



# **Usability Test Report for Specialty E-Commerce Website**

**12.11.2016**



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## 1. Introduction

Lesliespool.com (subsequently also called “the website”) is an online e-commerce site of swimming pool and spa supplies and services. Pool equipment, chemicals and other items related can purchased online. Leslie’s is also a chain of physical retail stores, which preceded the website in existence, and are at least partially supported by the website.

A usability test is intended to determine the extent an interface facilitates a user’s ability to complete routine tasks. Typically, the test is conducted with a group of potential users either in a usability lab, remotely (using e-meeting software and telephone connection), or on-site with portable equipment. Users are asked to complete a series of routine tasks. Sessions are recorded and analysed to identify potential areas for improvement to the web site.

For this usability test, only one participant was selected in accordance with this course’s requirements pertaining to this assignment. No remote observation was done, however, the video recording for this assignment has been made available to the teacher of this course for review in its entirety. In addition to identify potential areas of improvement for the website, the purpose of this task was also to learn from a live and working specialty e-commerce website in order to apply the learnt information towards future and upcoming projects.

## 2. Executive Summary

Moritz Zimmer (acting as facilitator) conducted the test in his home office using a live version of the website, accessing it the latest version of the Firefox Browser from a virtual Windows 7 machine running on Apple Macintosh equipment provided by the facilitator. The session was video recorded with OSX’s native Quicktime screen recording software, audio with a Logitech Microphone. Mouse clicks and Keyboard inputs were made visible with the Visualize.app software. The session captured the participant’s navigational choices, task completion rates, comments, questions and feedback. Also captured was a 30 minute “debriefing” interview and discussion with the participant about the findings (in lieu of being able to discuss this with the control-room group), screen-capture and audio-recording sessions of which *can* be made available upon request.

The user was expected to complete 4 different tasks, including finding a specific part, making a purchasing decision, finding a store and creating an account.

In general, the participant found the website difficult to use, was confused and overwhelmed by the products and their presentation.

The test identified problems ranging from severe to minor like screen space above the fold not being used to the best advantage to sell the products, and in many cases actually served to confuse the user. Redundant navigational elements caused user to mistrust the website, and inconsistency in presentation between product ranges further amplified those



two issues. Valuable screen real-estate was used for in-site advertisements, causing the user to not read vital information hidden and presented in these type of displays.

This document contains the participant feedback, satisfactions ratings, task completion rates, ease or difficulty of completion ratings, time on task, errors, and recommendations for improvements. A copy of the scenarios and questionnaires can be found in the Usability Test Plan from the previous assignment already submitted, but is available on request. Some of the analysis underlying this report come from two post-usability-test Discussion Videos recorded with the participant, which are also available on request.

## **3. Methodology**

### **3.1. Sessions**

This test was conducted in the home of the facilitator Moritz Zimmer with one (1) participant only. The usability test did not include any other people other than the facilitator and the participant, both physically present in the same room. The only participant (also referred to as user and subject in this document) in this test was recruited from the friends and family circle of the facilitator. The participant was an experienced computer user and beginner-level self-taught programmer, but had no to little experience with the type of product sold on the website to be tested, pool equipment and supplies. It was expected to be an advantage and desired situation, in order to allow for an observation of an ecommerce website selling specialized product to a client that is unfamiliar and potentially “out of their depth”, thus potentially exposing flaws generally inherent with all types of specialty ecommerce websites.

The Session lasted approximately one hour and fifteen minutes, thirty minutes of which were debriefing, discussion and Q&A about the website and the findings. During the session, the facilitator explained the test session . The participant was read by the facilitator the task scenarios, as well as was provided with an abbreviated copy of each task, and tried use the website to complete each task.

After the last task as well as the informal debriefing was completed, the facilitator asked the participant to rate the website overall by using a 5-point Likert scale (Strongly Disagree to Strongly Agree) for eight subjective measures including:

- Ease of use
- Frequency of use
- Ease to keep track of location in website
- Learn ability—how easy it would be for most users to learn to use the website
- Information facilitation – how quickly participant could find information
- Look & feel appeal – homepage’s content makes me want to explore the site further
- Site content – site’s content would keep me coming back
- Site organization



In addition, the test administrator asked the participants the following overall website questions:

- What the participant liked most.
- What the participant liked least.
- Recommendations for improvement.

The subjective and overall post-test discussion is available in video form upon request and not subject of this report directly.

### 3.2. Participants

Section omitted due to redundancy.

