Heuristic evaluation template

What is a heuristic evaluation?

In a **heuristic evaluation**, product teams inspect product **heuristics** to identify potential problems. These usability heuristics are evaluated against industry-standard including:

1. **Findable**: Familiar and natural
2. ***Accessible**: Compliant for all users
3. **Clear and communicative:** System and messages speak the users' language
4. **Useful**: Practical purpose with clear value or benefit
5. **Credible**: Convinced it's trustworthy
6. **Controllable**: Tailored and customizable functionality
7. **Learnable**: Attainable knowledge of functionality
8. **Aesthetics**: Governed by artistic taste and professional quality
9. **Persuasive design**: Displays valid reasoning to change behavior

*CMS has a defined **508 validation** process. A heuristic evaluation is not a substitute for formal 508 validation processes. This is a point of reference only.

Why are they valuable?

Use a heuristic evaluation (HE) to align and prioritize design and development teams' activities. A heuristic evaluation aligns products with validated usability principles. An HE is not a substitution for user testing, but, it is valuable for understanding the level of debt incurred by decisions that impact:

- accessibility
- usability
- product/process acceptance

View a series of articles that explain heuristic evaluations in greater detail. This 3-minute video quickly describes the process.

How to perform a heuristic evaluation

Conducting a heuristic evaluation may seem daunting, but it doesn't have to be! We'll take you through the process, one step at a time. We hope you are able to use the resources below as a starting point for evaluating your product. We also encourage you to adapt the template to fit your needs.

This template implements a widely accepted set of heuristics, adopted by Nielsen Norman Group. NNG are world leaders in research-based user experience.

template_Heuris...Evaluation.xlsx
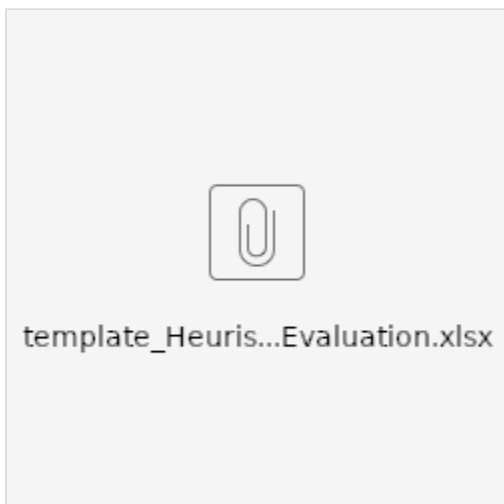
What is each sheet used for?

1. **Field definitions:** Quick explanation of each column and how to input and calculate values.
2. **First Eval-Rater1:** Main sheet to record data points. Use this sheet the first time an evaluation is performed.
3. **First Eval-Rater2:** Use this sheet if multiple people are going to complete the first evaluation. This is recommended but not required.
4. **Rater Comparisons-Eval1:** If multiple people are completing the first evaluation, use this sheet to compare any score discrepancies.
5. **Second Eval-Rater1:** Main sheet to record data points. This should be used when performing a second evaluation of the same product.
6. **Second Eval-Rater2:** Use this sheet if multiple people are going to complete the second evaluation. This is recommended but not required.
7. **Rater Comparisons-Eval2:** If multiple people are completing the second evaluation, use this sheet to compare any score discrepancies.

Who is responsible for this step?

Researchers, designers, developers, and/or product owners

What template sheets should be used?

