# Participatory Heuristic Evaluation

An extension of the traditional Heuristic Evaluation whereby UX practitioners partner with work-domain experts to assess a system's adherence to usability design principles. Used for the assessment of highly technical or complex systems where domain expertise is crucial.

The original justifying assumptions about the [heuristic evaluation](https://vaww.portal2.va.gov/sites/humanfactors/HFBoK/SitePages/Heuristic%20Evaluation.aspx) method presented by Nielsen (1989) and Nielsen and Molich (1990) were: the method is relatively inexpensive, evaluators do not have to be usability experts, there would be evaluations by “several” evaluators, and that when results are aggregated, the evaluators will find “most” of the issues identified by more expensive methods.

The addition of work-domain experts to the participatory heuristic evaluation allows the evaluator to more easily evaluate:

* Task flow
* Suitability of design to task
* Suitability of design to user

## Study Execution

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| **​Milestone** | **​Owner** |
| ​Initiate Kick-off Call | HFE |
| Provide system access or a representation of the system | ​                 Business Office |
| Recruit Evaluators | HFE |
| Recruit work-domain experts | ​                 Business Office​ |
| ​Conduct usability assessment | HFE |
| ​Analyze findings, write report | HFE |
| [​Conduct After Action Review](https://vaww.portal2.va.gov/sites/humanfactors/SitePages/AAR%20Process.aspx) | HFE |

## Benefits

* Inexpensive relative to other evaluation methods
* Intuitive, and easy to motivate potential evaluators to use the method
* Advanced planning not required (Nielsen & Molich, 1990).Provides an effective means of soliciting customizations that are not usability problems, but are deficiencies in functionality. (Peute , van Engen-Verheul, Kilsdonk, Peek & Jaspers, 2011)
* Can serve as a good pretest for user testing so that evaluators can stop problems with the system that might disrupt user test sessions.

## Limitations

* Users may not be able to add any further information to that of the heuristic evaluation of the experts, because of their lack of understanding of usability principles and rationale.
* The limited availability of work-domain experts may limit the number of expert evaluators that can be used, greatly reducing the number and scope of usability problems that can be found. In order to reach the same effectiveness level as traditional HE, more than 4 expert evaluators and work-domain expert pairs must be used.
* Heuristic evaluation may identify more minor issues and fewer major issues than would be identified in a think-aloud usability test (Jeffries and Desurvire, 1992).
* Heuristic evaluations may be prone to reporting false alarms – problems that are reported that are not actual usability problems in application (Jeffries, 1994).

## Outcomes

* Produce a list of potential usability problems, categorized by severity.

Provide supporting screenshots or illustrations of the problem.

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| **Phase of Development​** | |
| ​ | ​Planning, Scoping & Definition |
| ​ | ​Requirements Gathering |
| **✔** | **​Early Design** |
| **​✔** | **​Detailed Design & Development** |
| **​** | **​**Field Testing |
| ​ | ​Deployment |
| **✔** | **​Post-Deployment** |

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| **​Study Characteristics ​** | |
| ​**Timeframe** | ​2-3 weeks |
| **​Level of Effort** | Medium |
| ​**Data Collection** | Attitudinal |
| ​**Data Reporting** | ​Qualitative |

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| **​Related Methods ​** | |
| **Derived from** | ​[**Heuristic Evaluation**](https://vaww.portal2.va.gov/sites/humanfactors/HFBoK/SitePages/Heuristic%20Evaluation.aspx) |
| **​Complimentary Methods** | [**Formative Usability Test**](https://vaww.portal2.va.gov/sites/humanfactors/HFBoK/SitePages/Formative%20Usability%20Test.aspx)  [**Summative Usability Test**](https://vaww.portal2.va.gov/sites/humanfactors/HFBoK/SitePages/Summative%20Usability%20Test.aspx) |
| **​Similar Methods** | [**Pluralistic Usability Walkthrough**](https://vaww.portal2.va.gov/sites/humanfactors/HFBoK/SitePages/Pluralistic%20Usability%20Walkthrough.aspx)  ​[**Heuristic Evaluation**](https://vaww.portal2.va.gov/sites/humanfactors/HFBoK/SitePages/Heuristic%20Evaluation.aspx) |
| **​Follow-Up** | [**Summative Usability Test**](https://vaww.portal2.va.gov/sites/humanfactors/HFBoK/SitePages/Summative%20Usability%20Test.aspx) |

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