



E2: Heuristic Evaluation

A usability analysis of decorativethings.com

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Executive Summary

Decorative Things is an online retailer of unique home decor gifts and accessories. The company was founded in 1988 as a home decor manufacturer and has functioned as an online retailer for over 4 years. Customers frequently discover the website as a result of the press the company receives in many widely-distributed fashion and design focused publications, including *Elle*, *Oprah*, *Bon Appetit* and *Martha Stewart*. While Decorative Things offers an array of beautifully designed products geared towards customers with an eye for design; this report reveals that website has numerous usability issues that may frustrate novice users and impede sales.

A team of 3 evaluators conducted a heuristic evaluation to analyze the website and determine usability problems. Researchers focused on the website's homepage and shopping cart, and used Nielsen's Ten Usability Heuristics (Nielsen, 1995) to bring to light any usability issues. Evaluators identified problems, noted which heuristics were violated, and assessed each problem's severity. Once problems were discovered they were condensed based on similarities and given an average severity rating. This analysis yielded a number of recommendations to increase usability of decorativethings.com.

Recommendations include:

1. Reduce clutter on the homepage
2. Eliminate redundant links
3. Make sure the user can differentiate between graphics and links/buttons
4. Allow the users to sign up for the mailing list from the homepage
5. Allow the shopping cart to pop up anywhere on the page
6. Enable the user to "keep shopping" from the page they left off, rather than returning to the homepage

Incorporating these recommendations into the interface of the Decorative Things website will make navigating the site easier for novice and expert users alike.

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Introduction

Decorative Things is a home decor retailer that offers a large selection of home decor items, gifts, and accessories. After conducting a heuristic evaluation using Nielsen's ten usability heuristics, a number of usability issues were exposed. This report will discuss the issues that hinder ease of use and will include recommendations on how to improve usability on the website.

Methodology

A team of 3 usability researchers evaluated the homepage and shopping cart of the Decorative Things website using Nielsen's ten usability heuristics (Nielsen, 2005). A lead evaluator (Evaluator 1) determined the scope of the evaluation.

Each evaluator browsed the website's homepage and interacted with the shopping cart, recorded any usability problems, and noted and described any heuristics violated. A severity rating (Nielsen, 1995) was then assigned to each problem. Nielsen's heuristics and severity rating system are pictured below (Fig. 1 and 2). At the conclusion of the evaluation, problem descriptions were collected by the lead evaluator, reviewed, and condensed based on similarities. Problems that were out of the scope of this evaluation were eliminated. An average severity rating was determined for problems that had been consolidated by averaging each evaluator's rating. A complete list of problems can be found in the appendix of this report.

Usability Heuristics	
H1	Visibility of System Status
H2	Match between system and real world
H3	User control and freedom
H4	Consistency and standards
H5	Error prevention
H6	Recognition rather than recall
H7	Flexibility and efficiency of use
H8	Aesthetic and minimalist design
H9	Recognize, diagnose and recover from errors
H10	Help and documentations

Fig. 1 – Nielsen's Usability Heuristics (Nielsen, 2005)

Problem Severity	
0	Not a problem
1	Cosmetic problem

2	Minor problem
3	Major problem
4	Catastrophe

Fig. 2 – Problem Severity Scale (Nielsen, 1995)

Findings & Recommendations

The original list of problem descriptions included 14 problems identified by 3 evaluators. The number of problems was reduced to 6 after being reviewed and consolidated by the lead evaluator. The consolidated lists of problems below includes 4 usability problems on the website’s homepage (Fig. 3) and 2 usability problems in the shopping cart (Fig. 10.)

