

Usability Testing Report

Executive Summary

This report details a usability study conducted by Britney Williams of the website Home Advisor. The website was independently assessed through use of a Heuristics Evaluation and then through the employment of a Usability Test with various participants. This report highlights the results attained from testing and the recommendations for the site that will be the functional foundation of the site Home In Stone.

Five primary recommendations are:

- 1. Improve the readability of the site by including less ads and non-relevant services by having more concise service options.
- 2. Enhance functionality by prompting users to create a profile after they have entered information regarding their service of choice.
- 3. Provide clearer results of response time once a user has completed information searching for services.
- 4. Develop a method that allows users define if their issue is an emergency or not.
- 5. Allow for professionals to create their own profile before being called by a representative with no given timeframe.

Usability Criteria

Intuitive Design: How effortlessly did users navigate the websites architecture

Ease of learning: At what rate were users able to accomplish basic tasks

Error Frequency: How often did users encounter errors and how did they recover from them

Subjective Satisfaction: User's overall opinion regarding the site

15% of users could not recover from their errors easily

12% of users would not recommend this site to other people

30% of users found it hard to find the information they needed

15% of users felt that the information was not provided in a clear and concise manner.

This research report incorporates the details of how the Usability Testing was conducted and as a result, the suggested changes.

Goals

Identify issues & bugs with the site

It is important to identify the changes required in order to improve the users' satisfaction.

Test the websites concept with target audience

It is important to have baseline understanding of how the general audience interacts with an existing home services site.

Develop a concept for Home In Stone

It is important to identify the industry standard concepts and fundamentals of the user centered design to be the foundation of Home in Stone.

Methodology

Heuristics Evaluation

A Heuristic evaluation was conducted to identify problems in the user interface design, used as a point of reference for the iterative design process of the Home in Stone prototype.

Usability Testing Setup & Post-Test Questions

For this Usability Testing portion of this study, users comprised of family and friends who met the criteria of either being a homeowner or construction professional/tradesman. There were five usability tests done, one test was completed remotely and the other four were in-person.

1. Introduction

Participants were sat in a room, quiet of all distractions, using their own device to access the site www.homeadvisor.com. It was explained to them beforehand that the moderator would not be able to answer any questions until the end as the primary goal is to see how they would interact with the website naturally, with interference or assistance. However, they were free to think-aloud as they were navigating through the site and tasks asked of them.

2. Tasks

- Register yourself as a handyman who provides "Lawn Care" services
- Search Roof Repair and select "Repair a Natural Slate Roof", complete the process of finding services
- Attempt to "Start a Project"
- Undo last action

3. Post-Test Questions

These questions were asked to participants to gain a understanding of each person's unique perspective.

What part of the site did you like the most and least?

What tasks were difficult/easy to accomplish?

What caused you frustration/what surprised you?

What do you think about the way the information was presented?

If you could change any aspect of the site, what would it be?

Would you recommend this site to someone else? Why or why not?

Results

Various data has been collected through the methods of heuristic evaluation, usability testing, interviews and surveys, the data was analyzed through content and thematic analysis. Recurring patterns and themes between the participants were identified that produced a solid understanding of the users' perspective. Repeated phrases, words, and experiences for each participant were used to generate an outline of the systematic issues to be concentrated on for Home in Stone's website.

Heuristic Evaluation

Home Advisor's website showed no issues providing users with system status updates and uses words and concepts that are considered familiar to the everyday person such as "Start a Project", "Join Our Pro Network". In addition to this, design features are consistent with web standards, followed UX conventions and was effectual in showing users error messages if encountered. Conversely, there were various webpages within the site that were overloaded with various prices, services, and information that are unrelated to each other increasing the chances of the user not being able to complete a task or focus on their intended goal. Another area for improvement for Home Advisor's website is employing the functionality of user freedom, there were no options available to undo an error if a mistake was made, the user would have to begin again at the homepage rather than return to last page shown. Overall, the site has two areas that are major usability problems which are error prevention and user control and freedom and one minor usability problem which is minimalist design. Otherwise, the site performed well and met Heuristic requirements.

