Oberweis.com Redesign
Evaluation Results and Recommendations

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Kristin Adamczyk
Piya Buranatum
Colleen Gill
Scott Macdonald
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1. Executive Summary

On request of senior management of Oberweis Dairy, this team reviewed and evaluated the Oberweis.com website. The purpose for conducting this web site review was to gather insight as to whether users are able to use the site’s main features, understand the information that is presented to them and navigate easily throughout the site.

With these concepts in mind, four main business goals were identified and used as the basis for the redesign effort. Below are the initial business goals for undertaking this project. These do not represent the entire number of the goals but rather are the key goals that the team focused on for this initial release.

1. Eliminate the redundant sections on the home page and streamline the options available to users.
2. Improve the online order process, focusing on modifying orders, so customers can easily view and change orders as necessary
3. Expand the site’s tasks to include an online payment option
4. Increase sales of dairy and juice products

The project team also considered the current design in terms of its usability, look and feel and task flow process. Based on professional findings and user testing, the team is proposing a redesigned site that addresses the identified issues and includes several improved features for both the overall design and business process, all with the above goals in mind.

More detailed information regarding each goal and the team’s related recommendations can be found later in this report. The prototype for the redesigned website can be found in Appendix A.

2. Business scope

The recommendations and changes outlined in this document will concentrate on the tasks and content of the Oberweis.com website. All features and content are in scope, with the exception of the ‘Just for Kids’ module. The evaluation will focus not only on content, but also on design, in terms of aesthetics, form and flow.

Unless deemed necessary, no new content material will be added to the site. However, the team may take note of any potential problem areas and bring those to the attention of the Oberweis management team for their review.

3. Business goals and recommendations

As stated in the executive summary, four main business goals were initially identified prior to the start of our review.

1. Eliminate the redundant sections on the home page and streamline the options available to users.
2. Improve the online order process, focusing on modifying orders, so customers can easily view and change orders as necessary
3. Expand the site’s tasks to include an online payment option
4. Increase sales of dairy and juice products

As the team evaluated the website with these goals in mind, several issues surfaced. These issues ranged from inconsistent and ambiguous content to confusing user interaction and limited functionality. Below are the recommendations from the team, listed by business goal.
Goal # 1: Eliminate the redundant sections on the home page and streamline the options available to users.

Recommendation: Eliminate redundant Customer Feedback sections and place one time in a Contact Us section.

Reason: One of the first issues that the team noticed is the redundancy of the Customer Feedback sections, which can be found under several of the menu options. This may confuse users since it is not apparent whether each link brings the user to the same feedback page or if there is a separate page for each section (menu heading). Also, once the user has seen that option in one location, it may be confusing if they see it again in another. When they need to recall its location later, it will require more thought process than should be necessary. We recommend eliminating the redundant Customer Feedback sections and having one link in a Contact Us section. Users typically expect general contact information, including feedback forms, to be located in such sections. This change will not only condense the number of menu options but will also improve the site’s layout logic.

Goal # 2: Improve the online order process, focusing on modifying orders, so customers can easily view and change orders as necessary

Recommendations: Redesign the order flow – consolidate the order buttons available, mainly remove the “recurring order” option. Instead have one “Update Order” button that will be used to add, remove and update the current order. Also, do not spawn a new window, rather let the users browse in place so that numerous children windows are not visible and users know exactly which window is active.

Reason: As it was, the process of ordering products from Oberweis.com was a bit cumbersome, especially if a customer wanted to modify his or her order. Some of the issues with this process were that a new window spawned, the user had to first log in just to view the current order, and the screen was cluttered with confusing buttons so the customer is not sure which to click. By streamlining the order process, this confusion will be decreased.

Goal # 3: Expand the site’s tasks to include an online payment option

Recommendation: Include a new feature that allows users to make an online payment.

Reason: In the current website, this functionality does not exist. As e-commerce sites become more and more common, users are used to having an online payment option and would be expecting one on Oberweis.com as it is a retail site. In order to provide its customers with useful

Goal # 4: Increase sales of dairy and juice products

Recommendation: Incorporate above recommendations as well as those identified during user testing.

Reason: The goal of this website is to provide a useful service to its customers and to bring in revenue. By creating a more pleasant experience, customers will be more likely to complete transactions and return in the future for more purchases. Oberweis.com should work to retain its loyal clients as well as to draw in new clients.