Problems: Homepage					
Problem Description	Heuristic Violated	Severity Rating 1	Severity Rating 2	Severity Rating 3	Average Severity Rating
Too much information on the page, extreme clutter. Inconsistent design as the user scrolls down the page – information appears to be randomly placed on the page	4, 6, 8	3	2	2	2.3
Multiple links that differ in appearance lead to the same place. This leads to clutter and confusion.	4, 7, 8	3			3
A number of graphics included on the homepage have the appearance of buttons but can not be clicked	4	3		1	2
Meaning of the button that leads to mailing list is unclear. Button reads “XO” and looks similar to the “XO” button at the top of the page which takes the user back to the homepage	4, 6	2			2

Fig. 3 – Problems: Homepage

Reduce clutter on the homepage by utilizing a consistent and minimalist design scheme

Problem Details:

A major problem that caught evaluators' attention was the amount of clutter on the website's homepage (Fig. 4.) There are 19 different tabs on the website's header, which could overwhelm users. In addition, there are 14 images that can be clicked which link to the same information as the links in the header. In total, the user can click on 128 different items, many of which lead to the same place. Furthermore, the user must scroll through a large block of text, press information, and links to external content to see the entire homepage. The overload of information and the inconsistent design scheme can inhibit the user from finding what she is looking for. Information, actions, and options are not readily visible and this can be a great obstacle to the novice user.

Recommendation:

Clutter can be reduced by eliminating redundant links and cutting down large blocks of text or placing the text elsewhere within the website. A broad and shallow navigation structure can benefit users; however, a too broad navigation can overwhelm users and make finding information difficult. Reducing the amount of information on the homepage and employing a more minimal design scheme can help users by making options and possible actions visible. An example of more minimal and narrow homepage can be seen in Figure 6.