If this is the first heuristic evaluation being performed on a product **>> use the "First Eval" sheets**

If this is the second heuristic evaluation being performed on the same product **>> use the "Second Eval" sheets**

If there is only one person performing the evaluation **>> disregard the "Rater 2" sheets**

If there are two people performing the evaluation **>> you will need to use both the "Rater1" and "Rater 2" sheets**

How to perform a heuristic evaluation:

If there are two raters, assessments should be done individually

1. Identify a product to evaluate
2. Ensure product environment is stable
3. Establish acceptance criteria
4. Navigate the product and evaluate if it meets the measures highlighted. Change the value of the 'Assessment score' field for each measure. Possible values for the measure include:
    a. (default) Meeting Criteria: No issues (4)
    b. Cosmetic issue only: Minor issues (3)
    c. Moderate issue: should be given low priority (2)
    d. Major issue: Important to fix with high priority, critical (1)
    e. Unusable: imperative to fix, unusable blank (0)
    f. Not Applicable: Unable to score (blank)
        i. Please note that the Not Applicable (N/A) rating is not a zero. Using this rating will result in calculation errors if an item is rated N/A on one evaluation, but not the other
5. When scoring the measures under Accessibility, remember that CMS has a defined 508 validation process. We recommend leaning on the 508 testing team to correctly determine the assignment value. This evaluation is not a substitute for formalized 508 validation processes and is a point of reference only.
6. If the assessment score is less than 4
    a. Use the Problem field to note what issue(s) were found
    b. Use the Steps to Resolve field to note any recommendations to improve the score
    c. Use the Reference to JIRA field to link any tickets that relate to the problem and/or work to resolve the problem
7. The `Average score` is calculated automatically. This metric gives a sense of how a heuristic category performed holistically. However, take caution when there is a large amount of variation in a category, as your average will likely be skewed by the highest and/or lowest values

Why is this step optional?

This step should only be done if there were multiple evaluations in Step 2.

Who is responsible for this step?

Rater 1 and Rater 2 from Step 2

What sheets should be used?

If this is the first heuristic evaluation being performed on a product **>> use the "Rater Comparison-Eval1" sheet**

If this is the second heuristic evaluation being performed on the same product **>> use the "Rater Comparison-Eval2" sheet**

How to compare scores:

1. Review the `DIfference between rates` column and note any scores highlighted in red.
2. If there is a difference between ratings, there's likely a discrepancy in how the criteria were interpreted. Do NOT discuss ratings at this point, as this can introduce bias.
3. Mediate discrepancies by:
    a. **Option 1:** Each rater re-rates the non-matching categories in their own sheets. If there is still disagreement after the re-rate, discuss and work out any discrepancies.
    b. **Option 2:** If another team member is available, have a 3rd person be used as a tiebreaker (e.g. if Rater 1 said 4, Rater 2 said 3, and Rater 3 said 4, the score is now a 4)
4. The goal is to have no discrepancies between raters
    After performing a second evaluation, `% increase of score` is automatically evaluated. This % shows the magnitude of change from the previous evaluation. For example, an increase of 100% shows that your score doubled from your first to second evaluation. Look at this value with your category thresholds for a more comprehensive analysis. For example, an increase from 1 to 2 is 100%, but the category is still not usable

Why is this step optional?

This step is optional because product management maturity impacts final calculations and projected paydown.

Who is responsible for this step?

Analyst and/or product owner

What sheets should be used?

Evaluation sheet(s) used in Step 1

How to determine the projected assessment:

1. Change the value of the 'Projected Assessment' field for each measure. This assessment is based on future plans for the product or service. For example, will product A update its search in 2020 to meet the heuristic criteria? Possible values for the measure include:
    a. (default) Meeting Criteria: No issues (4)
    b. Cosmetic issue only: Minor issues (3)
    c. Moderate issue: should be given low priority (2)
    d. Major issue: Important to fix with high priority, critical (1)
    e. Unusable: imperative to fix, unusable blank (0)
    f. Not Applicable: Unable to score (blank)
        i. Please note that the Not Applicable (N/A) rating is not a zero. Using this rating will result in calculation errors if an item is rated N/A on one evaluation, but not the other
2. Current UX Debt and Projected Paydown columns will be calculated automatically.

Who is responsible for this step?

Anyone involved in the evaluation

How to present results:

There are many ways to present heuristic evaluation findings. See two example presentations below

Eval 1 example	Eval 2 example
HE Summary_11.22.2019.pptx	ShopCMS Heuris...6.05.2020.pptx