In addition to these recommendations, the proposed redesign site has also included feedback from the usability tests that were conducted. See Appendix C for more detailed information regarding those specifics.
4. Users

The target users of this site are anyone who lives within the delivery zone of Oberweis.com. This includes customers who shop at the retail stores as well as those who shop solely online.

The primary users targeted for this site can be described in three general groupings:

1. *Families on the go* – Families who are too busy carpooling kids around to stop and pick up groceries. They enjoy the convenience of home delivery since it is one less errand that needs to be made. While convenience is the main driving factor for these users, the interface must be easy to use and learn as well.
2. *Home bound customers* – People who are confined to their homes and do not have the option to run out to the store. They may not be computer savvy, so they need an interface that is easy to understand.
3. *Young professionals* – Customers typically in their 20s and 30s, who work full time, have active social calendars and are technically adept. They like the time saving aspect of ordering products online and they do so regularly.

There are also secondary users of the system whose needs should be taken into account when evaluating the features and functions. Below is a list of such users, but there may also be others not identified here:

1. *Delivery drivers* – in order to succeed in its home delivery service, Oberweis will need to employ drivers. These drivers may need to access the website to find out details pertaining to the customer’s shipping information. The interface should allow these users to access this information easily.
2. *Customer service representatives* – These users will be the first line of support for online customers. They need to understand not only the layout of the website but also the business rules and process in order to resolve any issues. The system should provide these users with any available tools necessary to perform their jobs.
3. *Site supporters* – The system needs to be easily supported and maintained, and any users involved with task will need access to the site architecture and should understand the design flow.

5. Features List

An initial list of desired features was established early on in the evaluation process. If incorporated, these features could help improve the capability and efficiency of the website. The team assigned each feature a priority and focused their efforts on the highest priority items. These are the features, in order of priority:

1. Addition of online payment capability
2. Streamlined online order changes process
3. Include nutritional information for products
4. Option for modifying delivery date
5. Display user profile information and have ability to edit profile
6. Link to product information from any page with description*
7. Cancel order*
8. Side panel that shows current order – similar to shopping cart feature that displays items currently in cart – want to see order without having to login first*
9. Print order*
10. Ability to add an item to the order from anywhere within the site*

The features that are followed by an asterisk (*) are not represented in the proposed redesigned site. Since they were rated lower in priority, these were considered secondary features, so as time and resources permit, they may be included in future releases of the website.
6. Card Sorting Results

One of the first techniques applied to this website was a card sorting review of the main content areas. When the team first reviewed the site, it was quickly apparent that the content was not organized in the best possible way. Secondary options, like Customer Feedback, were found under several menu options. This redundancy often leads to customer confusion as they can not easily recall where they saw a particular option. It also leads to confusion as it may not be obvious that the sections are duplicates and the user might think they are distinct options.

Below is the initial site map of Oberweis.com:
The sections marked with an asterisk (*) means that information is also listed another category.

What’s New
• This Month’s News
• Promotions
• Recipes

Order Changes*

Our Products
• Where to Purchase
• Milk
• Ice Cream
• Pies and Cakes
• Product Information*

Home Delivery
• Customer Service*
• Home Delivery Menu
• On-Line Order Changes*
• Sign-up for Service
• Refer a Friend
• Frequently Asked Questions
• Customer Feedback*

Retail Stores
• Our Locations
• Moola Card
• Fountain Menu
• Birthday Club Sign-Up
• Customer Feedback*

Health & Nutrition
• Dairy Moos You Can Use
• Product Information*

Just For Kids (out of scope for project)
• Birthday Club Signup
• Coloring Book
• Play Battleship
• Play Breakout

About Us
• Customer Service*
Using the above groupings, a card sorting experiment was performed with two users. The detailed results can be found in Appendix B. Based on this feedback, the team has come up with a new site map that eliminates any duplicate information and reorganizes the topics into sections which make the most sense to the user. Main changes include reducing the number of menu sections, streamlining the Home Delivery options, consolidating the customer feedback into one area, and highlighting the store locator option. Below is the updated site map.

Home

Products
• Menu
• Milk
• Ice Cream
• Pies and Cakes
• Product Nutritional Information

Home Delivery
• Sign-up for Home Delivery
• Change Order

Promotions & Features
• Promotions
• Refer a Friend
• Store Discount Card
• “Birthday Club” Sign-up
• Gift Certificate
• News
• Recipes

Customer Service
• Customer Service
• Customer Feedback
• Contact Us
• FAQ

Store Locator

About Us
• How It All Began
• Employment
• Plant Tours
• Privacy Policy
7. Heuristic Evaluation Results

Three members of the team performed heuristic evaluations on each of the drafted design iterations. Two evaluations were performed on iteration 1 and the second iteration was modified based on these results and feedback. To ensure that the system still met the team’s standards, another evaluation was performed on iteration 2. The results have been compiled together and are listed below.