### 3.3. Evaluation Tasks/Scenarios

Test participants attempted completion of the following tasks (for a more detailed description of tasks, see the previously submitted usability test plan and script) :

- Find an O-ring Pentair® Intelliflo® Pump Lid
- Select (and hopefully commit to buy) a Pool Cover
- Create an Account / Form Usage
- Find a local Store and Coupons.

## 4. Results

### 4.1. Task Completion Success Rate

The participant was able to complete some of the assigned tasks, some assigned tasks partially for a total average of 62.5% completion rate between all tasks. The second and third task had the highest completion rate, but the third task was completed in a much timelier manner than the second, and with significant advantage in confidence of completion.

Task Completion Rates

Task 1	Task 2	Task 3	Task 4
0%	100%	100%	50%

### 4.2. Task Ratings

After the completion of each task, the participant rated the ease or difficult of completing the task for four factors:

- It was easy to find my way to this information from the homepage.
- As I was searching for this information, I was able to keep track of where I was in the website.



- I was able to accurately predict which section of the website contained this information.
- I felt confident in the choices I made during the execution of the task

The 5-point rating scale ranged from 1 (Strongly disagree) to 5 (Strongly agree). Average percentages were calculated as the percent of points out of total points available.

### **4.3. Result Findings**

#### **4.3.1. EASE IN FINDING INFORMATION**

The participant was had significant trouble finding the desired information on the website in 75% of all cases. Only in one case, scenario 3 was the information clearly and easy to find from the homepage, almost without any thinking, according the post-test interview. For the 2<sup>nd</sup> and 3<sup>rd</sup> tasks, the participant had significant trouble getting to the information, although she stated that it was not impossible to get there, but that it took considerable effort and trial and error. In the case of the first scenario, the participant was unable to find the information at all, and even more so gave up when the task started to be perceived as unable to solve without help from an outside source.

#### **4.3.2. KEEPING TRACK OF LOCATION IN SITE**

The participant's general perception of being able to keep track of location in the website was rated as neutral to positive, with none of the tasks being experienced in a negative way. The participant did not like the giant ads, which did contribute to having to pay more attention to keep track of any given position. Overall, the participant stressed that the scores were mostly low because of frustration due to ad placement, rather than actually getting lost. In only one scenario, the 3<sup>rd</sup> was the participant confident to give the highest mark. In all other cases, the participant was either unable to locate the information or only with difficulty, but said was able to keep track of their location overall at all times.

#### **4.3.3. PREDICTING INFORMATION SECTION**

The participant found it overall difficult to predict the information location and navigation of the different parts of the website, but attributed this largely due to the lack of knowledge of the website, and, again, ads being placed everywhere on the website. Only the third task received full points, as the participant had previously seen the button to create an account and was therefore instantly familiar with the selection process. All other categories received less than favourable scores, largely due to the points mentioned above

#### **4.3.4. CONFIDENCE IN EXECUTION OF TASKS**

The participant was very confident in completing the 3<sup>rd</sup> task because the process was perceived well, and the participant could predict the location of the information on the site. The participant was less confident in their execution of tasks one, two and four. It is interesting to note that in all three cases, the participant rated the confidence the same, even though the completion rate of the tasks varies greatly, from 0%, 100% and 50% respectively, representing every possible outcome. This might indicate that the completion of those tasks are as much attributable to *chance* as they are to good web design.



Summary						
Task	Finding Info	Tracking in Site	Prediction	Confidence	Overall*	
1-Find an Oring for Pump	0/5	3/5	2/5	2/5	3.5	
2-Select / buy Pool Cover	3/5	3/5	2/5	2/5	3.5	
3-Create an Account	5/5	5/5	5/5	5/5	5	
4-Find Store & Coupons	2/5	3/5	2/5	2/5	3.5	

*\*Overall as expressed as simple average taken. Max Points for each section is 5.*

### 4.4. Time on Task

Time on task for the participant was derived from the recordings made during the session. Some tasks were inherently more difficult to complete than others and is reflected by time on task results.

Out of the completed and partially completed tasks, the second task—select a pool cover—took the most amount of time to complete, 13 minutes as a whole. The third task—creating an account—was completed the fastest, in just 3 minutes. Out of unable to complete or partially completed tasks, the first test—find a pump lid Seal—took the least amount of time, 7 minutes, with the participant giving up, overwhelmed. The fourth task—locate a store and coupons—took 9 minutes to complete and was partially completed.

