An Approach to Quality Technical Information: Outlining Nine Quality Characteristics

*Presented by Michelle Corbin and Fran DeRespinis*
Agenda

- Who are we to talk about this topic?
- What is quality technical information anyway?
- What are the nine quality characteristics you ask?
- Do you have any questions?
A methodology for achieving quality information

- Defines quality in a common and consistent way
- Provides detailed specifications of quality characteristics
- Provides a more complete view of quality than a style guide
- Describes what to do, when to do it, and how to do it
An Approach to Quality Information: Developing Quality Technical Information (DQTI)

- *Developing Quality Technical Information* is an externally published book in its 2nd edition (available on amazon.com, or your local independent bookstore)

- DQTI is a collection of writing guidelines organized into a series of 9 quality characteristics, which are grouped into 3 categories

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What Are the Nine Quality Characteristics?

- Accuracy
- Clarity
- Completeness
- Concreteness
- Organization
- Retrievability
- Style
- Task orientation
- Visual effectiveness
Quality Characteristics by Group

- **Easy to use**
  - Task orientation
  - Accuracy
  - Completeness

- **Easy to understand**
  - Clarity
  - Concreteness
  - Style

- **Easy to find**
  - Organization
  - retrievability
  - Visual effectiveness
Easy to Use

- The actual application of the information is critical.
- More than usability; it’s about the USE of the information.
- Information is easy to use when it is task-oriented, accurate, and complete.
Introducing Task Orientation

- A focus on helping users do tasks that are associated with a product or tool in relation to their jobs.
- Writing in terms of how the user does the task.
- Don't tell me how it works, tell me how to use it.
Don't tell me how it works, tell me how to use it.

--A customer
When to work on task orientation

Understand users, tasks, and product

Outline or chunk tasks and topics

Write

Review and revise

Review and revise

Clarity, style

Organization, retrievability, visual effectiveness

Accuracy, completeness, concreteness

Task orientation
Guidelines for task orientation

- Write for the intended audience
- Present information from the user's point of view
- Indicate a practical reason for information
- Focus on real tasks, not product functions
- Use headings that reveal the tasks
- Divide tasks into discrete subtasks
- Provide clear, step-by-step instructions
Introducing Accuracy

- Adherence to facts or truth
- Freedom from mistakes or errors
Be sure that you are right, then go ahead.

--Davy Crockett
When to work on accuracy

- Understand users, tasks, and product
- Outline or chunk tasks and topics
- Write
- Review and revise
- Review and revise

- Task orientation
- Organization, retrievability, visual effectiveness
- Accuracy, completeness, concreteness
- Clarity, style
Guidelines for accuracy

- Write only information that you understand, and then verify it.
- Keep up with technical changes.
- Maintain consistency of all information about a subject.
- Use tools that automate checking for accuracy.
- Check the accuracy of references to related information.
Introducing Completeness

From the user's point of view, all of the required information is available:

- All of the *relevant* information is covered
- Each subject is covered in *sufficient detail*
- All *promised* information is included
A successful book is not made of what is in it, but what is left out of it.

--Mark Twain
When to work on completeness

Understand users, tasks, and product

Outline or chunk tasks and topics

Write

Review and revise

Review and revise

Clarity, style

Task orientation

Organization, retrievability, visual effectiveness

Accuracy, completeness, concreteness
Guidelines for completeness

- Cover all topics that support users’ tasks, and only those topics.
- Cover each topic in just as much detail as users need.
- Use patterns of information to ensure proper coverage.
- Repeat information only when users will benefit from it.
Quality Characteristics By Group

- **Easy to use**
  - Task orientation
  - Accuracy
  - Completeness

- **Easy to understand**
  - Clarity
  - Concreteness
  - Style

- **Easy to find**
  - Organization
  - Retrievability
  - Visual effectiveness
Easy to Understand

- How information is presented in both small (words and sentences) and large (examples and scenarios) structures
- Information is easy to understand when it is clear, concrete, and stylistically consistent
Introducing Clarity

- Freedom from ambiguity or obscurity
- The presentation of information in such a way that users understand it the first time
Easy reading is damn hard writing

--Nigel Hawthorne
When to work on clarity

Understand users, tasks, and product

Outline or chunk tasks and topics

Write

Review and revise

Review and revise

Clarity, style

Task orientation

Organization, retrievability, visual effectiveness

Accuracy, completeness, concreteness
Guidelines for clarity

- Focus on the meaning.
- Avoid ambiguity.
- Keep elements short.
- Write cohesively.
- Present similar information in a similar way.
- Use technical terms only if they are necessary and appropriate.
- Define each term that is new to the intended audience.
Introducing concreteness

- Appeals to the senses
- Uses things that can be experienced
- Not abstract
- Not something that can only be thought or imagined
You look at me as if you’re in a daze
It’s like the feeling at the end of a page
When you realize you don’t know what you just read

--Missing Persons
When to work on concreteness

- Understand users, tasks, and product
- Outline or chunk tasks and topics
- Write
- Review and revise

- Organization, retrievability, visual effectiveness
- Accuracy, completeness, concreteness
- Clarity, style
Examples of the continuum from the abstract to the concrete