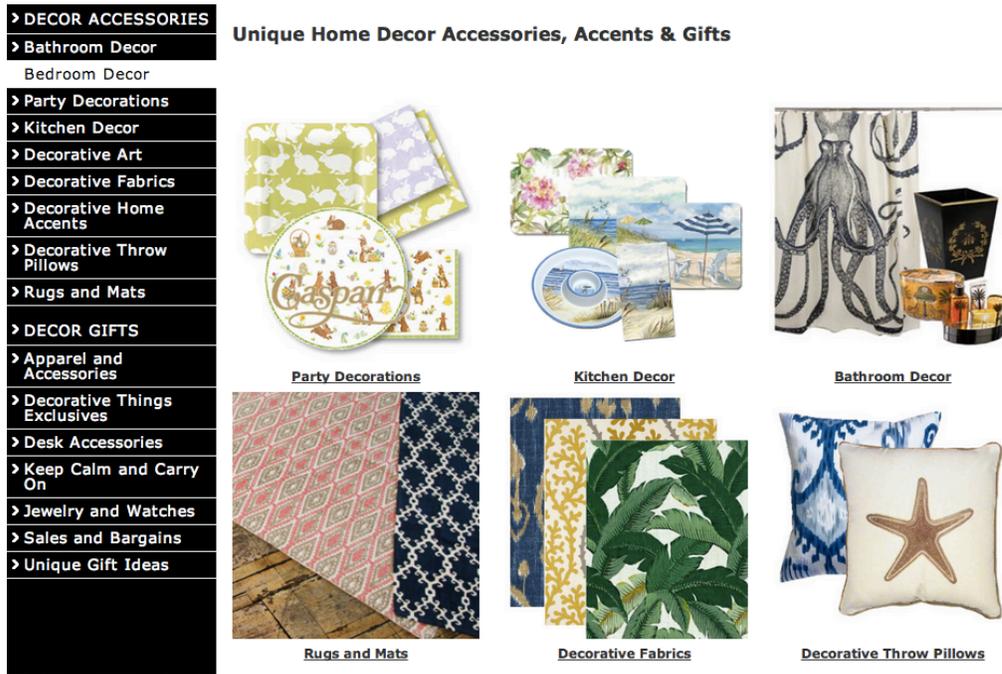


Fig. 4 – Example of clutter on the top section of the homepage

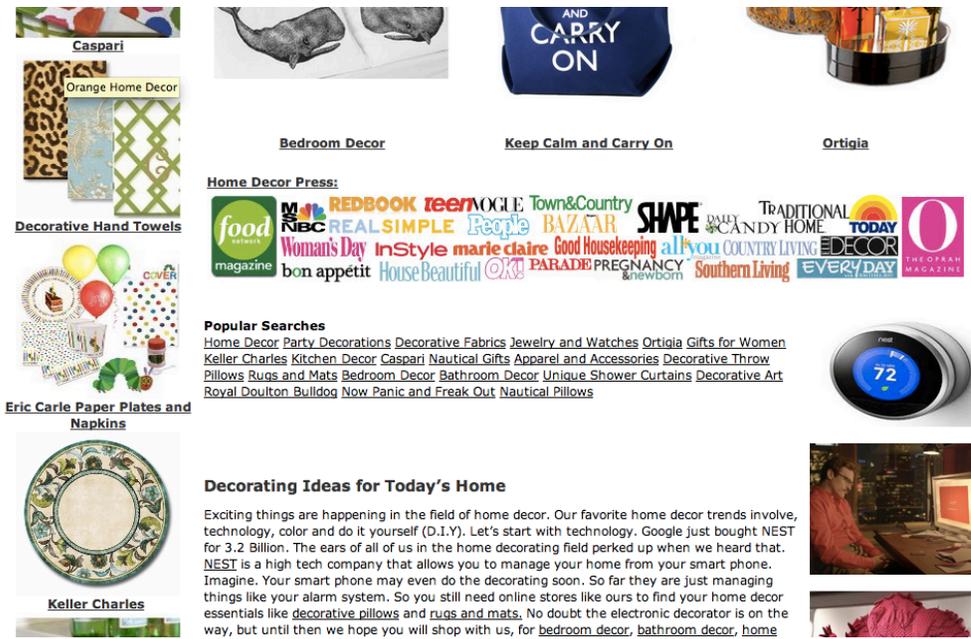


Fig. 5 – Example of clutter midway down the homepage

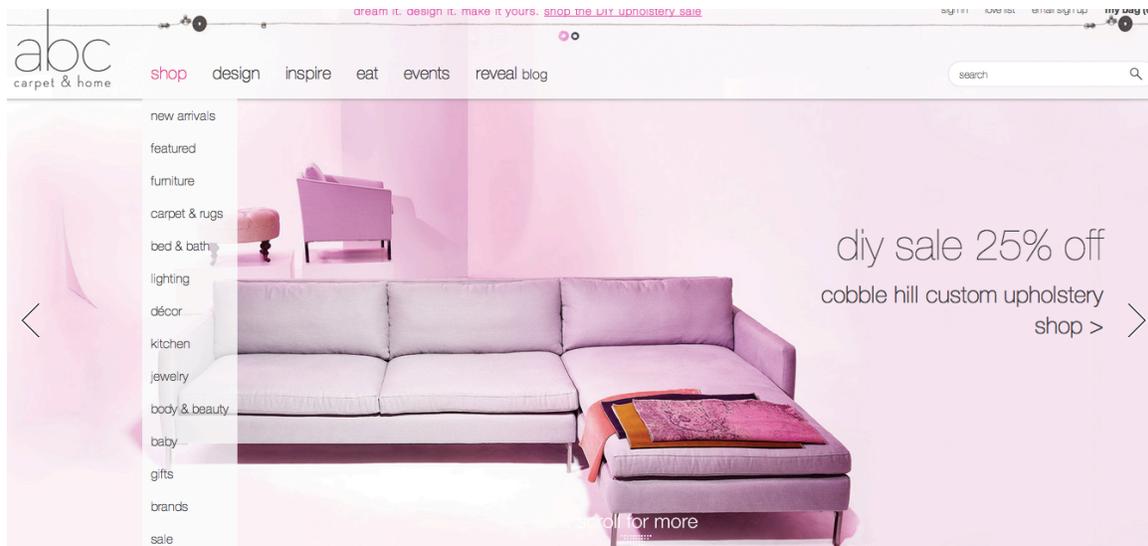


Fig. 6 – Example of the homepage of the home decor website www.abchome.com. The more narrow navigation structure and minimal homepage can help users navigate through the website more easily.

Eliminate redundant links

Problem Details:

As discussed previously, the Decorative Things home page frequently contains multiple links to the same piece of information. For example, there is a link to bathroom decor on the side bar, an image that links to bathroom decor in the center of the page, and a link to bathroom decor under “popular searches” (Fig 4). Links to the same information have an inconsistent appearance and can

confuse the user, leaving him/her wondering whether different links lead to the same place. This problem also makes finding the correct action a challenge, as the multitude of tabs and buttons cause clutter on the page.

Recommendation:

Removing the repetitive links in the center of the page and adopting a consistent format for different types of links can benefit users and keep them from wondering whether different words have the same meaning or lead to the same place. In addition, removing these links will reduce clutter on the page and make essential information more visible.