Usability Testing

The following are the recurring patterns and themes identified between the participants:

Recurring Themes

Participants enjoyed the website's interface: Clean, organized, simple visual design Participants expressed experiencing information overload as they attempted to find services

Participants experienced difficulty receiving recovering from errors

Participants successfully completed tasks of finding services did not lead to an immediate response timeframe

Participants successfully completed tasks of signing up as a handyman but it did not lead to an immediate response timeframe

Thoughts Spoken Aloud

"How long will it take for someone to call me?"

"What if I had an emergency?"

Recommendations

The following recommendations are based on the analysis conducted in the Usability Testing and Heuristic's Evaluation.

Design

When users enter their information requesting a service, the option to sign up is not provided: **Allow users to login or signup seamlessly**

Users expressed being distracted once they scrolled down on the homepage with the number of services provided: **Minimize pricing and information on webpages**

Users expressed not being able to find a certain task due to a multitude of irrelevant options provided under one service: Minimize the various kinds of services offered, streamline into dedicated categories

Functionality

When attempting to return to undo an action, user's experienced difficulty: **Implement a return function allowing users to recover from errors easily**

When signing up as a professional or requesting a service, users were told they would be contacted but no timeframe provided:

Provide users with a timeframe of when they will be contacted

When signing up for a service, users were not given a timeframe of when they would be contacted and were unable to state the urgency of the request:

Provide users the option to detail their service request as "Urgent" if applicable

When signing up as a professional, users were only able to input basic information and received no clear direction thereafter: **Allow for contractors/professionals to detail their services and certifications prior to signing up**

Conclusion

Home Advisor is a highly usability friendly site all around, as it is easy to use, navigate, and understand. It excels in the areas of visual design, efficiency of use and overall subjective satisfaction. Concurrently, there is need for improvement in design and functionality when considering the user's needs and motivations. The Information Architecture and end results of various functions could use polishing. All in all, the results found in this study will be employed as the basic functionality in the prototype of Home In Stone.

Appendix A

A.1 Heuristic Evaluation

Heuristic	Home Advisor https://www.homeadvisor.com			Ratings
#1: Visibility of system status The design should always keep users informed about what is going on, through appropriate feedback within a reasonable amount of time.		System moved very fluidly; no in regarding what was going on in s the site navigations were seamles	ystem because	0 – This is not a usability problem
#2: Match between system and the real world The design should speak the users' language. Use words, phrases, and concepts familiar to the user, rather than internal jargon. Follow real-world conventions, making information appear in a natural and logical order.	The site uses words and concepts that are considered familiar to the everyday person such as "Start a Project", "Join Our Pro Network" and "What do you need done" in the earch bar HomeAdvisor POWERED BY AND STATE BOOK INSTANTLY. See your price. Book instantly. Sit back and relax. Let a top-rated Fixed Price pro do the job. Learn more		0 – This is not a usability problem	
#3: User control and freedom Users often perform actions by mistake. They need a clearly marked "emergency exit" to leave the unwanted action without having to go through an extended process.	Fixed Fixed We know yo your home. I time to tack of greedy up to your down. I want to you home. I time to tack of residue du ye ready to high. Vetted, r. No time. Friendly. Affordab. Backed t	Price Gutter & Downspout Cleaning 12,461 customers rated this service u/w got a never-ending list of work that needs to get done around towever, with the demands of work and family, it's so hard to find the et all. When you book fixed price gutter cleaning services, you'll be out time for the more important things in life, booking a fixed-price ing service will give you the security of knowing that things are being in service till grather leave things to a professional, then we are	urn function. they completed clicking on the	3 - major usability problem; important to fix

