

# Motivating Consumers to Repair Through Platform Design

## A Strategy to Consumer Electronics Diagnostics

### Context

In a predominantly linear economy, premature replacement of consumer electronics accelerates CO<sub>2</sub> emissions, resource scarcity, e-waste, and pollution. Focusing on vacuum cleaners as high-volume small appliances, this project uses consumer behaviour factors as a leverage point to design digital interventions that motivate consumers to repair.

The project, commissioned by Techniek Nederland, explores how a repair platform can respond to these behavioural and systemic challenges to motivate consumers to repair and strengthen the role of professional services.

### Main Research Question

Based on the problem statement and design brief, the following main research question has been derived for this project:

**How can a repair platform for consumer electronics support the diagnostics journey, address consumer needs, and consider stakeholders to deliver interventions that effectively motivate repair?**

### Research Activities

In order to address this research question and design the final platform, the design process employed activities among all:



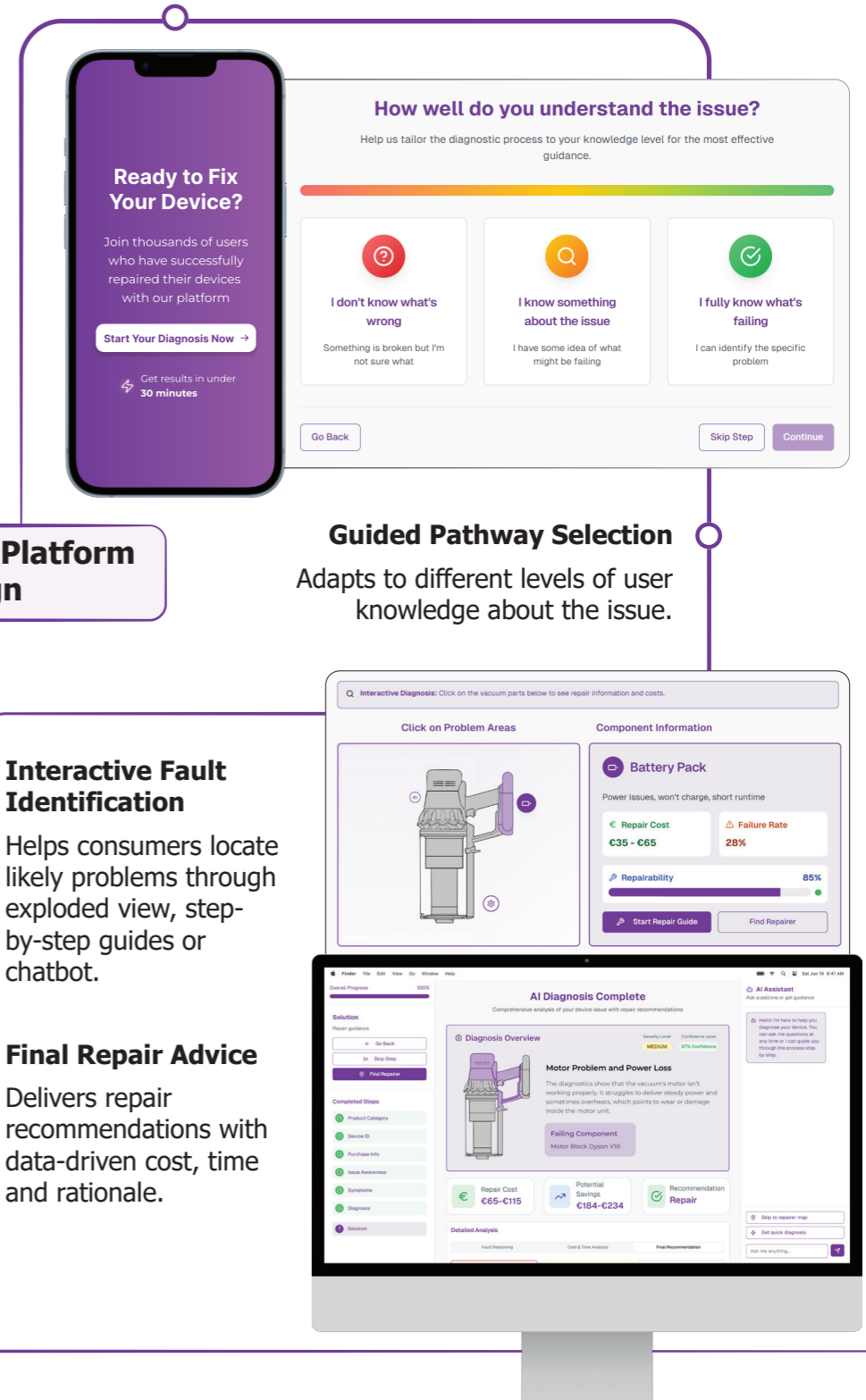
### Final Platform Design

#### Interactive Fault Identification

Helps consumers locate likely problems through exploded view, step-by-step guides or chatbot.

#### Final Repair Advice

Delivers repair recommendations with data-driven cost, time and rationale.



#### Guided Pathway Selection

Adapts to different levels of user knowledge about the issue.

Ilia Dichev  
Motivating Consumers to Repair Through  
Platform Design  
26.08.2025  
Strategic Product Design

**Committee** Prof. dr. ir. Ruth Mugge  
Prof. dr. A.R. Balkenende  
D. Mous  
Company Techniek Nederland