

# Usability evaluation plan

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## Objectives

- Assess the effectiveness of the application for handling different levels of complexity
- Identify obstacles to completing the cheque deposit process
- Create a repeatable usability evaluation protocol

## Research Questions

- How easily and successfully do users interact with their scanners to complete cheque deposits?
- What obstacles do users encounter on the way to completing a cheque deposit?
- What questions do users ask as they work through the cheque deposit process?
- How do users feel about how long it takes them to complete a cheque deposit?
- How do users feel about the complexity of completing a cheque deposit?

At the end of the evaluation, we will have quantitative data:

- Errors in following page instructions - we will know where participants are confused by instructions or are unsure about what they are expected to do.
- Errors in operating their scanners - we will know how many issues participants have and where they encounter problems while trying to use a scanner.

We will also have qualitative data:

- The verbal protocol (i.e., the running commentary that participants make as they think aloud) will indicate what confuses participants and why.
- Debriefing interviews will tell us what stands out about the experience of using the application. This should help us improve the product design for subsequent releases.

## Participants

I will seek out 6 Engineering and 6 non-Engineering volunteers from the Waterloo facility. Each participant must:

- have experience using a scanner
- have experience with Web-banking
- not be a member of the Consumer Deposit team or have used a previous version of the application

## Methodology

This usability evaluation will gather assessment data about the effectiveness of the application to capture images and then submit completed deposits. I will collect information about error and success rates as well as qualitative data about participants' experiences using the application.

To ensure coverage of different parts of the application, participants and tasks will be assigned as follows:

Participant	Blue-sky mode	Grid mode	Manual mode	Exceed cheque limit	Bad data cheque
1	✓			✓	
2	✓			✓	
3	✓			✓	
4	✓				✓
5	✓				✓

Participant	Blue-sky mode	Grid mode	Manual mode	Exceed cheque limit	Bad data cheque
6	✓				✓
7		✓	✓		
8		✓	✓		
9		✓	✓		
10		✓	✓		
11		✓	✓		
12		✓	✓		

For example, the task for participant 6 will have the participant use the grid and then the manual mode fall-back.

## Session Outline and Timing

Each evaluation sessions will last for approximately 30 minutes. These sessions break out as follows:

Activity	Time (minutes)
Introduction to the session	2
Background interview	3
Tasks	20
Debriefing	5
<b>Total</b>	<b>30</b>

### Introduction to the session

I will read a short script to the participant that provides an introduction and orientation to the evaluation. This material will explain the purpose and objective of the evaluation, my role as moderator, the laptop and scanner setup, the protocol for the rest of the session, and the importance of thinking aloud while working through their tasks.

### Background interview

Before having the participant begin, I will conduct a brief background interview to confirm the participant's experience with home banking and using a scanner. This will provide some context for the rest of the session.

### Tasks

Each participant will receive [a set of cheques](#) and a [task sheet](#). For each cheque, the participant will type in the amount, scan the front and back, and verify the cheque on the deposit review page. After scanning in their 4 cheques, the participant will submit the deposit. In addition, the participant will work through any additional tasks identified in the matrix.

### Post-test debriefing

Once the participant has completed their tasks, Morae will present a short questionnaire prompting them for their preferences and other qualitative data. I may also use this time to follow up on any particular problems that occurred during the session.

### Location and Setup

This evaluation will take place in a reserved enclave. The participants will use an NCR laptop connected to one or two scanners (depending on their associated tasks within the matrix). The laptop will run Windows XP and Firefox 3.5. It will use build 10 of Consumer Deposit application. The laptop will also have Morae Recorder installed on it and a web camera attached. The Morae software will record what is happening on the screen (as well as other data) while the web camera captures the participant's face and voice.

### **Moderator Role**

I will sit in the room with the participant while conducting the evaluation. I will introduce the session, conduct a short background interview, and then introduce tasks for the participant to complete. I may ask unscripted follow-up questions to clarify participants' behavior and expectations. I will also take detailed notes and record the participants' behavior and comments.

### **Reviewing, Tabulating and Analyzing Data**

Using my notes and the recordings, I will tabulate and analyze the data to answer the key questions (listed in the Objectives section of this document) with findings and recommendations. I will provide these results in the final written report and in a presentation, if requested.

No labels