#4: Consistency and standards Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform and industry conventions.	Features are consistent with web standards, were easily accessible, and follows current UX conventions. Most Popular Projects Additions & Bathroom Remodel Bathroom Remodel Bathroom Remodel Bathroom Remodel Bathroom Remodel	0 – This is not a usability problem
#5: Error prevention Good error messages are important, but the best designs carefully prevent problems from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.	No option available to undo an error if a mistake is made. Compare quotes from top-rated Addition & Remodeling Contractors. Enter the location of your project. 2P code 30281 Stockbridge, GA	3 - major usability problem; important to fix
#6: Recognition rather than recall Minimize the user's memory load by making elements, actions, and options visible. The user should not have to remember information from one part of the interface to another. Information required to use the design (e.g. field labels or menu items) should be visible or easily retrievable when needed.	Login, signup, notification and search functions were easily accessible and follows UX conventions	0 – This is not a usability problem
#7: Flexibility and efficiency of use Shortcuts — hidden from novice users — may speed up the interaction for the expert user such that the design can cater to both inexperienced and experienced users. Allow	Site does not allow for personalization, customization or accelerators. Due to kind of site, unnecessary.	0 – This is not a usability problem

users to tailor frequent actions. -Interface overall is highly UX friendly, but some webpages are overloaded with various prices, services, and information #8: Aesthetic and minimalist that are unrelated to each other, as if over advertising. design Makes it hard for user to focus on their intended goal. Interfaces should not contain information that is irrelevant or rarely needed. Every extra unit of information in an interface competes with the 2 - minor relevant units of information usability and diminishes their relative problem visibility. #9: Help users recognize, -Error code clearly stated that an invalid Zip Code was diagnose, and recover from entered, and the user is notified in red to immediately gain their attention. errors Error messages should be HomeAdvisor expressed in plain language (no error codes), precisely indicate the problem, and Compare quotes from top-rated Gutter 0 -This is Repair Services. constructively suggest a not a solution. usability ZIP code 95874 Δ problem nvalid ZIP code

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A.2 Usability Testing

Pre Test Questionnaire
Do you have previous experience using the
website HomeAdvisor by Angie?
How often do you use technology?
What are the typical devices that you use?
Have you used technology to share your
services? [Contractor/Tradesman]
Have you used technology to find services?

Task Observation	
Task 1: Please navigate a roof repair	
Task 2: Please attempt to register yourself as a handyman who provides "Lawn Care" services.	
Task 3: Please attempt to undo your last action.	
Task 4: Please attempt to schedule a free estimate	
Task 5: Please attempt to subscribe to mailing list	
Task 6: Please attempt to contact Home In Stone	

Please rate the following from 1-5:

	1 – Strongly Disagree	2 – Disagree	3 – Neutral	4 – Agree	5 – Strongly Agree
		It was eas	y to find the ir	nformation I	needed
W	'henever I made a mista	ıke using the sy	stem, I was a	ble to recove	er easily
		l was	able to comp	lete my task	quickly
		lj	felt comfortal	ble using the	system
	The inform	ation is present	ted in a clear o	and concise	manner
		l w	as able to nav	vigate the sit	e easily
			I found	the site hard	d to use
	l wou	ld recommend	this site/prog	ram to other	people

*Reference Script [Interview]

- Interview Questions -

- 1. What part of the site did you like the most?
- 2. What part of the site did you like the least?
- 3. What was your experience like navigating the site?
- 4. What task did you find difficult to accomplish?
- 5. What task did you find easy to accomplish?
- 6. What did you like about the websites' interface?
- 7. What didn't you like about the websites' interface?
- 8. What do you think about the way the information was presented?
- 9. Were you able to complete your task in a timely manner?
- 10. What information were you looking for that was not available or difficult to find?

- 11. Did you encounter any errors? If so, what were they?
- 12. How was the process in recovering from the errors?
- 13. If you could change any aspect of the site what would it be?
- 14. If applicable, what caused you frustration?
- 15. If applicable, what surprised you?
- 16. How would you describe your overall experience using the site?
- 17. Would you recommend this site to other people? Why or Why not?

*Reference Script [Closing]

Testing Script

Setup: The interview will be conducted after the Usability Testing is complete to receive detailed feedback regarding the participants' experience using the site. Based on the participant's geographical location, options will be provided to complete the interview face to face at the client's home or via phone. Equipment used in this study will consist of a laptop/computer and data will be collected via notepad with pen or pencil.