Visibility of system status

<table>
<thead>
<tr>
<th>Findings</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>The system always keeps the user informed by displaying appropriate page titles and section heading.</td>
<td>Use of bread crumb technique will aid users in finding their way through the website.</td>
</tr>
<tr>
<td>The user knows where they are on the site at all times because the main navigation category box that they are currently viewing is highlighted, and the sub-navigation option that they are currently viewing is in Bold.</td>
<td>Not shown on the wire frame, but browser title bars should display appropriate titles of the page.</td>
</tr>
<tr>
<td>Title on page reminds user where they are in overall website (i.e. View/Pay for Order).</td>
<td></td>
</tr>
<tr>
<td>When dealing with customer order name, address, and account information is always visible.</td>
<td></td>
</tr>
</tbody>
</table>

Match between system and the real world

<table>
<thead>
<tr>
<th>Findings</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a possible confusion with “Change Order”.</td>
<td>A suggestion is “Check Order” or “View Order”.</td>
</tr>
<tr>
<td>Users might not correlate Menu with a list of all products without thinking about it for a bit.</td>
<td>Possibly change the Menu option under Products to be Product List.</td>
</tr>
<tr>
<td>Most concepts and terminology used is easy to understand.</td>
<td></td>
</tr>
<tr>
<td>The language on the site should be considered familiar to most people; there are no highly-technical terms used.</td>
<td></td>
</tr>
</tbody>
</table>

User control and freedom

<table>
<thead>
<tr>
<th>Findings</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>A couple of pages do not have either “Update Order” or “Cancel Order” buttons when needed.</td>
<td>Should include an “Update Order” and “Cancel Order” buttons on all pages of the View/Pay for Order screens.</td>
</tr>
<tr>
<td>Customers may want to change their minds and not make changes.</td>
<td>A “Cancel” button should be included on the “Change Order” pages.</td>
</tr>
<tr>
<td>Since this is a website, no “Undo” buttons are</td>
<td></td>
</tr>
</tbody>
</table>
necessary – it is easy for the user to quickly go somewhere else on the site.

Back browser button is always available; in addition, there are Previous buttons also.

System supports a “Previous” button for undoing when needed.

### Consistency and standards

<table>
<thead>
<tr>
<th>Findings</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Home Delivery Menu” and “Products” pages are very similar and can confuse the user.</td>
<td>“Home Delivery Menu” and “Products” pages should be consolidated together and highlighting the products that are available for home delivery.</td>
</tr>
<tr>
<td>The “Change Order” section under the “Home Delivery” menu might be confusing to users that want to change their account information. Users might think that they can only change their order in this section.</td>
<td>Add one extra step to make it clearer to the user.</td>
</tr>
<tr>
<td>Under “Customer Service”, the information provided in the “Customer Service” and “Contact Us” screens are very similar. Both screens are unnecessary. Also, the store hours on these two screens do not match.</td>
<td>“Customer Service” and “Contact Us” information can be combined. There should only be one set of store hours so customer is not confused as to which is correct.</td>
</tr>
<tr>
<td>When making a payment, the entire credit card number should not be displayed for security reasons.</td>
<td>Only show the last 4 digits, the rest can be ## or XX characters.</td>
</tr>
<tr>
<td>Home Delivery should allow users to select an actual date</td>
<td>Include a calendar icon so users can select an actual date, not just day of week.</td>
</tr>
</tbody>
</table>

### Error prevention

<table>
<thead>
<tr>
<th>Findings</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>The site is designed in a rather easy-to-understand way so that users do not get lost on the site.</td>
<td>For home delivery page, it might be good to have user input their zip code first. Then the system could check to see if home delivery is available to that location. If so, the user can continue on with the sign up process; if not, the system should display a message saying “Sorry, home delivery is not available in your area.”</td>
</tr>
<tr>
<td>Directions are easy to understand and follow.</td>
<td></td>
</tr>
<tr>
<td>Good error prevention with action verbs on the buttons.</td>
<td></td>
</tr>
<tr>
<td>“Previous” button aids in error prevention.</td>
<td></td>
</tr>
</tbody>
</table>
# Recognition rather than recall