Time on Task					
	Task 1	Task 2	Task 3	Task 3	Total Time*
Time in Minutes	7	13	3	9	39

*\*The first task took 7 Minutes and ended with the participant giving up unable to complete the task. The second task took 13 Minutes to, and the participant was able to complete the task. The third task was successfully completed in just 3 minutes, the shortest in the test, and the fourth task took 9 minutes, with the task remaining partially incomplete.*

### 4.5. Errors

A non-critical error is an error that does not prevent successful completion of the scenario. Most tasks involved at least one non-critical error, mostly mis-navigation, as well as confusion by icons clicked, irrelevant information perceived. Critical Errors, errors that prevented the successful completion of the entire or partial task, were largely due to the inability to discern the information presented on the webpage, and the user was able to call each scenario as non-completable without the facilitator stepping in. Errors counted for this summary are of both natures.



### 4.6. Summary of Data

The table below displays a summary of the test data, as the headline already indicates.

Summary of Completion, Errors, Time on Task, Mean Satisfaction				
Task	Task Completion	Errors	Time on Task	Overall*
1	0% - 0 points	4 - 0.5 points	7 Min - 3 points	29% - 3.5/12 points
2	100% - 4 points	5 - 0 points	13 Min - 0 points	33% - 4/12 points
3	100% - 4 points	0 - 4 points	3 Min - 4 points	100% - 12/12 points
4	50% - 2 points	2 - 2 points	9 Min - 2 points	50% - 6/12 points

*\* 12 possible points: Since I don't know how these charts are supposed to be calculated, I scored each category in points from 1 to 4 based on the best-in-class and worst-in-class. For example, 3 Minutes Time on Task would get 4/4 points, 13 minutes gets 0/4 points.*

### 4.7. Overall Metrics

#### 4.7.1. OVERALL RATINGS

After task session completion, participants rated the site for eight overall measure. The responses have been collected during the post-test interview, a video file of which is available upon request. It is worth noting that the participant did not “strongly agree” with any of the above measures, and this might be informed by the participant’s relatively high percentage of inability to complete the tasks as mentioned further above.

The following represents the participant’s responses in a tabular form.

Post-Test Questionnaire					
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Thought Website was easy to use				X	
Would use website frequently		X			
Found it easy to keep track of where they were in website				X	
Thought most people would learn to use website quickly	X				
Can get information quickly			X		
Homepage's content makes me want to explore site	X				
Site's content would keep me coming back			X		
Website is well organized		X			

\*Percent Agree (%) = Agree & Strongly Agree Responses combined





#### **4.7.2. LIKES, DISLIKES, PARTICIPANT COMMENTS**

A summary of the answer to the **bolded measures**:

- The participant **agreed that the website was generally easy to use.**
- The User **disagreed with the idea of using the website more frequently**, stating that one would “just go to the store” instead.
- The participant **did agree that she found keeping track within the entirety of the website easy.**
- Participant thought that the learning curve for the website was extremely high, as indicated by **strongly disagreeing with the notion that the website would be easy to learn** for other people. Most notably pointed out where the lack of details given in each of the corresponding sections and product pages, especially in the light of “pools are complicated, the subject matter is just too complex”.
- The participant was **neutral regarding the quickness of getting information**, stating that the tab-navigation was helpful and not hard to use, she also liked the fact that a search engine was there in case it was needed. She did however point out that she still “could not find technical things on the website”.
- The participant felt to **strongly disagree that the homepage encourages site exploration**, mostly because “everything just looked like ads”, even sections of the website that were not advertisements.
- She felt **neutral about coming back to the site**, mostly stating that she found the colours “pleasant but not enticing”.
- The participant **disagreed with the notion about the website being well organized**, finding that her “trust was lost on the magnifying glass/search icon confusion”, which represented a significant inconsistency across the website.

## **5. Recommendations**

The recommendations section provides recommended changes and justifications driven by the participant success rate, behaviours, and comments. Each recommendation includes a severity rating. The following recommendations would improve the overall ease of use and address the areas where participants experienced problems or found the interface/information architecture unclear, as well as might help with conversion rates and reflect directly in sales numbers and/or signups.



### 5.1. Scenario 1: Find a Pentair® Intelliflo® Pump Lid Gasket

The participant was asked to find a Pentair® Intelliflo® pump lid gasket. Test started on the home page.

