Chapter 41
Technological Disruption as a Driving Force for Coopetition: The Case of the Self-Driving Car Industry

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ABSTRACT

Coopetition is still a relatively new perspective and paradigm for considering relationships between networks, firms and organizations, and business units. The literature on coopetition focuses on developing several alternative perspectives of coopetition. Integrating theories on coopetition is an essential challenge for scholars of management and marketing. However, one possibility to challenge the contemporary field of coopetition is to introduce new topical themes of business and society and test their relationships with coopetition perspectives. The authors consider one technical disruption—self-driving cars—and its collaboration networks related to coopetition perspectives. Outcomes show the importance of lead users of this disruptive technology. Furthermore, coopetition, and especially competitive networks, seems to be an important strategy for developing new disruptive technologies according to the needs of markets.

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1. INTRODUCTION

The coopetition research field has a multifaceted structure even without combining it with an all-inclusive theoretical approach (Bengtsson & Kock, 2000; Rusko, 2015; Bengtsson et al., 2016). The roots of the concept of coopetition are deep: According to Smith and Vogel (2010), the first documented use of coopetition as a concept appeared in 1913 (Smith & Vogel, 2010). Ever since the mid-1990s, coopetition has been an emerging trend in management studies, particularly concerning strategy and strategic alliances.

We assume that, instead of constructing one dominant theoretical coopetition framework, there is a need to develop coopetition discussions by challenging coopetition as a phenomenon in different topical contexts. Technological disruption is one of the most important drivers in national and international business life (Iansiti & Levien, 2004). Contemporary society and business environments have several technological distruptions (see Leydesdorff & Zhou, 2014; Vargo et al., 2015). Both technological disruption and coopetition are important features of businesses and organizations. However, there is a lack of papers that study various relationships between coopetition and technological disruption. This study focuses on the coopetition features of the disruptive technologies comparing the collaborative and competitive structures of three new industries. The main research question is, what kind of relationship does coopetition have with technological disruptions? If competitive features are involved with technological disruption, how does coopetition emerge in technological disruptions? In other words, is coopetition necessary, and in which forms, for large-scale technological disruptions? This paper studies these questions using the self-driving car industry as a case study example.

Lately, we have seen automotive manufacturers and ride-hailing service companies initiate strategic alliances and different forms of cooperation. Thus, our research on coopetition in the self-driving car industry can be seen as contemporary both in terms of the industry and in terms of the overall emerging coopetition paradigm.

In this text, we will concentrate on coopetition and technological disruption as it unfolds between automotive manufacturers and ride-hailing companies in the industry of self-driving cars. The trend of strategic alliance and cooperative actions between automakers and ride-hailing companies has been a fairly recent phenomenon, so, in this study, we have comprised our material largely from news articles and technology magazines' publications. Based on our analysis of these articles and publications, we have tried to construct a view of the competitive structures in self-driving car markets.

This study has the following structure: We start with a literature review, which introduces the concepts of technological disruption, coopetition, and radical innovation. For coopetition, we provide a theoretical background. Then we describe our research design, which contains information about empirical material and the introduction of the case. Next, we consider coopetition activities in the self-driving car industry. Our discussion section connects the two main concepts of the study—technological disruption and coopetition—based on the findings of the case study. Finally, we make concluding remarks regarding managerial implications and suggestions for further studies.