<table>
<thead>
<tr>
<th>Findings</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers do not have to remember product information, there is always a link provided.</td>
<td></td>
</tr>
<tr>
<td>Users should be able to find what they are looking for simply by visiting the site; they do not have to memorize where the information is located.</td>
<td></td>
</tr>
<tr>
<td>Any steps that the user needs to perform, such as changing an order, provides enough feedback so that they do not need to remember how to change an order – it is explicitly stated on the screen for them.</td>
<td></td>
</tr>
<tr>
<td>Navigation is easy to follow. No process is so complex that the user will get lost and not be able to backtrack.</td>
<td></td>
</tr>
<tr>
<td>Menu options are self-evident and do not require much thought process. Users will be able to find available information, even if they have not visited the site in many months.</td>
<td></td>
</tr>
</tbody>
</table>

# Flexibility and efficiency of use

<table>
<thead>
<tr>
<th>Findings</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main navigation aids in searching for information quickly.</td>
<td>Currently there are no accelerators on this site, but in future release accelerators should be used for expert users.</td>
</tr>
<tr>
<td>The navigation is clear enough for users to very quickly know which category they need to select in order to find the information they are looking for.</td>
<td>There should be a link on the home page for returning users to access their account from there.</td>
</tr>
<tr>
<td>The site allows for any number of clicks and routes taken by the user.</td>
<td></td>
</tr>
</tbody>
</table>

# Aesthetic and minimalist design

<table>
<thead>
<tr>
<th>Findings</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design is clean and information is highly visible.</td>
<td>The View/Pay for Order screens could be split up. The side navigation could have 2 options, View Order and Pay for Order. The Pay for Order would bring you to the existing make payment screen that displays the order and current balance due. The View Order would still have a link to the Pay for Order page, but it</td>
</tr>
</tbody>
</table>
could be a smaller link and that would free up the right hand corner on the View Order screen, thus making it less crowded with information and more clear to the user.

The design is simplistic and straightforward so that users do not get confused by irrelevant information and graphics that make the site hard to understand.

<table>
<thead>
<tr>
<th>Help users recognize, diagnose, and recover from errors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Findings</strong></td>
</tr>
<tr>
<td>System will display messages in plain English when necessary, i.e. “Your shopping cart is empty” if the user tries to make payment on an empty cart.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Help and documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Findings</strong></td>
</tr>
<tr>
<td>Not Applicable.</td>
</tr>
</tbody>
</table>
8. Usability Test Plan

The purpose for conducting a usability test on the redesigned Oberweis user interface prototype is to see if users are capable of completing several tasks efficiently and effortlessly.

For the user test, the specific questions that need to be answered are:
   - Can a user find product information?
   - Can a user change their standing order?
   - Can a user make a payment online?
   - Can a user find help when needed?

A total of four users will be tested. An alternate participant will be acquired in case one of the participants is unable to attend at last minute. The four participants are as follows:

   - One user is a novice to expert computer user. She uses a computer on a daily basis for work, school, and communicating with friends and family. She is familiar with web interfaces and has been using the internet for the last five years. She performs a lot of daily tasks on the internet, such as paying bills, reading the news, and using Ebay to sell items. She is familiar with interfaces; however she is not the intended user for this interface.
   - The other two users are beginner computer users. They recently started using the internet within the last year. They complete small tasks such as checking email once a week or surfing the web. The internet is not a part of their daily life. They are also unfamiliar with the content of the Oberweis site. This group represents the least competent user who will use the product (in this case, the Oberweis site). If they are able to finish the tasks, it will be a strong indicator that more qualified users will be able to complete the tasks.

The usability test will be an assessment test to measure both performance and preference data. The tests last approximately 15 to 20 minutes and will consist of tasks completed by the participants using a paper prototype.

The full test plan, including the test scripts, environment setup, evaluation measures and checklists, can be found in Appendix B.

9. Usability Test Results and Recommendations

A usability test of the second iteration of the redesigned Oberweis website was conducted between the dates of June 2-3 of 2004. Three users fitting our study’s demographics/users constituents were tested. The purpose of the test was to verify the findings that were obtained during previous heuristic evaluation, and expand on possible areas of drawbacks and improvements of the Oberweis website.

In general, users seemed to have no problems navigating every section and sub-sections of the website; they also had little difficulties during the process of each task. Overall satisfaction of the site was positive. Most of the test users commented that the website’s functionality was straightforward except for one. The terminology used on some of the pages was confusing at times to the test users.