Opening: Hello, my name is Britney Williams, and I thank you for taking the time to meet with me today, your feedback is very valuable. Today we will be reviewing the home improvement site Home Advisor, by Angie's List. My goal is to identify possible changes needed to improve the site's performance and gain an understanding of how satisfied participants are with the site. There are (3) sections associated with this study. In the first section, I will provide you with (4) tasks to complete and observe you as you navigate them. If at any point you would like to ask a question, feel free to do so, but I may not be able to provide an immediate answer as the observation part is to understand how you are able to use the site without assistance. I will do my best to answer your questions at the end of the observation period. The second part of this study consists of a survey explaining your immediate response to using the site. The third part of this study consists of an Interview with (17) questions to gain a deeper understanding of your experience, which may mirror questions you answered in your survey. Just to confirm, this session is estimated to last 1 hour 30 minutes, does that still work for you?

For the first part of this study, I am going to provide directions for tasks to complete on the site. I would like for you to observe the processes you're going through, in order to share with me later. Some of the processes will not lead to a full outcome as I will provide you with a stopping point. Do you have any questions for me before we get started?

Great! Let's begin.

Midpoint: Thank you for completing the requested tasks, it was a pleasure to observe your experience interacting with the website. We are now moving to Section (2) of this study which consists of your immediate emotion following your use of the site Home Advisory. Do you have any questions for me at this time?

Great! Let's begin.

Interview: Thank you for completing the first two parts of this study. For Section (3), I will be asking you 17 questions regarding your experience using the website Home Advisor, by Angie's List. Feel free to provide me with as many details as you would like. Do you have any questions before we begin?

Great, let's begin.

Closing: Those are all the questions I have for you. Thank you for your participation in this interview, you have successfully completed all (3) sections. Are there any final thoughts you would like to share? Are there any questions you may have for me?

Great. Again, I thank you for your time and participation. The information you have provided me with today is very helpful. Have a wonderful day!



Prototype Development & Usability Testing Report

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Executive Summary

This report details a usability study conducted by Britney Williams of the prototype Home In Stone. The prototype was created in efforts to implement adverse usability findings of the website Home Advisor. This report highlights the results and recommendations attained from testing the Version 1.0 prototype of Home In Stone and highlights the changes implemented in the final Version 2.0 prototype. Due to the nature of the prototype being developed for comparison to an existing site, both visual design and functionality were important considerations to effectively be able to compare Home In Stone to Home Advisor. This report will also expound on the planning, design, development and revision stages of the prototype for Home In Stone.

Usability Criteria

Intuitive Design: How effortlessly did users navigate the prototype's architecture and does it meet conventional UX design standards

Ease of learning: At what rate were users able to accomplish basic tasks

Error Frequency: How often did users encounter errors and how did they recover from them

Subjective Satisfaction: User's overall opinion regarding the prototype

Goals

Conduct research on Home Advisor

A Heuristics
Evaluation and
Usability Test was
done on Home
Advisor's site to
identify areas of
improvement to
implement into the
prototype

Design an effective prototype

Design a functional system complete with information architecture, wireframing, design aspects and content before development

Test and refine

Conduct an in-depth analysis of the prototype to find areas of improvement to be refined for Version 2.0 before finalization

Methodology

Discovery

Initial research was conducted on Home Advisor through gathering information by testing the site to confirm the scope, assess the features, and developing testing tools for a usability study. Upon completion of a usability study on Home Advisor's site, the data was analyzed and developed to create a framework for Home In Stone's prototype.

Planning and Design

In the planning phase of Home In Stone's prototype, a project timeline, scope, intended deliverables, success measurements, user personas, scenarios, storyboards, and user task lists were developed and refined. Upon completion of these coupled with the Usability Study results for Home Advisor, a structure regarding Home In Stone's prototype design was developed, also known as the Information Architecture. The information Architecture ensures that the user has a seamless experience when navigating through the various webpages of the site.