Make sure the user can differentiate between graphics and links/buttons

Problem Details:

A number of graphics contained on the homepage have the appearance of buttons, but cannot be clicked (Fig 7.) A user may believe that a piece of information is a button, and can become frustrated when she attempts to click it. In addition, these graphics increase crowding and can distract the user's attention from the actual links on the page.

Recommendation:

Changing the appearance of the graphics that look like buttons can improve this problem. In the example shown in Figure 7, removing the black background and changing the color of the text from white to another color can make it more clear that this information is a notice to users, rather than a link.



Fig. 7 – “FREE GROUND SHIPPING” and “FREE GIFT WRAP” have a similar appearance to buttons.



Fig. 8 – The notice about free shipping on the home décor website www.jonathanadler.com looks different from the buttons and tabs on the homepage. Adopting a similar design can help customers navigate the page more easily.

Allow users to sign up for the mailing list from the homepage

Problem Details:

The meaning of the button that leads to a page where the user can sign up for the mailing list is unclear. A small button reads “XO” can be clicked to bring the user to a new page to sign up for the website’s mailing list. This button has a very similar appearance to the “XO” button at the top of the page, which takes the user back to the homepage. The “XO” button has an inconsistent meaning and the user must be experienced to understand its purpose.

Recommendation:

After the small “XO” button is clicked, the user is brought to a new page that contains a box where she can enter an e-mail address (Fig. 9.) The “XO” button could be eliminated and replaced with this box, reducing the number of steps the user has to take. Placing this box directly on the homepage can reduce confusion about how to sign up for the Decorative Things mailing list. While the homepage is currently crowded, removing unnecessary information and replacing it with useful information can benefit users, and subsequently improve sales.



Fig. 8 – The large “XO” button on the left takes the user back to the homepage. The small “XO” button on the right brings the user to a new page where she can sign up for the Decorative Things mailing list.

JOIN OUR MAILING LIST

* Required field

Email Address: *

[Join Now](#)

Decorative Things respects your privacy. We do not sell or rent your personal information to anyone. Rest Assured.

Fig. 9 – After the small “XO” button is clicked, the box above appears on a new page. The “XO” button could be eliminated and replaced with this box.

Problems: Shopping Cart					
Problem Description	Heuristic Violated	Severity Rating 1	Severity Rating 2	Severity Rating 3	Average Severity Rating
When an item low down on a page is added to the shopping cart, the cart appears as a pop up on the top of the page and is not visible to the user unless she scrolls up	1, 6	3		3	3
The “keep shopping” button takes the user back to the homepage instead of the place where she left off	2	1			1

Fig. 10 – Problems: Shopping Cart

Allow the shopping cart to pop up anywhere on the page, not only above the fold

Problem Details:

When a user adds an item below the fold to the shopping cart, the shopping cart pops up on top of the page (Fig. 11.) Depending on how far the user has scrolled down, the cart may not be visible at all. The user will not receive adequate feedback and will be unaware that an item has been added to the cart. An expert user may know that the cart is on top of the page, but a novice user who cannot see the cart may not know how to proceed.

Recommendation:

To remedy this problem, the cart should be able to pop up on any portion of the page the user is viewing. This will provide the user with feedback that they have added an item to the cart and improve ease of use for the novice user.

