The rise of self-moving products: How regular motion patterns enhance product attitudes

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Abstract:
As technology advances, self-moving products become increasingly prevalent in consumers' everyday lives. These products move across physical space to complete tasks without the need for human intervention. Examples include robotic lawn mowers, window cleaners, and security drones. Despite their increasing prevalence, little is known about how self-motion influences product attitudes toward such products. A series of lab and online experiments demonstrate that the regularity of motion patterns (i.e., the degree to which the motion path shows repetitive patterns) is critical for consumer perception of self-moving products. Building on evolutionary psychology as well as the psychology of fear, we argue and empirically show that irregular motion patterns trigger the perception of threat (e.g., toward objects or people), which in turn decreases product attitudes. These findings advance our understanding of the perception of autonomous technology and motion. Further, they suggest how firms can design and communicate self-moving products going beyond technical specifications and taking a customer-centric perspective.