

# The Choice for In-home AI Devices: A Cohort-Specific Perspective

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The use of in-home AI devices is a megatrend and the market potential for smart speakers is enormous. So far, several smart speaker providers like Amazon, Google, and Apple compete in the market and try to gain as many customers as possible. The knowledge of AI users' characteristics is mandatory for marketing managers to draw brand-specific implications. Especially psychographic characteristics have proven their potential to predict customer behavior lately ([1]). In an empirical study, we asked 350 respondents to fill in a personality test and to participate in a discrete choice experiment with smart speakers. To determine the respondents' personalities, we used the Five Factor model and relied on a well-established personality test. In the discrete choice experiment, the smart speakers were described by four attributes, i.e., brand (Amazon/Apple/Google/Xiaomi), price (50/100/150/200), language performance (simple commands/advanced instructions/natural language), location of personal data's storage (at home/at provider/at manufacturer). The data of 16 choice sets per respondent entered a mixed logit model, which considered both respondents' personality and age as observed heterogeneity ([2]). We found the adoption of smart speakers to be predominantly driven by the attributes of brand and price. In addition, we observed that respondents' age and personality unveil differences in the preferences for certain smart speaker brands.

Triggered by these results, we conducted a subsequent simulation study, which scrutinized shifts of market shares in several age cohort-based markets when a relatively unknown but cheap brand enters an established market, thus highlighting the importance of age cohorts in deriving successful marketing strategies for providers of in-home AI Devices.

Keywords: Discrete Choice Experiment, Simulation Study, Artificial Intelligence

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