



Repair Scorecard

Masters graduation or research project



The problem: Products break. Some can be repaired easily, others aren't worth the time, it's cheaper to buy a new one. But how do customers know which is which when buying a product? And how do manufacturers and governments develop policies, like the new EU Right to Repair law, to improve reparability? There are many scorecards for reparability, but all of them are qualitative checklists (e.g., how many screws are there? How many disassembly steps? Etc.) Such checklists don't tell companies or governments whether it's worth the money to repair a product.

Project goal: Create a new repair scorecard, different from anything used today, that quantifies the €/hr of value recovered by repairing a product. That means taking into account how much the product would cost to replace, the cost of spare parts, the time required to disassemble, replace the bad part, and reassemble, for all of the most common repairs. Literature data already exists for many products, so you can develop benchmarks, but some hands-on experimentation will be required as well. You might also decide to include factors like the time to diagnose the fault, time to order parts, cost of tools required, statistical likelihood of different product failures, likelihood of breaking the product worse during a repair attempt, and more. You might also plan to integrate this scorecard with factors that must remain checklist items, such as whether a repair manual is freely available online, or risk of safety hazard during repair. You might also suggest thresholds for what €/hr scores are "good" or "bad" for different regions of the globe, and what policy targets should be.

In summary:

- Develop a €/hr reparability scorecard
- Develop a tool (simple spreadsheet calculator is ok) where others can easily score products.
- Score a variety of products in different industries, to provide benchmarks of good and bad scores.
- Translate results into simple policy recommendations for manufacturers or governments.

Company partner: No industry partner is guaranteed, but you will work with the [PROMPT](#) research consortium of universities, nonprofit consumer organizations, and companies, including the repair companies iFixit and RUSZ. Students are also welcome to recruit other partners.

Skills required: Applicants should have hands-on experience with product repair. Time commitment required is a graduation project or a research project of 9 ECTS.

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