**Page ID**: **#.# Keystroke Level Modeling**

# Primary Content

**Title**

Enter the **Title** of the **Method** here (REQUIRED).

**Keystroke Level Modeling**

**Description**

Enter the **Description** here (REQUIRED).

Used to improve the efficiency of human-computer interaction by identifying and eliminating unnecessary user actions. Keystroke level modeling (KLM) simulates how trained, expert users will perform on the system design.

This method is useful for comparing predicted performance across different variations on a user interface. However, it does not require users or a working prototype — only a description of the path through the design is needed.

With KLM, a given task flow through a user interface is broken down into pieces (keystrokes, mouse clicks, moving hands back and forth between the keyboard and mouse, etc.). A lookup table is then used to identify the interaction time for each piece. The total task time is calculated by adding all the actions together.

KLM is the simplest variant of the GOMS (Goals, Operators, Methods, and Selection) modeling method. It is among the few models of human-computer interaction that is based on empirical research.

**Recommended Uses**

Enter the **Recommended Use** here. If there are no details, insert N/A or TBD.

* To estimate cost savings associated with improved user efficiency.
* To predict performance improvements of design changes yet to be implemented and/or compare the efficiency of competing designs.
* To measure a design against performance criteria.

**Limitations**

Enter the **Limitations** here. If there are no details, insert N/A or TBD.

* Valid only for repetitive tasks that do not entail problem-solving.
* Valid only for expert users who do not make any errors.
* Does not account for user context, such as interruptions or fatigue.
* Does not assess readability or layout of the user interface.
* Provides no insight into how useful or enjoyable the product under design will be.

**Outcomes**

Enter the **Outcomes** here. If there are no details, insert N/A or TBD.

* Predicted performance times for all tasks using each alternative interface approach.

**Required Skills and Expertise**

Enter the **Required Skills** **and Expertise** here. If there are no details, insert N/A or TBD.

* The quality of the KLM analysis depends highly on the experience of the modeler, who must make accurate assumptions, such as that a good typist will take 0.12 seconds to press a key.

**How to Proceed**

If there are no details, insert TBD.

* **How-To Guide.** Review step-by-step instructions on how to conduct keystroke level modeling and access tools and instruments to support your evaluation.
* **Schedule a Consult.** Connect with a usability specialist for support on your project.

[BEGIN: How to Do It]

**Introduction**

Enter the **Introduction** here (REQUIRED).

N/A

**Procedure**

Enter the **Steps** here. (Required).

N/A

**Tools**

If there are no details, insert N/A or TBD.

* N/A

[END: How to Do It]

**Author**

Enter the **REFERENCES** here. If there are no details, insert N/A or TBD.

* Human Factors Engineering (HFE), Office of Health Informatics, Veterans Health Administration

**Sources**

Enter the **REFERENCES** here. If there are no details, insert N/A or TBD.

* N/A

**References**

Enter the **REFERENCES** here. If there are no details, insert N/A or TBD.

* N/A