The following test results are summarized by task and provide an overview as to what the users were able to accomplish and what issues were discovered. The detailed quantitative and debriefing results can be found in Appendix C.
Test Objective 1: Can a user find product information?
For task 1, users were asked “Can you find product information for “Reduced Fat Milk (2%)?”

Qualitative data:
- All test users were able to complete this task successfully but with some minor difficulty.
- All three test users said that the “product name should be underlined to represent a hyperlink.”

Findings/Recommendations:
The reason why our test users had some minor difficulty completing this task the first time around was because the product names were not underlined. It did not appear to be a link to the users. The test users were told by the facilitator that the names are links and the users continued the task with no problems. To solve this problem, the product names should be highlighted and or underlined to indicate that it is a clickable link.

Test Objective 2: Can a user change their standing order?
For task 2, users were asked “Can you remove “Margarine” from the order and add one “Chocolate Milk” to the order?”

Qualitative data:
- All test users were able to complete this task successfully but with some minor difficulty.
- 2 out of the 3 test users did not click the “update” button.

Findings/Recommendations:
The users took time in analyzing the page and looked a little confused. They did not associate changing a standing order to the “Home Delivery” feature. One of the test users did not know that the feature was available. The “Home Delivery” button should be changed to “My Order” or “Shopping Cart”, terms that the user can identify with. The link should also be made more prominent to indicate to the user that this is a very important feature of the website.

Since 2 out of 3 test users did not click the “Update” button, this button should be made more prominent and the update should automatically occur when the “Add Item” is clicked.

Test Objective 3: Can a user make a payment online?
For task 3, users were asked “Can you make an online payment?”

Qualitative data:
- All test users were able to complete this task successfully with no difficulty.

Findings/Recommendations:
All three users completed this task in two clicks. All of the users mentioned that this feature was very straightforward and easy to understand. One of the test users said that the “Make Payment” should be moved down to make it more prominent on the page.
**Test Objective 4:** Can a user find help when needed?

For task 4, users were asked “Can you find the page where you can “Contact Us?”

**Qualitative data:**
- All test users were able to complete this task successfully with no difficulty.
- 2 out of 3 test users completed this task in one click.
- One of the test users took one extra step and went to “About Us” then to “Customer Service.”

**Findings/Recommendations:**
This feature was very straightforward. The users did not have difficulty in completing this task. Possibility the “Customer Service” and “About Us” page can be combined because it is closely related and helps the users.

### 10. Key Task Flows

With the redesigned site, there are three features that the team denoted as primary goals that users of Oberweis.com will want to accomplish. The task flow for these follows below:

1) **Change Order**
   
   Home Page -> Go to Home Delivery Section -> Sign in -> Review Current Order -> Make changes to order (Update order)

2) **Look up Nutritional Information for a product**
   
   Home Page -> Go to Product Section -> View list of products -> Select product -> View product information

3) **Make Online Payment**
   
   Home Page -> Go to Home Delivery Section -> Sign in -> Review current balance and account info -> Make Payment

4) **Contact Customer Service**
   
   Home Page -> Go to Customer Service -> Find selected method to contact Oberweis (phone, email, etc.)
Appendix A: Redesigned Prototype
Appendix B: Card Sorting Raw Data

Here are the two user’s results from the card sorting exercise.

User 1:

[Image of Card Sorting Software]
Date: 5/5/2004
Evaluator: N/A
Participant: Scott Oberweis
Total of groups: 7

- Privacy Policy
- In Stores
  - Where to purchase
  - Refer a Friend
  - Store Locations
  - Store Discount Card
  - Gift Certificates
- Home Delivery
  - Change Order
  - Home Delivery Menu
  - Sign-Up for Delivery
- Products
  - Milk
  - Ice Cream
  - Pies and Cakes
  - Product Information
  - Nutritional Information
  - Product Information
- Contact Us
  - Customer Service
  - Frequently Asked Questions
  - Customer Feedback
  - Contact Us
- Features
  - This Month's News
  - Promotions
  - Recipes
  - Flavor of the Month Info
  - "Birthday Club" Sign-up
- About Us
  - Employment
  - "How it all began"
  - Plant Tours
Dendograms
Appendix C: Usability Test Plan

Problem Statement
The purpose for conducting a usability test on the redesigned Oberweis user interface prototype is to see if users are capable of completing several tasks efficiently and effortlessly.

