

Managing Supplier Risk and Capabilities: Essays from a Multi-disciplinary Perspective

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Abstract

Covid-19 shutdowns drew attention to the need for large global firms to maintain and develop capabilities and relationships within their local supply networks. In this dissertation, I explore this idea of investing in these supply networks as a means to gain competitive advantage. I have framed the phenomenon under study in the context of single-sourcing, a practice which is common in organizations due to a focus on efficiency, but has not received due attention in literature. Within this context the dissertation explores the relationship between firm behavior and motivation from two perspectives, first of a market-facing retailer firm and the second of a supplier firm, selling to this retailer.

Within the first perspective, I explore the idea of supplier improvement as a means for mitigating supply risk. In Chapter 2 (Essay 1), I model a newsvendor-like retailer sourcing from a single supplier. I propose an investment that the retailer can make to improve her supply by improving the suppliers' capabilities. I also model her optimal order quantity, study expected profit and find evidence to show that except in situations where supplier switching is cheap, it is beneficial for the retailer to invest in her suppliers' improvement.

In Chapter 3 (Essay 2), I explore a similar investment model in a Quick Response like retailer facing an endogenous lead time dependent cost of quick response, while in Chapter 4 (Essay 3) I analyze a Quick Response retailer facing a constraint on the supply capacity. I find consistent results while noting that quick response capabilities make the investment model more beneficial for the retailer while the capacity constraint works as a deterrent. These chapters take a cross-sectional view and focus on formal decision models around the investment choices made by the retailer firm.

In exploration of the second perspective, in Chapter 6 (Essay 4), I take a longitudinal view to focus on the consequences of such an investment on the supplier firm. The supplier firm, by virtue of the relationship stands at a nexus of the vertical network created through the knowledge investments made by the (retailer) lead firm and the horizontal 'buzz' networks created through an agglomeration of his peers. I hypothesize that the firm, while using these knowledge sources to upgrade capabilities, cyclically faces four paradoxes of attention, learning, success, and optimal distinctiveness. I also propose management strategies through the conduit of trade associations using their position in the networks.

My dissertation furthers the understanding of the value of interfirm relationships and provides support for the arguments in favour of investing in these relationships to gain competitive advantage.