In order to design good, useful, user-friendly products, it is important to understand user needs and characteristics. But, equally important is to see how technologies shape and transform user needs and behavioural routines. To improve usability, the focus must not just be on user needs, but also on how products guide and change people.

**Examples of user guiding design**

The pitched roof of the trash bins at Dutch railway stations prevents people from leaving rubbish on top of the bin, and guides them towards desired use (the cup on the roof in the picture is a trick).

If this extraordinary curve in this bicycle lane in Paris makes you smile, it may also suddenly make you aware of the great extent our everyday movements are guided and constrained by technology.

The usability of this remote control is awful. Users were even confused about which side was the front. The sticker (taken from a piece of fruit) at least solves this problem by guiding users when picking it up.

For more information, examples, publications, and contact details, check out “product impact” on [www.designforusability.org](http://www.designforusability.org)
Product Impact Model

<table>
<thead>
<tr>
<th>above-the-head (abstract)</th>
<th>before-the-eye (cognitive)</th>
</tr>
</thead>
<tbody>
<tr>
<td>utopian technology</td>
<td>guidance</td>
</tr>
<tr>
<td>dystopian technology</td>
<td>persuasion</td>
</tr>
<tr>
<td>ambivalent hybridity</td>
<td>identification/lifestyle</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>behind-the-back (environment)</th>
<th>to-the-hand (physical)</th>
</tr>
</thead>
<tbody>
<tr>
<td>technical determination</td>
<td>coercion</td>
</tr>
<tr>
<td>trend conflict/reinforcement</td>
<td>mediated gestures</td>
</tr>
<tr>
<td>environmental conditioning</td>
<td>subliminal affect</td>
</tr>
</tbody>
</table>

**Interaction mode:** What is the contact point between technology and user? **Exemplary influence:** What kind of effect does the technology have on users?

**Abstract** (above-the-head)
Views about how technology drives history.

**Environment** (behind-the-back)
Influence on users without direct contact.

**Cognitive** (before-the-eye)
Cues to the mind to change decisions.

**Physical** (to-the-hand)
Changing gestures through bodily contact.

Product Impact Session

**Explanation**
In a Product Impact Session, a product is analysed with the purpose of discovering and designing user-changing effects.

**Preparatory questions**
- Is the product necessarily encountered so that it can enforce behaviour? Or, is it a consumer product that can be easily avoided, and can rather only seduce users?
- Are there specific behaviour goals: usability, energy-saving, social empowerment?
- What are critical use actions that must be avoided or assured?

**Assess and re-design**
- **Mind set:** Think the other way around!
  - Do not go from user needs to technical solutions, but from a product (or concept, prototype) to user guiding and changing effects.
- **Use the model**
  - Make a round along the quadrants of the model.
  - Do the interaction modes apply, and what effects can be identified?
  - Consider design alternatives to better guide users.
  - Try changing between cognitive and physical interaction.
  - Try to improve connection to trends in the technical environment.

**Results**
- **Wrap up**
  - Identified effects
  - Design alternatives