

AI experts suggest 39% of time currently spent on chores could be automated within the next decade

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Researchers predicted the percentage of time that will no longer be spent on housework in 5 years and in 10 years, thanks to automation of domestic tasks. The predictions estimated by experts varied according to their country and gender (top panel). Experts’ estimation of the reduction in time dedicated to domestic work also varied significantly between activities (bottom panel): grocery shopping was predicted to be most automatable within 10 years whereas

physical childcare was predicted to be least automatable. Credit: Anne-Lise Paris (in-graphidi.com), PLOS, CC-BY 4.0 (creativecommons.org/licenses/by/4.0/)

On average, 39% of time currently spent on unpaid domestic work could be automated within the next decade, suggest AI experts from the UK and Japan. The findings are published in *PLOS ONE* by a team led by Ekaterina Hertog at the University Oxford, UK, and colleagues in Japan.

According to previous studies, people in the UK aged 15 to 64 spend about 43% of all their work and study time on unpaid domestic work (housework like cooking and cleaning, as well as child or elder care, that could theoretically be delegated to a paid worker or replaced by market goods).

In the UK, working-age men spend around half as much time as working-age women do on such work, and in Japan, the same figure is just 18%. However, few studies to date have examined [automation](#) in relation to unpaid domestic work, or how predictions about automation differ depending on the AI experts consulted. The authors of the present study asked 29 male and female AI experts from the UK and 36 experts from Japan to estimate how automatable 17 housework and care work tasks might be over the next decade.

The experts predicted that on average 39% of the time that people currently spend on any given domestic work [task](#) could be automated within the next ten years. Their estimates varied significantly between tasks, with the most automatable task predicted to be grocery shopping (59%).

The least automatable task was physical childcare (21%). UK-based experts believed automation might replace more domestic labor (42%)

than Japanese experts (36%). The authors suggest this may be because in the UK, technology is associated more with labor replacement compared to in Japan.

UK male experts tended to be more optimistic about domestic automation compared to UK female experts, which falls in line with previous studies showing that men tend to be more optimistic about technology than women in general. However, this trend was reversed for Japanese experts, with female experts being slightly more optimistic; the authors consider if the Japanese gender disparity in household tasks plays a role in these results.

Though the study's diverse sample is not statistically representative of the field and is too small to generalize the findings to all AI experts, the authors note that examining experts' backgrounds may contextualize their forecasting predictions. They also emphasize how these predictions don't just anticipate the future of work, but also shape it, such that bringing greater cultural and gender diversity to future research is important.

The authors add, "Our study with technology [experts](#) in the UK and Japan finds that in 10 years' time domestic automation could reduce the amount of time spent on current housework and care work tasks by 39%."

More information: Ekaterina Hertog et al, The future(s) of unpaid work: How susceptible do experts from different backgrounds think the domestic sphere is to automation?, *PLoS ONE* (2023). [DOI: 10.1371/journal.pone.0281282](https://doi.org/10.1371/journal.pone.0281282)

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