Appendix II

DSS User-Centered Design Checklist

EASY TO UNDERSTAND

1. Does the DSS user interface design focus on the decision task, e.g., approving loan applications, monitoring key results metrics, allocating resources?
2. Does the interface style reflect the user's point of view and conception of what is being done, rather than the designer's point of view?
3. Does the DSS user interface present only information relevant to the user's decision task(s)?
4. Do system capabilities enhance user task accomplishment? For example, is color or blinking text used appropriately?
5. Are abbreviations, mnemonics, codes, and acronyms based on normal language usage, specific job related terminology, or a known logic?
6. Does the DSS design take advantage of what the user already knows?
7. Is terminology for labeling, commands, messages, and prompts consistent with the user's frame of reference? A term should mean what a user thinks it means.
8. Do icons directly represent the associated object or action?
9. Is the DSS designed to do what the user would naturally or naively guess it should do?
10. Does the DSS design maintain visual consistency as well as action consistency?
11. Does the DSS design maintain consistency in the display, labeling terminology, system control, and abbreviations?
12. Is the DSS designed so the user is able to easily predict how it will respond to actions?

EASY ORIENTATION AND NAVIGATION

1. Is the DSS designed so the user knows where she is, what she can do there, and how she can leave a page or the system?
2. Does each screen and window have a descriptive title, placed in a consistent location?
3. Does the DSS design provide cues to identify the currently displayed page and the total number of pages in a multipage display?
4. Are applicable menus and control options available to the user at all times?
5. Does the DSS design provide the user a means to log-off a DSS by a single action (e.g., menu option, command input)?
6. Does the DSS design require a confirmation to exit without saving changes?

ENHANCE PRODUCTIVITY

1. Does the DSS design and specific features take job requirements and decision tasks into consideration and support job accomplishment?
2. Does the DSS design avoid the use of acronyms and abbreviations?
3. Does the DSS design require recognition rather than recall memory where possible?
4. Does the DSS design use units of measurement familiar to the user? Do not require the user to transform units of measurement.
5. Does the DSS design keep screen density as low as possible (for warning and emergency messages, preferably less than 25 percent of the screen space)?
6. Does the DSS design maintain consistent display formatting within the system?
7. Does the DSS design use colors for coding and emphasis?
8. Does the DSS design display only task-related information and place all data related to one task on a single screen?
9. Does the DSS design highlight data, a message, a menu item, an icon, or other display structure as feedback to acknowledge that the user has selected the item?
10. Does the DSS design provide users with information about the current system status as it affects their work (for example, printing delays, inoperable peripherals, and processing delays due to system load)?
11. When the completion of a command results in a consequence that is not visible to the user, does the DSS design provide a feedback message that describes the actions resulting from the command in simple, direct, positive language?

MAINTAIN INTEGRITY OF THE DSS

1. Does the DSS design maintain the integrity of DSS data?
2. Does the DSS design build protection around dangerous operations and permit the user to undo things that have been done?

3. Does the DSS design require users to confirm that they want to perform a critical, potentially hazardous, or potentially destructive command before execution?
4. Does the DSS design provide on-line Help with summary information initially, and with more detailed explanations available on request?
5. Does the DSS design permit the user to enter Help at any point and use a simple, standard action for the user to request Help?
6. Does the DSS design provide an easy means of returning to the task after accessing Help?

PROVIDE CONTROL TO USERS

1. Does the DSS design help the user feel in control of a decision support session?
2. Does the DSS design give the user multiple means for doing things and let the user, not the computer, set the pace?
3. Does the DSS design provide for simple command language control of a DSS by advanced users?
4. Does the DSS design require the user to enter any particular data only once and then have the system access that data if needed?
5. Does the DSS design permit the user to request a more detailed explanation of feedback?
6. Does the DSS design use neutral wording in feedback messages?
7. Is the DSS designed so users are unlikely to make “errors”?

The above checklist is based on a document prepared at NASA called HCI Guidelines and the guidelines and factors identified by Shneiderman (1992) and Larson (1982).