Test Objectives
The specific questions that need to be answered:

- Task 1: Can a user find product information?
- Task 2: Can a user change their standing order?
- Task 3: Can a user make a payment online?
- Task 4: Can a user find help when needed?

Test Design and Methodology

The usability test will be an assessment test to measure both performance and preference data. The tests will last approximately 15 to 20 minutes and will consist of tasks completed by the participants using a paper prototype.

Before the usability test is performed, the team will meet to set up the test environment and complete a Usability Team Checklist (Appendix A) to make sure that everything is ready for the participant of the test.

The usability test will consist of the main performance test of the redesigned Oberweis user interface prototype, where usability data will be collected through direct observation. The test will go as follows:

1 - Participant Greeting and Orientation
Each participant will be personally greeted by the greeter/facilitator. This will make the user feel more relaxed and comfortable with the situation. The participant will receive a short, verbal, scripted introduction and orientation (Appendix B) to the test. This introduction will explain the purpose and objective of the test, the need for product anonymity until after the test, and additional information about what is expected of them. Duration is approximately 3 minutes.

2 - Informed Consent Form
The participant will now be given the Informed Consent Form (Appendix C) to read over and accept its terms. Duration is approximately 1 minute.

3 - Performance Test (using task scenarios) and User debriefing
The greeter/facilitator will also be reading from a script (Appendix C) to maintain consistency for each participant. The Facilitator will sit the participant in front of the paper prototype that the user goes through with the aid of the “computer”, a usability team member. The purpose of the debriefing (Appendix E) is to assess overall satisfaction and opinion about the prototype (i.e. usability factors, aesthetics and the web site organization). Duration for the whole test and debriefing should not be more than 10 minutes.

4 - Test team debriefing
The greeter/facilitator, “computer”, and the two observers will meet and discuss the test result, or perhaps collect all data gained from the testing session.
Task List
The task in the following list will take approximately 15 minutes to accomplish. If the time limit has expired, the user will be stopped. The tasks are ordered in a sequence that the user would logically perform them.

Task 1: Can you find product information for “Reduced Fat Milk (2%)”?
Task 2: Can you remove “Margarine” from the order and add one “Chocolate Milk” to the order?
Task 3: Can you make an online payment?
Task 4: Can you find the page where you can “Contact Us”

Test Environment
The test will take place in a quiet room with no disruptions. Using one of the usability team members as the “computer” with the paper prototype, the user will be tested and monitored by the greeter/facilitator who will be sitting next to the user. Slightly behind the users on the side will be the observers, who should be able to watch the participant during the testing, but should not be in full sight of the user in order to avoid distraction to the user.

The lighting will approximate an office. On the table, the user will be provided with the following items:
1. Paper Prototype
2. Task Cards
3. Pen to point with

Test Roles (Each member of the Usability Team will perform one of the following roles)

Greeter/Facilitator
The greeter/facilitator’s role will be to welcome the user so the user feels at ease and comfortable. The greeter/facilitator also will tell the user about the purpose of the test, the user’s rights, and then distribute the Informed Consent Form (Appendix C).

The greeter/facilitator will conduct the test and debriefing. The greeter/facilitator will read the test procedures and answer questions about the task from the user (but not how to do the task). Other than during the debriefing session where the user is given the chance to ask/talk about the task, the facilitator will limit interaction with the user.

During the task, the user should not ask questions. If the user has problems for a long time, the facilitator will try to give a hint or may be skip to a new task.

“Computer”
The “computer” has the role of simulating the steps the actual user interface will display. The “computer” does not speak or aid the test user in anyway.

Observers
There will be two observers. The observers will see the user’s “screen” (the paper prototype), face, and hand while doing the test. They must be sitting well behind the user. The observers do not speak, but they will take notes. One of the observers will also be responsible for making sure the test starts and finishes on time.
**Evaluation Measures**
User’s performance during the test (verbal and non-verbal behavior), as well as the user’s preference data (notes taken during the debriefing), will be measured.

To give accurate result for feedback on the task’s difficulty level, the user will be asked to speak aloud during the testing to give appropriate feedback. Notes will be taken for each successful and unsuccessful task being done, as well as the user behavior.

Collect the following information: user’s opinion (comments) on the task performed, the website’s appearance and performance, and the user’s erroneous attempts (as well as successful ones).

