HRI in the home: A longitudinal ethnographic study with Roomba

Sub-project 5.1: Robots for daily life – Interaction analysis

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Phase 2
Give them a domestic robot and study initial reactions.

• What do people expect from Roomba?
• How do they initially react to Roomba?

Phase 3
See how they explore the robot during two weeks.

• How do different household members interact with Roomba?
• What else then cleaning to people do with Roomba?
• How do people describe Roomba?

Phase 4
Examine the use patterns of the robot during two months.

• Who uses Roomba for what, when, where, how, and why?
• How does Roomba impact the household?

Phase 5
Find out values the robot might hold for the household.

• How does perception evolve over time?
• What drives adoption/rejection?

Outputs
→ How a robot impacts a household ecology and social aspects
→ Process of adoption of a domestic robot beyond novelty effects
→ What experiences shape people’s perception of a robot
→ What factors drive or hinder adoption of domestic robots
→ What methods to study robot adoption in daily life
→ How to design future personal service robots