

Meaning in the Age of Autonomy: Marketing Autonomous Products to Consumers Who Value Manual Labor

Key Takeaways

- Autonomous products are becoming increasingly sophisticated – able to cook meals and vacuum floors – but consumers who derive meaning from manual labor resist robots taking over tasks they value.
- Consumers who scored high on a novel meaning of manual labor (MML) measure were skeptical towards autonomous products, which fully take over a task, but not of automated products, which only partly take over a task.
- Companies can identify which consumers value manual labor by observing their behaviors and preferences, and can market autonomous products to these consumers by highlighting other uses of saved time, such as being with friends and family.

Adapted from “[Meaning of Manual Labor Impedes Consumer Adoption of Autonomous Products](#)”, by Emanuel de Bellis of University of St. Gallen, Gita Johar of Columbia Business School, and Nicola Poletti of Cada.

This paper from Columbia Business School, “Meaning of Manual Labor Impedes Consumer Adoption of Autonomous Products,” explores marketing solutions to some consumers’ resistance towards autonomous products. The study was co-authored by Emanuel de Bellis of University of St. Gallen, Gita Johar of Columbia Business School, and Nicola Poletti of Cada.

Research

Compared to panic that generative AI will replace many jobs, autonomous products that can cook, clean, or mow the lawn seem uncontroversial. However, Meyer Feldberg Professor of Business Gita Johar’s latest research suggests that consumers who find manual labor meaningful may resist autonomous products. A simple change in marketing, however, can shift their attitudes.

Many consumers hesitate to embrace new products, a tendency Johar has long analyzed in her research. Consumers might be generally skeptical of technology. They might fear losing control, as with self-driving cars. Or maybe traditional processes are woven into their identity, such as an old-school baker used to kneading dough by hand. In this paper, Johar and her colleagues constructed and tested a new variable: meaning of manual labor (MML).

Finding meaning in life, the researchers emphasized, is a higher-order need humans share, even as what we find meaningful can differ. People who treat manual labor as purely functional and score low on the paper’s MML variable might eagerly adopt autonomous products. However, people who feel manual labor provides meaning and score high on MML likely see autonomous products as taking over an important part of their lives.

Research (continued)

Since consumers differ in how much they value manual labor, the researchers explored how manual labor attitudes influence autonomous product preferences. And since consumers who value manual labor also find meaning

in other parts of their lives such as family or work, the researchers evaluated whether highlighting uses of time saved through autonomous products could counteract some consumers' resistance to robots.

Johar and her co-authors deployed four field and experimental studies:

Study 1 showed that consumers who value manual labor had worse views of autonomous products. Comparing a general population survey with autonomous product owners revealed that owners derived less meaning from manual labor.

Study 2 sought to rule out other reasons consumers might resist autonomous products, such as general aversion to new technology. Consumers who value manual labor were only skeptical of autonomous products that would fully replace their work. They were not skeptical of new automated products that would make their work easier.

Study 3 disentangled meaning of manual labor from identity relevance. When identity drives consumption, a person might resist automation. An old-school baker who views

hand-kneading as a signal of artisan credibility might reject a stand-mixer that streamlines work. But Study 3 reaffirmed that valuing manual labor only leads consumers to resist autonomous products, not automated ones. This effect persists for both identity relevant activities like cooking and less identity relevant tasks like mowing the lawn.

Study 4 disentangled meaning of manual labor from identity relevance. When identity drives consumption, a person might resist automation. An old-school baker who views hand-kneading as a signal of artisan credibility might reject a stand-mixer that streamlines work. But Study 3 reaffirmed that valuing manual labor only leads consumers to resist autonomous products, not automated ones. This effect persists for both identity relevant activities like cooking and less identity relevant tasks like mowing the lawn.

Conclusion

Overall, the four studies showed that the new age of autonomous products can challenge but also bolster humans' longstanding search for meaning. The studies indicated that valuing manual labor leads to skepticism of autonomous products but not automated ones, and validated a simple intervention to counteract this skepticism.

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Conclusion (continued)

With autonomous products poised to continue their growth, Johar's research establishes the psychological backing for a new wave of marketing. Consumers who draw meaning from manual labor tend to focus on what they'll lose if they outsource tasks to autonomous products. They ignore, however, the opportunity costs of their time, which could be allocated to family, friendships, leisure, and more.

Marketing can nudge consumers to consider what they value most while driving product adoption in the process. Companies can discern which consumers they need to target by observing preferences for tasks and hobbies that require manual labor, such as hand-washing dishes, woodworking and more. For those that value manual labor, companies need to be explicit and describe how exactly consumers can spend the extra time they save through autonomous products.

As new products open up more possibilities for how consumers allocate their time, Professor Johar's research nudges companies to adopt new marketing strategies to open up markets for these products.

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