

PRODUCT CONCEPT EVALUATION



Bear-resistant containers come in all sizes and shapes, from ultra-light backpacker food containers weighing a few ounces to dumpsters able to hold 20 tons. Some of these products have been tested by trial and error through direct experience with bears, and actually meet the criteria for 'bear-resistance'.

When can the method be used?

Product Concept Evaluations take place throughout the design process. Concept screenings usually involve large numbers of product ideas and concepts, and therefore are more frequently used in the beginning of the design process. Concept optimisation takes place near the end of the design process, when aspects of the concept need to be improved.

How to use the method?

Typically, these evaluations are carried out in a controlled environment, where a panel of people judge product concepts based on a list of predetermined issues. The starting point of a Product Concept Evaluation is a number of concepts to be judged and a reason for conducting the evaluation. Often, concept screenings are conducted by experts such as managers, engineers and marketers instead of representatives from the user group. Concept optimisation aims to judge parts or elements of product ideas and concepts. The assumption is that preferred aspects or elements of the individual product concepts can be connected with each other, yielding a concept that is regarded as optimal. Go/no-go decisions usually involve the choice between two or three product concepts. The types of concept representations that you can use for Product Concept Evaluations are:

- Textual concepts: Written scenarios describing how people can use the product, or an enumeration of the aspects of the product idea.
- Pictographic concepts: Visual representations of the product ideas. Depending on the stage of development these can be sketches or highly detailed 3D-CAD models.

Product Concept Evaluation helps you to understand how intended users or other stakeholders value your concept design. This will enable you to determine which aspects should be optimised. You can then make a go/no-go decision or select concepts (concept screening).

- Animations: Moving visual representations of the product idea or a user scenario.
- Mock-ups (dummies): Three-dimensional, tangible representations of the product idea.

Possible procedure

STEP 1

Describe the aim of the Product Concept Evaluation.

STEP 2

Determine what type of Product Concept Evaluation you want to conduct, for example personal interviews, focus groups or discussion groups.

STEP 3

Create the appropriate concept representations.

STEP 4

Create a plan that includes: The aims and type of evaluation, a description of the respondents, questions you want to ask the respondents, aspects of the product concept that need to be evaluated, a description of the test environment, the means of recording the evaluation, a plan for how you will analyse the results.

STEP 5

Search for and invite respondents to the evaluation.

STEP 6

Set up the test environment, including recording equipment.

STEP 7

Conduct the concept evaluation.

STEP 8

Analyse the results, and present the results concisely, using for example a report or a poster.

Tips & Concerns

- The selection of respondents is an important aspect of Product Concept Evaluations. The invited respondents belong to one or more of the pre-formulated user groups.
- You can select them based on sociocultural characteristics or demographic characteristics.
- An important issue to be taken into account is the respondents' level of knowledge of the product category. To assess this level of knowledge, you could simply ask respondents about their experiences with similar products.
- Another important issue when selecting respondents is related to psychological aspects such as tolerance and innovativeness. One important question is: how tolerant are the respondents towards new products and new situations?
- Another important question is how innovative, or conservative, are the respondents? Such psychological aspects have a big influence on the results of the Product Concept Evaluations.
- Do not forget to provide the respondents with some form of compensation.
- Make sure you structure the evaluation systematically with the questions you want to ask.