Part Planning

What? Summary and purpose of the tool

The Part Planning tool is a fast and simple early design stage tool for modular design. It is intended to help companies increase their product's service life, the number of reusable parts, and the number of reusable modules. The tool is applied during a workshop and creates a strategic plan for carry-over parts by means of disassembling a product, analysing which parts can potentially be carried over to future generations, and discussing the implications. Preparation will require two to four hours to disassemble the targeted product and the workshop itself will take two to four hours.

Why? Reasons to use the tool

The tool's purpose is to maximise the number of parts and modules that are preserved over product generations without hindering innovation. This is achieved by striving for spare part compatibility to retain backwards compatibility across product generations. In new product development, rather than reusing what exists, parts and modules are proactively designed to fit in multiple generations by, for example, paying attention to fixed interfaces between key components. Through forward planning, better service and spare part efficiency, less long-term stock is required.

When? Situations for which the tool would be useful

The Part Planning tool has been specifically developed for the early (re)design stage of product development to assist cross-departmental product development teams. It is especially useful in contexts where it is known that parts of the product will be replaced during or between use cycles (e.g. during repairs, remanufacturing or refurbishment). Particularly long-lasting consumer goods can benefit from this approach.