Change	Justification	Severity
<p>Improve the product landing page by making the content above the fold clearer by:</p> <ul style="list-style-type: none"> <li>Removing “frequently purchased items” section.</li> <li>Replacing it with a more clearly featured parts-breakdown picture that clearly invites to start looking for the part there.</li> </ul>	<p>The Participant had trouble in both this scenario and scenario 2, as well as somewhat in scenario 4, to perceive any information that is located “below the fold”.</p> <p>In this case, the information that likely would have helped the participant—a parts breakdown—is not only <i>skewed</i>, but also overlaid with images, causing the participant to ignore this section.</p> <p>Important screen real-estate was wasted by so-called “frequently purchase parts”—which, as an industry-insider I can affirm are not at all frequently purchased—which was completely useless, and potentially cause the participant to ignore the solution she might have otherwise found.</p>	High
<ul style="list-style-type: none"> <li>Provide pictures for all parts, link back to the parts-breakdown for items without pictures.</li> <li>If no picture is there, use the parts-breakdown and highlight the part in question on the overview.</li> </ul>	<p>In some instances, including the part the participant was asked to find, there is no picture of the part a user might be looking for, making it impossible to discern which is the part they need.</p>	High

### 5.2. Scenario 2: Select (and hopefully commit to buy) a Pool Cover

The participant was asked to select a pool cover for their pool. This test started from the homepage.

Change	Justification	Severity
<p>Improve the product landing page by making the content above the fold clearer by:</p> <ul style="list-style-type: none"> <li>Removing “featured cover kits” section.</li> </ul>	<p>The Participant had trouble in both this scenario and scenario 1, as well as somewhat in scenario 4, to perceive any information that is located “below the fold”.</p>	High
<ul style="list-style-type: none"> <li>Remove / Change the look of the “magnifying glass” icon</li> </ul>	<p>The user confused it for a search icon, because the icon looks almost identical to the search-bar icon in shape and style, and even the background colour is the same colour of teal.</p> <p>Having there caused the user to lose trust in the website, which she verbalized. It also introduces no additional functionality and could safely be omitted.</p>	High
<ul style="list-style-type: none"> <li>Provide user-ratings and more details on pool covers, like it is possible in other parts of the website.</li> </ul>	<p>The user was trying to make a purchasing decision on pool covers by comparing products, but was wishing out loud for a “rating system, like amazon has”, or even get more information about the cover by clicking on it.</p> <p>Especially frustrating is, that most other products on the website have such a functionality.</p>	Medium



### 5.3. Scenario 3: Create an Account / Form Usage

The participant was asked to create an account on the website. The user started on the homepage.

Change	Justification	Severity
<ul style="list-style-type: none"> <li>Redesign section on the side explaining the benefits of the account to the user to be less generic.</li> </ul>	The Participant ignored an almost page-long description of what the account does and wondered out loud during the test. Because the website is full of banners and ads, the user was inclined to ignore this.	High
<ul style="list-style-type: none"> <li>Consider requiring an email activation</li> </ul>	Both the test plan and the user anticipated an account to be activated with a confirmation email, however this was not the case. While a nuisance technically, this sort of behaviour has become expected, and it might serve to gain trust into the website to behave like other websites do.	Low
<ul style="list-style-type: none"> <li>Change the "you successfully logged in" message from red to green.</li> </ul>	The colour red indicates something went wrong, typically.	Medium

### 5.4. Scenario 4: Find a Local Store and Coupons

The participant was asked to find a local store, and to see if there are any coupons available. If the user previously was able to find parts, see if those parts are available in a local store.

Change	Justification	Severity
<ul style="list-style-type: none"> <li>In absence of a functionality to see local availability, add message like "call your local store to see if the item is in stock" or similar, showing link to store locator if no store selected, or the stores phone number.</li> </ul>	This sort of functionality is expected in modern websites, and it could potentially drive the business of the local branch.	Medium

### 5.5. General Recommendations, Summary

I would recommend to re-think the usage of the content above the fold in general. The website spends a lot of screen space on in-site advertisements, which, because they behave, look like and are placed like ads, have a tendency to be a nuisance to users and go ignored.

In order to build and maintain trust, I would recommend to keep the visual language the same, and remove any icons that are redundant and confusing.

Benefits of the Rewards Program could be better explained, for example, items could be advertised on the website to show how many points they are worth, or—even better—what the user would get back in rewards. For example, "this item earns you \$15 in Leslie's Rewards" or similar.



## 6. Conclusion

The user found the website overall usable and clear in navigational structure, and was able to complete some of the tasks at least partially with little difficulty; however, because of the very technical and specific nature as it is expected to be found in a *Specialty* e-Commerce website, a more precise and concise presentation, especially as it pertains to toning down in-site advertisements, as well as information presented above the fold, is highly recommended.

## 7. Sources

Moritz Zett (username), (Nov. 2016). *Usability test for specialty e-commerce website – Moritz Zimmer*. [Video File]. Retrievable from:  
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Usability.gov. (n.D.). *Report template: usability test*. [DOCX document]. Retrieved from:  
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Zimmer, M. (2016). *Usability test plan for specialty e-commerce website*. Unpublished manuscript.

## 8. Appendix/Waiver

Attached on the last page is the Recording Consent Form signed by the participant.