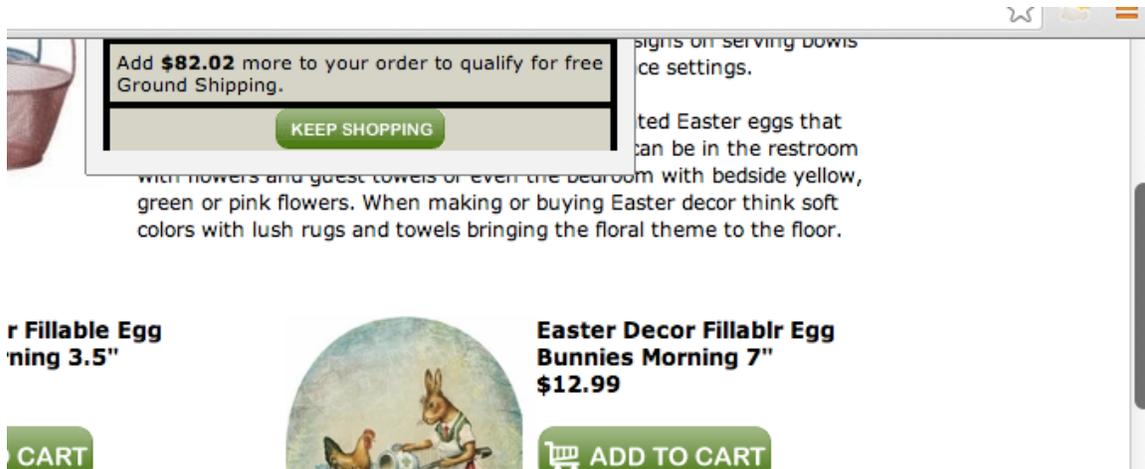


Fig. 11 – As the user scrolls down, the shopping pop up shopping cart remains above the fold. Adding an item below the fold will

When the user clicks “Keep Shopping,” allow the user to continue from the page they left off

Problem Details:

When the user clicks the “keep shopping” button (Fig. 11) she is brought back to the homepage, rather than the page she was previously viewing. If a user is shopping for party decor and adds paper napkins to the cart and then decides to add paper cups, the user will be brought back to the homepage and will have to go through the process of locating the party decor page and the cups again. This does not match the shopping process the user encounters in the real world, where a shopper does not have to return to the front of the store and navigate through the aisles each time she would like to add an additional item to her shopping cart.

Recommendation:

This problem can be resolved by allowing the user to return to the place she left off when the “keep shopping” button is selected. This will create a better match between the process of shopping on the website and shopping in the real world.

Conclusion

Decorative Things allows users to browse many high quality home decor items online. This heuristic evaluation, focused on the homepage and shopping cart, exposed a number of obstacles a user may encounter when attempting to navigate the website. Employing the recommendations yielded by this analysis will allow Decorative Things to better service users.

References

Nielsen, J (n.d.). *Ten Usability Heuristics*. Retrieved March 27, from <http://www.nngroup.com/articles/ten-usability-heuristics>

Nielsen, J (n.d.). *Severity Ratings for Usability Problems*. Retrieved March 27, from <http://www.nngroup.com/articles/how-to-rate-the-severity-of-usability-problems>

Appendix

List of All Problems					
Evaluator	Problem Description	Location	Heuristic Violated	Severity Rating (0-4)	Eliminate? (Yes/No)
1 (Lead Evaluator)	Too much information on the page, extreme clutter	Homepage	6, 5	3	No
1	Multiple links lead to same piece of information. These links differ in appearance but lead to the same place. This leads to clutter.	Homepage	4, 7, 8	3	No
1	Too much text on the homepage, an overload of information that seems like it would fit better as supplementary info – not the first information the user encounters	Homepage	8	3	No
1	The large amount of information on the page seems randomly placed. For example, press links	Homepage	4, 6, 8	3	No
1	Graphics that look like links are not actually links.	Homepage	4	3	No
1	When an item low down on a page is added to the shopping cart, the cart appears as a pop up on the top of the page and is not visible to the user unless she scrolls up	Shopping cart	1, 6	3	No
1	Meaning of the button that leads to mailing list is unclear. Button reads “XO” and looks similar to the “XO” button at the top of the page that refreshes the homepage	Homepage	4, 6	2	No
1	The “keep shopping” button takes the user back to the homepage instead of the place where she left off	Shopping cart	2	1	No
2	Unclear how to get fabric swatches – on the page for decorative fabrics, it is hard to distinguish between the various buttons	Decorative Fabrics	2, 6	2	Yes – out of scope of evaluation
2	Site content extends beyond what is readily visible on the screen without scrolling down – too much content for 1 page	Homepage	8	2	No
3	If an item below the fold is added to cart, card is not visible	Shopping cart	6	3	No
3	Graphics that can not be clicked have the same appearance as buttons	Homepage	4	1	No
3	Size/scope of homepage is too great – very cluttered	Homepage	8	2	No
3	Design of homepage is inconsistent and changes as the user scrolls down the page	Homepage	8	2	No

*problems removed

*problems consolidated