**Usability Team Checklist:**

- [ ] Make sure all participants are there
- [ ] Quiet conference room available for testing
- [ ] Paper Prototype

Check list for the Greeter/Facilitator:

- [ ] Script
- [ ] Task Cards

Checklist for the Observer #1:

- [ ] Log Sheet
- [ ] Pen, pencil

Checklist for the Observer #2:

- [ ] Log Sheet
- [ ] Pen, pencil
- [ ] Watch
Test Script

Hello my name is Piya Buranatum and this is my team:
Scott Macdonald – who will be acting as our “computer”.
Colleen Gill and Kristin Adamczyk – will be observing the test.

Everything you hear today from me will be read off a script for consistency so that all users receive the same information.

Today you will be participating in a usability test of the redesigned Oberweis user interface prototype. The purpose of a usability test is to determine if a prototype allows people to accomplish, quickly and easily, a particular task. Usability tests are designed to get feedback from people, like you, who represent someone who will use the future website. A typical study involves several people. Once all of the tests are done, we compile feedback received from each person who participated. From that feedback, we prepare a final report to the development team that highlights recommended changes to the product.

One important thing you should keep in mind is that we are testing the prototype, not you. If you cannot complete a task, or get stuck, that means we haven’t done our job. You are here to help us to build a better product, so be candid – if something seems wrong, or out of place, tell us so.

During the test, we will ask you to perform a series of tasks we have selected.

Please feel free to mention at anytime:
- Any problems, or concerns, functionality you can’t find, decisions you are trying to make, and anything that doesn’t seem logical to you.
- Tell us about functionality that seems to be missing in this web site.
- Tell us anytime this web site does not meet your expectations or surprises you in any way.
- Remember: be candid, you are here to help us understand if the website is easy to use.

If you would like to take a break at any time, please let us know. Also, if you feel uncomfortable and would like to stop, please feel free to tell us. You are not obligated to finish if you are uncomfortable.

Do you have any questions so far?

*** Present the consent form now ***

I’m going to give you a quick consent form for you to read over and acknowledge.

***Wait for acknowledgment ***

Thank you very much

I’m going to give you a series of tasks to perform. Please take your time to complete the tasks. When you are done with a particular task, tell me you are done and we will move on to the next task.

Remember, we are testing the web site, not you, so do not feel self conscious.

***The facilitator presents the first Task Card***

Task 1: Can you find product information for “Reduced Fat Milk (2%)”?

***User does the task***

***The facilitator presents the second Task Card***
Task 2: Can you remove “Margarine” from the order and add “Chocolate Milk” to the order?
***User does the task***
***The facilitator presents the third Task Card***

Task 3: Can you make an online payment?
***User does the task***
***The facilitator presents the fourth Task Card***

Task 4: Can you find the page where you can “Contact Us”?
***User does the task***

***Debriefing questions***
Did you find any of the tasks hard to accomplish? If so, which one(s)?

Did you find the functionality of the website to be straightforward?

Was there any wording or terminology that did not make sense to you?

Do you have any suggestions for improving our user interface design?

Do you have any questions so far?

Please don’t discuss the details of this user testing session with anyone for the next two weeks. Otherwise, we won’t be able to use them in the test. You can say that you participated in the usability test, but once again, do not discuss the details.

On behalf of our team, thank you for your time.

If subject becomes quiet at anytime:

I’d like to hear what you’re thinking
If you could just say whatever words come to your mind
Please speak up
Informed Consent Form

Project Title: Oberweis Redesign Prototype

Please read this consent agreement carefully before you decide to participate in the study.

Purpose of the research study: The purpose of this study is the test the usability factors of the Oberweis web site redesign.

What you will do in the study: You be participating in a short user testing session. At no time will the confidentiality of this research be violated by associating identifying information with responses.

Time required: 15 minutes

Risks: There are no anticipated risks to participating in this study.

Benefits: There are no direct benefits to you for participating in this research study. The study results will help us understand how to improve the usability factor of the Oberwes Redesign Prototype. The data collected will be provided when analysis is complete.

Confidentiality: The information that you give in the study will be handled confidentially. Your information will be assigned a code number. The list connecting your name to this number will be kept in a separate computer file. When the study is completed and the data have been analyzed, this list will be destroyed. Your name will not be used in any report or made public in any way.

Voluntary participation: Your participation in the study is complete voluntary.

Right to withdraw from the study: You have the right to withdraw from the study at any time without penalty.

How to withdraw from the study: If you want to withdraw from the study, simply leave or state that you wish to end the interview. There is no penalty for withdrawing.