<table>
<thead>
<tr>
<th>Abstract</th>
<th>Concrete</th>
</tr>
</thead>
<tbody>
<tr>
<td>financial institution</td>
<td>Federated Bank, Raleigh</td>
</tr>
<tr>
<td>bank</td>
<td>IBM Tivoli NetView</td>
</tr>
<tr>
<td>Computer system</td>
<td>capital management software</td>
</tr>
<tr>
<td>software</td>
<td>IBM Tivoli NetView</td>
</tr>
<tr>
<td>hierarchy</td>
<td>organization chart</td>
</tr>
<tr>
<td>pyramid structure</td>
<td>Department L5A</td>
</tr>
<tr>
<td>“A function of the compiler is to check syntax.”</td>
<td>“The XYZ compiler checks syntax.” example of syntax messages for a code sample</td>
</tr>
<tr>
<td>&quot;A database is a set of tables, in which each table is a set of relations.&quot;</td>
<td>&quot;A database is like a file drawer, in which each folder holds related papers.&quot; (a simile shows the explicit comparison)</td>
</tr>
</tbody>
</table>
Guidelines for concreteness

- Choose examples that are appropriate for the audience and subject.
- Use focused, realistic, accurate, up-to-date examples.
- Make examples easy to find.
- Make code examples easy to adapt.
- Use scenarios to illustrate tasks and to provide overviews.
- Set the context for examples and scenarios.
- Relate unfamiliar information to familiar information.
- Use general language appropriately.
Introducing style

- Using correct and appropriate writing conventions and choices of words and phrases
- Following certain conventions, standards, and rules to ensure consistency
- Making choices about tone, grammar, punctuation, and presentation
To me, style is just the outside of content, and the content the inside of style, like the outside and inside of the human body—both get together, they can’t be separated.

--Jean-Luc Godard
When to work on style

- Understand users, tasks, and product
- Outline or chunk tasks and topics
- Write
- Review and revise
- Task orientation
- Accuracy, completeness, concreteness
- Organization, retrievability, visual effectiveness
- Clarity, style
Why should we care about style?

- Errors in grammar, spelling, and punctuation make you look less credible.
- Inconsistencies in highlighting, tone, and spelling confuse readers.
- Incorrect or inconsistent boilerplate text (inconsistent throughout a library or across solutions) can be misleading and might cause legal problems.
- Errors in style can cause inaccurate or nonsensical translations.
Guidelines for style

- Use correct grammar.
- Use correct and consistent spelling.
- Use correct and appropriate punctuation.
- Write with the appropriate tone.
- Use an active style.
- Use the appropriate mood.
- Follow template designs and use boilerplate text.
- Create and follow style guidelines.
Quality Characteristics By Group

- **Easy to use**
  - Task orientation
  - Accuracy
  - Completeness

- **Easy to understand**
  - Clarity
  - Concreteness
  - Style

- **Easy to find**
  - Organization
  - Retrievability
  - Visual effectiveness
Even though finding the information is not the main purpose (that’s to USE it), if users can’t find the information, it doesn't matter how accurate, clear, complete, concrete, well-organized, stylish, task-oriented, or visually effective it is.

What do users need to be able to find the info? They need information that is well organized, highly retrievable, and visually effective.
Introducing Organization

- How information fits together
- Arrangement of information
  - Across topics, sections, chapters
  - Within topics, paragraphs, sentences
Without order there is only chaos, and nothing constructive can evolve from chaos except order.

--Duncan Head
When to work on organization

Understand users, tasks, and product

Outline or chunk tasks and topics

Write

Review and revise

Review and revise

Clarity, style

Task orientation

Organization, retrievability, visual effectiveness

Accuracy, completeness, concreteness
Guidelines for organization

- Organize information into discrete topics by type.
- Organize tasks by order of use.
- Organize topics for quick retrieval.
- Separate contextual information from other types of information.
- Organize information consistently.
- Provide an appropriate number of subentries for each branch.
- Emphasize main points; subordinate secondary points.
- Reveal how the pieces fit together.
Introducing Retrievability

- Finding specific information quickly and easily
- Obvious examples: table of contents, index, cross-references or links, and headings
- Not so obvious examples: highlighting, revision markers, and icons
- Retrievability elements are entry points, or signposts that orient and direct users
Knowledge is of two kinds. We know a subject ourselves, or we know where we can find information upon it.

--Samuel Johnson
When to work on retrievability

- Understand users, tasks, and product
- Outline or chunk tasks and topics
- Write
- Review and revise
- Clarity, style
- Task orientation
- Organization, retrievability, visual effectiveness
- Accuracy, completeness, concreteness
Guidelines for retrievability

- Facilitate navigation and search
- Provide a complete and consistent index
- Use an appropriate level of detail in the table of contents
- Provide helpful entry points
- Link appropriately
- Design helpful links
- Make linked-to information easy to find in the target topic
Introducing Visual Effectiveness

- Visual effectiveness is a measure of how the appearance of information affects the ease with which users can find, understand, and use it.
- Visual effectiveness impacts all the other quality characteristics.
Art does not reproduce the visible; rather it makes visible.

--Paul Klee
When to work on visual effectiveness

- Understand users, tasks, and product
- Outline or chunk tasks and topics
- Write
- Review and revise
- Review and revise

- Task orientation
- Organization, retrievability, visual effectiveness
- Accuracy, completeness, concreteness
- Clarity, style
Guidelines for visual effectiveness

- Use graphics that are meaningful and appropriate
- Choose graphics that complement the text
- Use visual elements for emphasis
- Use visual elements logically and consistently
- Balance the number and placement of visual elements
- Use visual cues to help users find what they need
- Ensure that textual elements are legible
- Use color and shading discreetly and appropriately
- Ensure that all users can access the information
And in conclusion…..

- You need to define your approach to quality, based on specific quality characteristics – this is our approach.
- Good quality information is the result of the consistent and focused application of specific quality characteristics.
- AND, you can apply metrics and other quality improvement processes using this approach as a foundation for quality.
Questions? Answers?