Information Architecture & Wireframe

The information architecture consisted of allowing for both homeowners and professionals alike to have the ability to sign up and/or login. Other pages of the site consist of About Us, Contact Us, Services, FAQ, etc. Upon completion of this, a wireframe of the site was developed. In order to follow trending UX design standards the main page is an extended page that provides various information such as login/signup functionality, testimonials, newsletter signup and FAQs, instead of those being individual webpages.

Web Design

The visual design of the site has consistent colors throughout which are blue, yellow, white and grey. The colors are strategically implemented in various areas, with yellow being the primary color of forms and call to actions and submission buttons as it is the most dynamic. This unity allows for the website to have a great deal of unity, contrast and balance. White space is also highly considered throughout the design to ensure that the design is consistent and engaging.

Content

The content that would go on the prototype were considered in its development as it greatly helped with the placement of other design essentials such as images. This information was especially important to use in order to determine what links were needed in order to direct to the next webpage.

Usability Testing & Prototype 1.0 Evaluation

For the Usability Testing portion of Home In Stone's prototype, like HomeAdvisor, users comprised of family and friends who met the criteria of either being a homeowner or construction professional/tradesman. There were five usability tests done, one test was completed remotely and the other four were in-person.

The participants of the study were asked to complete similar tasks as those asked in Home Advisor.

Tasks

Sign up/Login

Attempt to schedule a free estimate

Subscribe to the mailing list

Attempt to Contact Home In Stone

Undo last action

Register as a handyman who provides "Lawn Care" services

Search for services of your own and indicate the service as "Urgent"

Questions were asked to participants to gain an understanding of each person's unique perspective.

Post-Test Questions

What part of the site did you like the most and least?

What tasks were difficult/easy to accomplish?

What caused you frustration/what surprised you?

What do you think about the way the information was presented?

If you could change any aspect of the site, what would it be?

Would you recommend this site to someone else? Why or why not?

Results

The following are the results received from Usability Testing of Home In Stone's 1.0 prototype and the detailed implemented revisions found in prototype 2.0:

Design

1. Sign Up leads to Professional Homepage **Revision:** Created a signup and login pages for each respective user (added functionality)

2. Images on services page could be more reflective **Revision**: Updated images

3. Bad placement of widget on homepage header **Revision**: Redesigned header

Functionality

 Professional Sign-Up page asks if users are "Registered", which was unclear Revision: Changed to "Licensed?"
 Revision: Changed to "Password" since signup and login pages were created

Revision: Changed to "Password" since signup and login pages were created

2. No clear designation to user of knowing the difference of an "Urgent" and regular request

Revision: Added "Urgent" button to services request and an "Urgent" response to user

3. Users unable to subscribe to newsletter **Revision:** Created "Success" response after user signs up

4. No submit button available on homepage widget **Revision:** Added button and success response

Before & After Revisions

Recommendation **Before After** Revision: **Created a** signup and login WE'RE EXCITED YOU'RE BACK WE'RE EXCITED FOR YOU TO JOIN US page for each Let's get started with a little about you. respective user (completely new functionality due to LET'S BEGIN WITH THE BASICS EMAIL ARE YOU A HOME OWNER OR PROFESSIONAL? recommendations, PASSWORD not before and PROFESSIONAL after) ALREADY HAVE AN ACCOUNT? SIGN IN Revision: **Updated** images

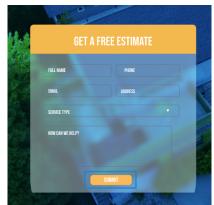
Revision: Redesigned header





Revision: Changed to "Licensed?" REGISTERED? YES NO LIST ALL SERVICES YOU OFFER Second Revision: LIST ALL SERVICES YOU OFFER LIST ALL CERTIFICATIONS AND LICENSING **Changed to** LIST ALL CERTIFICATIONS AND LICENSING "Password" since signup and login Tell us more about what you do... Tell us more about what you do... pages were created **Revision: Removed** EMAIL the option to select if the service was SERVICE SELECTED SERVICE SELECTED urgent and added SUB SERVICE SUB SERVICE an "Urgent" button to services request that provides an "Urgent" response to user Revision: Created - Function was not available -"Success" response HOME IN STONE after user signs up for newsletter **Revision: Added** "Submit" button and success response





Version 2.0

The results of the Usability Testing of Home In Stone's prototype Version 1.0 led to various changed in both the sites design and functionality. In terms of design, participants stated that the images on the service page could represent their links better, such as instead of having a picture of trees for "Tree Removal", to have a picture of a tree being cut down. In turn, the various pictures were changed leading to a more fluid interface design. Another area of design was the header on the homepage that was initially center placed, users stated that it was an odd placement and left too much blank space on either side with no additional content. The widget for the header was moved to left placement increasing visibility of content that is below it.

