This is Why Users Cannot Understand Your Content

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Industrial PhD student at Mälardalen University
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About Jonatan

- From Västerås, Sweden
- 20 years of experience as a technical communicator, mostly within XML based content management.
- Information Architect at Excosoft.
- Industrial PhD student in innovation and design at Mälardalen University.
How to connect the terminal to the ground

To connect the terminal to the ground, do the following:

1) Find a earth-ground source on the machine.
2) Attach the yellow-green cable to this source.
3) Secure it firmly, by tightening the earth-ground screw.
You will learn about

1. Usability problems in technical communication

2. What it means to comprehend a text

3. Situations where comprehension fails, in a reading-to-do context

4. How technical information can be designed better
Technical information is often not usable
What influences how usable a manual is in a reading-to-do context?

If a user cannot understand what they find and read in the manual...

the manual is not usable...

and the product (software, machine, etc.) is not usable either.
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How do users understand information?

Mental model (representation)

Working memory

Knowledge in long-term memory
The procedure is actually quite simple. First, you arrange the items into different groups. Of course one pile may be sufficient depending on how much there is to do.

If you have to go somewhere else due to lack of facilities that is the next step; otherwise you are pretty well set.

At first, the whole procedure will seem complicated. Soon, however, it will become just another facet of life. It is difficult to foresee any end to the necessity for this task in the immediate future, but then, one never can tell.

After the procedure is completed one arranges the materials into different groups again. Then they can be put into their appropriate places. Eventually they will be used once more and the whole cycle will then have to be repeated.

Modified from:
How to wash clothes

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How are users reading-to-do?

Work task

Execute tasks

Express information need

Formulate task strategy

Find a manual, search and read it
4 situations where reading-to-do comprehension may fail

<table>
<thead>
<tr>
<th>When users’...</th>
<th>And...</th>
<th>Then...</th>
</tr>
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<tbody>
<tr>
<td>Domain knowledge</td>
<td>Language knowledge</td>
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Situation 1: is sufficient is sufficient includes abstract and vague words cannot understand
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<td></td>
<td>is sufficient</td>
<td>is sufficient</td>
<td>includes abstract and vague words</td>
</tr>
<tr>
<td>Situation 2:</td>
<td>is sufficient</td>
<td>is not sufficient</td>
<td>includes unusual words</td>
</tr>
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</table>
A gal kicked the soccer.
The pigskin flew towards the window.
The casement broke.

A girl kicked the football.
The football flew towards the window.
The window broke.
Avoid using unfamiliar words

• Use the same word consistently for the thing you are referring to.

• Avoid using synonyms.

• If you have to use a word that might be unfamiliar to the user, make it easy for the user to get a definition.
Situation 2 - example
4 situations where reading-to-do comprehension may fail

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</tr>
<tr>
<td>Situation 3:</td>
<td>is not sufficient</td>
<td>is sufficient</td>
<td>is not coherent</td>
</tr>
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A fat man stopped to read the sign warning of thin ice. He decided not to cross the desert.

A fat man stopped to read the sign warning of thin ice. He decided not to cross the lake.

Modified from:
Be explicit about what knowledge users are assumed to have

- Analyze the knowledge users must have to “bridge” sentences.
- Tell the user that this is the knowledge they are assumed to have.
- Or, provide the background information that the user may lack to help the user bridge sentences.
4 situations where reading-to-do comprehension may fail

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<tr>
<td>1</td>
<td>is sufficient</td>
<td>is sufficient</td>
<td>includes abstract and vague words</td>
<td>cannot understand</td>
</tr>
<tr>
<td>2</td>
<td>is sufficient</td>
<td>is not sufficient</td>
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<tr>
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</tr>
<tr>
<td>4</td>
<td>is contradictory to what is stated in the information</td>
<td>is sufficient</td>
<td>contradicts users’ knowledge</td>
<td>may misinterpret or ignore information</td>
</tr>
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At the concert hall, the performance of a new piano piece by the famous composer was held for the first time.

Modified from
My translation
At the concert hall, the performance of a new piano piece of the famous **composter** was held for the first time.

Modified from
My translation
A stone fell down the mountain hillside and smashed the cottage at the edge of the forest to pieces. After putting the stone in his pocket, the owner of the house had to build a new home.

Modified from
My translation
A stone fell down the mountain hillside and smashed the cottage at the edge of the forest to pieces. **After putting the stone in his pocket**, the owner of the house had to build a new home.

Earth is a round planet orbiting the sun. Since it is round like a globe, you can travel around it without facing the risk of “falling off the cliff”. 
Make users aware of information that could contradict their beliefs

• Identify information that you think contradict users’ beliefs, such as “composter – composer”.

• Add information to make the user aware of the contradiction, such as a refutation text:

  **Did you know?**
  Many think that the earth is flat, but this is actually not true; the earth is a sphere.
What influences how usable a manual is in a reading-to-do context?

- Quality and quantity of knowledge
- Quality of information—readability, findability, and legibility
- If a user cannot understand what they find and read in the manual...
- Level of disturbances in the work place
- Reading skill level
- The manual is not usable...
- and the product (software, machine, etc.) is not usable either
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Technical information must include the information users need.

Product development

**Technical communicator:**
Predict user questions

Product is launched to the market

Product in operation

**Support engineer:**
React to real user questions
How to connect the terminal to the ground
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Simulate the dialogue between the expert and novice

I have a problem. When I try to connect the cable to the terminal, I get an error message.

Ok, so how do I connect the terminal to the ground?

You get an error message if you forget to connect the ground first.

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Dialog on on-line forums

where to post an upload variable

I use a cart on my website and in order for it to process orders I need to post this variable on the form for the checkout cart. Does it go on the credit card processor form where user inputs the credit card info?

```html
<input type="checkbox" title="Manual" name="tmf" value="_cart"/>
<input type="checkbox" title="Manual" name="upload" value="1"/>
<input type="checkbox" title="Manual" name="business" value="Your PayPal Email Address"/>
<input type="checkbox" title="Manual" name="item_name_1" value="Post Your Value Here"/>
<input type="checkbox" title="Manual" name="amount_1" value="xx">
<input type="submit" name="submit" value="submit">
</form>
```

Korrekt Svar

by phpandcss den 2013-nov-04 16:14

1. Mr. Ben, what is the value to be inserted in one of the red values? Which value is it?
   `<input type="hidden" name="item_name_1" value="Post Your Value Here"/>

2. and most importantly, what does a label for the user to identify the input field look like?

3. Can you post one which is specifically for this form upload variable?
Questions?

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or scan the QR code

The feedback tool will be available even after the conference!