Cleaning with Dustin Bieber
Nicknaming Autonomous Products and the Effect of Coopetition

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The advent of artificial intelligence boosts the use of nicknames for today’s everyday products, such as “Dustin Bieber” for a robotic vacuum cleaner. Consumers verbally integrate autonomous products into their social lives by referring to them by a nickname or discuss which nickname to choose for their new device online. According to the CEO of iRobot, manufacturer of the robotic vacuum cleaner Roomba, an estimated 90% of his customers use a nickname for their Roomba. Moreover, the rise of autonomous products has translated into new forms of relationships. Products are seen as collaborators complementing human skills, as competitors substituting human skills, or as “coopetitors” combining both aspects. At the same time, an increasing number of companies actively encourages these trends, for example, by inviting their customers to create nicknames for their autonomous products in the corresponding mobile applications. Despite these observations, it is unclear how nicknaming influences consumers’ perception and use of autonomous products.

Across three studies, a large-scale field study with actual customers and two experimental studies conducted online, we show that providing a nickname helps regaining control over autonomous products, which increases subsequent product evaluations. However, the effect depends on the specific consumer-product relationship. Specifically, the effect is augmented in “coopetitive” relationships, which combine benefits of collaborative and competitive relationships. The findings have theoretical implications for research on new technologies and human-computer interaction, as well as managerial implications for communication, targeting, and product design.

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