Regarding functionality, participants found an assortment of areas for improvement. Results of this were that the professional sign-up page was unclear asking the user if they are "Registered", no special response to an urgent request although the functionality was available, no separate login's for homeowners vs professionals and no response to user once they signed up for a newsletter or free estimate. As a result, a separate login page was created for homeowners and professionals which changed the professional signup page to require a password instead of a "Registered" request. The checkboxes of an "Urgent" request was changed to a button that leads to a response page for the user recognizing that their request is urgent and providing the timeframe in which they will be reached. Lastly, a submit button was created for the header widget and the submit button for the newsletter sign-up were changed to reflect a success message letting the user know that their request was complete.

Final Testing

Upon completion of the changes made from Version 1.0 to 2.0, the final prototype of Home In Stone Version 2.0 underwent another stage of testing. This testing was to measure the success of the prototype with implemented changes that were compared to the usability issues identified for Home Advisor. The results of this comparative analysis between the two sites as they relate to the User Task List can be found below.

Measurements of Success

	Surcificities of Suc	
User Task List	Home Advisor	Home In Stone
Homeowner wants to be able to sign up	Problem: When users enter their information requesting a service, the option to sign up is not provided.	Resolve: When users request a service, they are automatically taken to sign up page where they can detail their request
Homeowner wants to be able to search for services	Problem: Users expressed being distracted once they scrolled down on the homepage with the number of services provided. Problem: Users expressed not being able to find a certain task due to a multitude of irrelevant options provided under one service:	Resolve: Homepage has important information, and all services are on one dedicated page. Users can detail their request and choose a subservice directly on the request form based on the main service chosen, no need to provide dropdown on main page listing too many services.
Homeowner wants to schedule a free estimate	Functionality supported	Functionality supported
Homeowner wants to submit an Urgent request	Problem: When signing up for a service users are unable to state the urgency of their request	Resolve: Users can submit form with "Urgent" button and receive an "Urgent" response message.
Professional company wants to be able to sign up, detail their services when signing up, list their certifications	Problem: When signing up as a professional, users were only able to input basic information (i.e. name, phone, email) and received response that they will be contacted for more info with no response time provided	Resolve: When signing up as a professional, users can input their identifier information and detail their skills, licensing and certifications when signing up. User receives response time of when they will be contacted.
User wants to access Frequently Asked Questions	Function Supported Problem: Hidden in footer	Resolve: FAQ's Easily accessible on homepage
User needs to be able to subscribe to mailing list	Function Supported	Function Supported
User wants to contact Home In Stone	Function Supported	Resolve: Option provided to send an email, mark email as urgent and receive

	Problem: Only option provided is to call	response timeframe. In addition to this, phone number is available for calls.
User wants to know a response time	Problem: When signing up as a professional or requesting a service, users were told they would be contacted but no timeframe provided:	Resolve: When signing up as a professional or a homeowner requesting a service, a response time is given to user to let them know when they would be contacted.

Conclusion

Home In Stone passed all measurements of success in a comparative analysis of Home Advisor. Various usability aspects of Home Advisor that were identified as areas of improvement through heuristic evaluation and usability testing were used to create a task list, then a function list that served as the basis for Home In Stone's overall design and function. Overall, the user centered design, development process, and iterative testing of Home In Stone's prototype proved to be successful in meeting the basic functionality of Home Advisor with added improvements. Version 2.0 of Home In Stone's prototype is completely UX friendly, functional, and succeeds in participants subjective satisfaction.