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Usability Guidelines for Self-service Touch-screen Kiosks

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Understand the Customer: The Self-service, Touch-screen Kiosk User's Cognitive Context

The self-service, touch-screen kiosk must be easy and simple to use by people who have little computer experience, a low literacy level, and no prior experience with the kiosk application. In addition, touch-screen users expect to spend a short time at the kiosk since they are typically standing and can only use their fingers to perform actions. This means that the kiosk application must allow users to complete a task in just a few, uncomplicated steps.

The following guidelines can help you design a kiosk application around this cognitive context, providing a pleasing user experience and enhancing customer loyalty.

1. **Catch the attention of potential customers with the welcome screen and clearly show that the kiosk is meant for store customers to use.**

    Customers in the store may pass the kiosk but not be sure for whom it is intended. For example, they may wonder if it is a security device, or they may assume it is for use by store personnel only. Customers will give the kiosk only a glance as they walk by. Therefore, the user interface (UI) must provide a quick way for them to realize that they can use the kiosk.

    Recommendation: In addition to signage near to or attached to the kiosk, the initial screen should include colorful and large graphics that show the purpose of the kiosk. Engaging animation on the welcome screen is very likely to capture the attention of passers by,

causing them to look a bit longer to see what the kiosk is trying to communicate. Graphics and animation will make a clearer, faster impression than text.

2. **Offer an incentive for customers to interact with the kiosk and clearly present the incentive on the welcome screen.**

Many individuals are reluctant to use self-service applications. They may have had a bad self-checkout experience, or they may be intimidated by the automated, computer-like interaction of a kiosk application. They typically worry that the application will ask them to do something that they do not know how to perform. Users do not want to get stuck in the middle of a self-checkout process when they never planned to use the kiosk in the first place.

Recommendation: Provide an incentive to users that tempts them to try the kiosk application, for example, a monetary or merchandise reward. The incentive must be simple and easy to understand when presented on the welcome screen. To encourage store customers, interesting graphics should be used to present the incentive.

3. **Offer simple, meaningful choices on each screen.**

Touch-screen kiosk users expect to perform a task simply and quickly by pointing to obvious choices. If users have to work hard to understand what they can do on each screen, or they are not sure what the choices on the screen mean, they will cancel the process or walk away.

Recommendation: No more than 2-3 choices should be on each screen. The choices should be clearly expressed in brief, meaningful text labels and large, 3D graphics that invite touch activation. The choices must be intuitive to the user with respect to any of the previous actions the user may have taken.

4. **Present any applicable restrictions early in the task sequence.**

People are reluctant to use a kiosk if they do not know critical details that could influence a successful outcome. Users do not want to invest time in the kiosk only to find towards the end of the process that they cannot complete it successfully. If users are not told that there are restrictions on payment types, or delivery of an item, or the details about the item (e.g., size, color, warranty), they will assume there are no restrictions. If they only learn about a restriction after investing time in the kiosk, they will either be unable to complete the transaction, or they will walk away without completing it out of frustration and even anger. In both cases, users will lose faith in the kiosk and probably never use it again.

Recommendation: Restrictions should be clearly displayed in an area that the user must look at to continue the action (e.g., the navigation area). The restrictions should not interrupt the positive, forward motion through the task, but they should be placed directly in the task path so they user will see them.

5. **Present simple task sequences.**

Kiosk customers expect to accomplish the kiosk task quickly without being required to remember the details of each step they performed. In addition, they do not want to read complex instructions on the screen. If a task has too many steps, they are likely to be confused about where they are in the process. Further, they are likely to become frustrated with the length of time they are investing in the task, and they will walk away.

Recommendation: Limit task sequences to no more than 4-5 steps. Clearly identify which step the customer is currently on in the process. In addition, show the customer the results of the previous step that has already been completed. Finally, at the end of a task, show the customer a summary of everything that was selected in the task.
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6. **Allow the customer to control the task.**

People won't use a software system that they don't trust. If kiosk users feel they are being forced to proceed through a task, or if they are unable to reverse a decision, they will not trust the system.

Recommendation: Provide cancel/exit and go back navigation options for every step before the final step. In addition, if the customer must make a commitment to a sensitive selection (for example, an amount that will be charged to an account), provide a confirmation message after the selection is made and before going to the next step.

7. **Show the customer how to interact with the kiosk's devices.**

People will not use the kiosk if it asks them to complete a task they cannot understand. If the user cannot find an area of the kiosk that requires interaction (for example, the card swipe device, or the receipt or card issuing port), or they can find it but cannot figure out how to use it, they will walk away from the kiosk.

Recommendation: The screen should show large, detailed pictures of any kiosk devices the user must interact with to complete a task. The picture should be shown on the screen where the user is asked to perform the task. If the user must perform an action, for example, swipe a card, then an animated graphic that shows this action should be used. If the user is expected to retrieve an item that the kiosk issues from a port, then the area around the port should be color-coded and the screen should show a picture of the port and its color coded area. The color coding will help the user distinguish this port from other ports on the kiosk.

8. **Maximize the touchability of screen input controls.**

If people cannot easily touch the objects they want to interact with, they will be frustrated and not use the kiosk. Every touchable item must be easy to activate on the first try.

Recommendation: Use button implementations for selections. Avoid using text lists of items and scrollbars. Limit the amount of alphanumeric data entry that is required. If is required (for example, phone number and email address), provide a fully-functional and complete onscreen keyboard with key buttons that have "whitespace" between them.

9. **Offer enhanced but optional capabilities.**

   Customers who enjoyed the primary kiosk task will be interested in performing other tasks with the kiosks. If they don't know that other tasks can be performed, they will think the kiosk has only one service purpose and use it only when they need that particular service.

   Recommendation: Identify ways to help users perform the kiosk's primary task and present these aids as options. For example, if an incentive is offered to use a loyalty card with the kiosk purchase and the customer has forgotten her card or doesn't have one, provide an option for the customer to look up her card number or sign up immediately for a loyalty card. Even if customers don't use these options, they will become aware of them and may use them at a later time, if they enjoyed the primary kiosk user experience and trust the kiosk.

10. **Personalize the screens wherever possible.**

    Kiosk screens hold a conversation with customers by asking them to take actions and then responding to those actions. This interaction causes customers to view the kiosk as a "voice" of the store, even though they know it is a machine. If the kiosk does not show the customer that it knows them, then the customer does not believe that the store acknowledges them as one of its customers. But if customers feel a friendly presence of store personnel coming through the kiosk activity, they are likely to think of the kiosk interaction as part of a relationship with the store. The customer reaction will be more like "This is a friendly place to be."

    Recommendation: Personalize the user experience with human-friendly language. Use complete sentences on the screen, when text instructions are needed. Use polite language, including "please" and "thank you" where appropriate. Use welcome messages, and if the customer is known (for example, through a loyalty card swipe at the kiosk), add the customer's name in the screen's welcome message and on the receipt.