

Upgrade Forecast

What? Summary and purpose of the tool

The upgrade forecast tool helps designers to forecast technological trends by outlining a roadmap. It has been developed to forecast future product specifications and enhance the upgradability and life extension of the product to ensure that it responds to future user needs. The tool has been designed as an A0 template - on which a graphical representation of technological trends over time can be made for key functionalities of the product. During a workshop, a multi-disciplinary team of product developers completes an upgrade plan with design specifications. In preparation, two hours are needed to define the product and identify four to eight key product characteristics, while the workshop itself takes one to three hours.

Why? Reasons to use the tool

The Upgrade Forecast tool can efficiently help companies to create an upgrade plan. It can spearhead the process of design for upgradability by extrapolating trends, demands, and disturbances. The tool can assist companies to answer questions such as “How will technologies develop?”, “Which trends do we follow?”, and “To which technology should be upgrade?”.

When? Situations for which the tool would be useful

The Upgrade Forecast tool is particularly useful for cross-departmental product development teams in the ‘fuzzy’ front end of product development. It can be applied in contexts where companies are considering upgrading one of their products. The tool is particularly applicable in situations where a.) the product use life is shorter than the product working life, b.) users replace the product to get the features of a new one, c.) the new product is commonly an evolution (rather than a revolution) of the previous one, or d.) users would pay to get the latest features added to the product they are using.

