

# Chapter 29

## The Fit Between External Involvement and Business Environment: Evidence From Chinese Manufacturing Firms

**Di Cai**

*Shandong University, China*

**Taiwen Feng**

*Northwestern Polytechnical University, China*

**Zhenglin Zhang**

*Xi'an Polytechnic University, China*

### ABSTRACT

*Previous studies are inconsistent in their findings about the relationship between external involvement and performance. The authors attribute this inconsistency to the misfit between external involvement and business environment. Drawing the concept of fit between information processing capabilities and needs from information processing theory, they develop the fitting patterns between external involvement and business environment and examine their impacts on performance. Information processing capabilities are measured by the degree of two types of external involvement in the NPD process and information processing needs are assessed based on three dimensions of business environment. Cluster analysis was used to develop the taxonomies of fit between external involvement and business environment. Analysis of variance (ANOVA) was used to examine the impacts of fitting patterns between external involvement and business environment on performance. The results reveal six fitting patterns between external involvement and business environment. ANOVA results show that the fitting patterns between external involvement and business environment are related to both operational performance and business performance, supporting our fit theory.*

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## INTRODUCTION

External involvement has received increasing attention both in research and practice in recent years (Lin & Germain, 2004; Mishra & Shah, 2009; Feng, Sun & Zhang, 2010; Svendsen, Haugland, Grønhaug & Hammervoll, 2011). Since organizations need information with high quality to cope with uncertainty, external involvement is especially important when facing environmental uncertainty (Premkumar, Ramamurthy & Saunders, 2005; Harmancioglu, Grinstein & Goldman, 2010). Scholars have highlighted that organizations are able to access rich information and knowledge from their customers and suppliers through successful external involvement (Singh & Power, 2009). Thus, external involvement provides an opportunity to enhance organizational information processing capabilities, which is critical for mitigating the influences of dynamic and uncertain environments (Premkumar et al., 2005; Koufteros, Vonderembse & Jayaram, 2005).

Despite the increasing research interests in external involvement, findings about the relationship between external involvement and performance from previous studies are inconsistent. While some studies provided empirical evidence for the positive impact of external involvement on performance (Singh & Power, 2009; Mishra & Shah, 2009), others reported a non-significant or even negative relationship between external involvement and performance (Hartley, Zirger & Kamath, 1997; Danese & Filippini, 2010). We attribute this inconsistency to the misfit between external involvement and business environment.

Furthermore, previous studies have limited the analysis of external involvement to its customer dimension (Lin & Germain, 2004; Svendsen et al., 2011), supplier dimension (Carr, Kaynak, Hartley & Ross, 2004; Chang, Chen, Lin, Tien & Sheu, 2006), or a combination of the two (Lau, 2011). Very few studies have investigated both two forms of external involvement in a single model. This study jointly examines two forms of external involvement, thereby addressing the fitting patterns between external involvement and business environment and their impacts on performance. This will improve our understanding of the mechanism of external involvement and help practitioners focus their limited resources to achieve the fit between external involvement and business environment.

While most early scholarly work applied the information processing theory to internal organizational issues, in recent years the theory has been extended to study inter-organizational interactions (Premkumar et al., 2005). In this study, we exert the information processing theory in an effort to place the fitting patterns between external involvement and business environment and their impact on performance in a theoretical context. From the perspective of information processing theory, organizations should attempt to achieve the fit between information processing capabilities and information processing needs to obtain superior performance (Galbraith, 1973). In our study, information processing capabilities are measured by the degree of two kinds of external involvement in the NPD process and information processing needs are assessed based on three dimensions of business environment. We posit that there exist different fitting patterns between external involvement and business environment, and they are related to performance.

To fully understand external involvement and its relationship to performance, there is a need to examine what fitting patterns between external involvement and business environment exist in Chinese manufacturing firms, and how these fitting patterns are related to different dimensions of performance. This suggests taking the concept of fit to study external involvement to provide a more nuanced and in-depth understanding of the two questions on the fitting patterns and their impacts on performance. An important question that this allows us to consider is whether organizations that fit external involve-

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