. Fifth, information system maturity has positively and significantly influenced SME marketing performance.

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### INTRODUCTION

Firm proactively change their business processes to reduce costs and improve competitive advantage (Carrol & Shabana, 2010). Brink (2017) reveal that collaboration contributes to SMEs competitiveness. Collaborative activities make SMEs become more sustainable (Govindan et al., 2016). Collaboration enable movement of resources to the other party to enhance value creation (Prahalad & Ramaswamy, 2004; Thomke & Hippel, 2002), innovation (Kim & Lui, 2015; Zhang & Tang, 2017), competitive advantage (Allred et al., 2011; Maulana & Rufaidah, 2014) and performance (Choi & Ko, 2012; Chuang & Lin, 2015; Vereecke & Muylle, 2006; Wang et al., 2015). Collaboration also allows for better managerial decisions.

The development of information and technology enables collaboration activities without having to meet face to face. Switzer and Hartman (2008) reveal e-collaboration as working together in electronic environment. Electronic collaboration enables a comprehensive long-distance collaboration for research and development, marketing (Bidgoli, 2012), learning, and tacit knowledge sharing (Harris, 2009). In order to develop electronic collaboration, SMEs are expected to have maturity in adopting information system (IS). IS maturity influences the knowledge sharing and firm performance (Rao et al., 2015). IS is strategically important when the organization are distributed geographically (Lang, 2001). Technology and information system makes SMEs receive information rapidly, easy to collaborate and communicate, and it influences the speed of decision making. IS also makes everything efficient (Alavi & Leidner, 2001; Wade & Hulland, 2004) and enhace companies' performance (Mohamed et al., 2006).

We find inconsistencies in the impact of e-collaboration on performance. Rosenzweig and Roth (2007) found that e-collaboration can enhance operational and business performance. Some experts reveal that the use of the internet in collaborative activities has not been able to show its benefits to performance (Deveraj et al., 2007; Jap & Mohr, 2002; Mukhopadhyay & Kekre, 2002; Rosenzweig & Roth, 2007). The inability is caused by less attention to the various costs that arise due to e-collaboration, such as human relations, system information, process changes and administrative costs (Kumar & van Dissel, 1996; O'Leary-Kelly & Flores, 2002). This study investigates the effect of e-collaboration capability and information system maturity on knowledge sharing and SMEs marketing performance.

### LITERATURE REVIEW

### **E-Collaboration Capability**

E-collaboration is a collaboration among individuals who accomplish a task using electronic technology (Kock et al., 2001). Switzer and Hartman (2008) and Weiseth et al. (2006) emphasize e-collaboration as working together in an electronic environment. Collaboration is carried out without face-to-face interactions between individuals or members of virtual teams involved in shared tasks using information and communication technology (Bouras et al., 2008). E-Collaboration uses a combination of hardware, software and communication technology that enables decision makers around the world to communicate, participate and collaborate in decision-making activities (Bidgoli, 2012). E-collaboration uses electronic technology, such as web-based chat tools, e-mail, internet, websites, social media, decision support system groups, and teleconference tools. E-collaboration is important because the relationship between the firm and its customers and suppliers can be managed efficiently.

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