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1. Find an interesting product (physical or non-physical): Robotic vacuum cleaner

Roborock S7. Source: Verkkokauppa.com (for illustration purpose only)

2. Analyse its smartness according to the characteristics:

a. Understanding: Understand the task of cleaning the house, what it is capable of cleaning, and what it is not.

b. Learning: Learn the structure of the house and the layout of furniture by travelling through different parts/rooms of the house.

c. Reasoning and decision-making: Follow the most efficient path around the house so that it can clean the house in the shortest amount of time.

d. Autonomy and independence: Automatically clean the house when you are away or on the weekend, dispose the trash when it is full, and go back to the charging station when the battery is low.

e. Adaption / Reflection: Adapt to avoid unsuitable terrains, such as staircases, backyards, pools, etc.

3. Analyse two functions according to the Data/Model/Action-concept: Automatic cleaning based on time and planned route

a. What data is captured? (Data)
   - The current time
   - The structure of the house and the layout of rooms

b. How is the data captured? (Data)
   - Time is captured using the internal clock or from the Internet
   - The structure of the house and the layout of rooms are captured using sensors on the vacuum cleaner throughout its journey around the house

c. What is done with the data? (Model)
   - The vacuum cleaner analyses the time to get the most appropriate time to start cleaning

- The structure of the house and the layout of rooms are analyses to get the most efficient and fastest cleaning route

d. What is the result and action? (Action)
 - The vacuum cleaner starts cleaning when the appropriate time comes
 - The vacuum cleaner follows its planned route to clean the house