Payment: You will receive no payment for participating in this interview

Who to contact if you have questions about the study: Kristin Adamczyk (axel_ice@hotmail.com), Piya Buranatum (piyatida_buranatum@yahoo.com), Colleen Gill (colleengill@sbcglobal.net), Scott Macdonald (smacdona@depaul.edu)

Who to contact about your rights in the study: Piyatida Buranatum

Agreement: Please read the following out loud.
I agree to participate in the research study described above.
You will receive a copy of this form for your records.
Appendix D: Usability Test Results

Evaluated Measures Results:

Test Objective 1: Can a user find product information?
Task 1: Can you find product information for “Reduced Fat Milk (2%)”?

Quantitative data:

<table>
<thead>
<tr>
<th>Task 1</th>
<th>Mean</th>
<th>Test-User 1</th>
<th>Test-User 2</th>
<th>Test-User 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time (seconds)</td>
<td>16.33</td>
<td>15</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>Task completed</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Number of errors</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Test Objective 2: Can a user change their standing order?
Task 2: Can you remove “Margarine” from the order and add one “Chocolate Milk” to the order?

Quantitative data:

<table>
<thead>
<tr>
<th>Task 1</th>
<th>Mean</th>
<th>Test-User 1</th>
<th>Test-User 2</th>
<th>Test-User 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time (seconds)</td>
<td>37.33</td>
<td>35</td>
<td>40</td>
<td>37</td>
</tr>
<tr>
<td>Task completed</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Number of errors</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Test Objective 3: Can a user make a payment online?
Task 3: Can you make an online payment?

Quantitative data:

<table>
<thead>
<tr>
<th>Task 1</th>
<th>Mean</th>
<th>Test-User 1</th>
<th>Test-User 2</th>
<th>Test-User 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>6</td>
<td>8</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Task completed</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Number of errors</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Test Objective 4: Can a user find help when needed?
Task 4: Can you find the page where you can “Contact Us”?

Quantitative data:

<table>
<thead>
<tr>
<th>Task 1</th>
<th>Mean</th>
<th>Test-User 1</th>
<th>Test-User 2</th>
<th>Test-User 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>8</td>
<td>9</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Task completed</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Number of errors</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Recorded Actions of Test Users:

**User 1**

Task 1
- Went to products -> Selected Reduced Fat Milk
- Comment: product name should be underlined to represent a hyperlink

Task 2
- Spent awhile looking at main menu navigation
- Went to Home Delivery -> Logged in -> Checked Remove box for margarine (did not click update) - > Selected Add New Item button -> Selected Chocolate Milk

Task 3
- Went to Make Payment -> Selected Pay Now

Task 4
- Went to About Us, then went to Customer Service

Debriefing Questionnaire responses:
Q1) “About Us” and “Customer Service” menu names seem similar; somewhat confusing
Q2) Yes
Q3) No
Q4) Nope – looks good

**User 2**

Task 1
- Went to products -> Selected Reduced Fat Milk
- Comment: product name should be underlined to represent a hyperlink

Task 2
- Spent time analyzing main menu navigation
- Went to Home Delivery -> Logged in -> Checked Remove box for margarine (did not click update) - > Selected Update Order -> Selected Chocolate Milk

Task 3
- Went to Make Payment -> Selected Pay Now

Task 4
- Went to Customer Service

Debriefing Questionnaire responses:
Q1) Task 2 – Make payment is off to the side; should move it down so it is more in main field of view
Q2) No – “Home Delivery” idea was confusing; didn’t know home delivery was available
Q3) Order of menus is somewhat confusing; Customer service should possibly be a link at the bottom of the page since many other sites follow this format
Q4) View/pay order screen – too much white space
User 3

Task 1
- Went to products -> Selected Reduced Fat Milk
- Comment: product name should be underlined to represent a hyperlink

Task 2
- Tried clicking on Chocolate milk in order to add it before informed this did not add the product to the order
- Went to Home Delivery -> Logged in -> Checked Remove box for margarine -> Selected Update -> Selected Add New Item button -> Selected Chocolate Milk

Task 3
- Went to Make Payment -> Selected Pay Now

Task 4
- Went to Customer Service

Debriefing Questionnaire responses:
Q1) No
Q2) Yes
Q3) Task 1 wording confusing – wasn’t sure what kind of information we wanted (i.e. product price, etc. or nutritional information)
Q4) No