

Usability Study of an Interactive eBook for Members of the Honolulu Board of Realtors®

Courtney Hara
University of Hawaii at Manoa
ccnhara@hawaii.edu
[eBook](#)

Abstract: The Honolulu Board of Realtors® (HBR) is a non-profit organization which provides real estate agents in Hawaii access to local benefits under the Hawaii Association of Realtors® (HAR) and the National Association of Realtors® (NAR). This usability study evaluated the ease of use and design of an interactive eBook with curated information on benefits for members of HBR. The eBook is a curated resource for information spread across multiple websites and organizations. It provides members with current information on relevant benefits and resources. Taking into consideration the diversity of the target population, the visual design of the content was based upon grids and hierarchies. Videos, images, motion graphics and links were implemented in Adobe InDesign and published through Creative Cloud in order to preserve them across multiple devices. Overall, participants found the eBook to be a clean, simple, and relevant resource. The following report details the research, design, implementation and results of this study.

Statement of the Problem

The purpose of this usability study was to evaluate the ease of use and design of an interactive eBook with curated information on benefits for members of the Honolulu Board of Realtors®. The overarching goals of the study included (1) providing a single point of access to information spread across multiple websites, (2) informing members of relevant and useful resources, and (3) organizing that content in a way that makes sense and is easy to navigate.

A real estate agent is defined by the Merriam Webster Dictionary as “a licensed professional who works on behalf of the buyer and seller of real estate during a sales transaction.” For many people, buying a home is the largest monetary transaction of their lives. There are over 10,000 real estate agents in the state of Hawaii. A member of the Honolulu Board of Realtors® (HBR) is one of over 6,000 agents who have also pledged to abide by a strict Code of Ethics created by the National Association of Realtors® (NAR). “The Honolulu Board of Realtors® exists for the ethical and professional success of its members at the most efficient production given available resources” (hicentral.com). With the success of its members as the primary focus, HBR provides a number of resources to aid Realtors® in this demanding profession.

Once a month, a New Member Orientation is held to introduce HBR and review NAR’s Code of Ethics. In 2017, more new members were applying each month than one

orientation could include. To accommodate the large number of incoming agents, the Board decided to add extra dates. Every odd numbered month now has two New Member Orientations. The initial idea for this project stemmed from these orientations where less than an hour is devoted to sharing the many benefits the Board has to offer its members. The eBook is supplemental to New Member Orientation as well as a resource for more seasoned members.

On average, each HBR New Member Orientation includes 45 new members. Each attendee is given a physical binder which I print and collate as the Professional Development Administrative Assistant. This binder supplements the orientation and includes information that cannot be addressed in class. It takes over 10 hours to create 50 or more binders for orientation in case of walk-ins. This physical binder quickly gets outdated because of the nature of its content. Some long-time members have commented that they still have their binders even though it is essentially useless. The binder no longer serves its purpose as a resource for the member.

Realtors® are busy professionals who, in our world of instant communication, are rarely “out of the office.” Information on the resources provided to them as members of HBR as well as the State and National Association of Realtors® is spread across multiple websites and documents, so specific information is difficult to locate. Many times, new members in particular feel overwhelmed with the amount of information they need to process and organize upon entering the real estate profession. The eBook also serves as a single point of access to information that members in any stage of their career can utilize in their day-to-day business.

Literature Review

In 2015, NAR commissioned a third-party group to identify and evaluate threats that could impact real estate agents. The results of the study were published as the D.A.N.G.E.R. Report: The Definitive Analysis of Negative Game Changers Emerging in Real Estate. Real estate as a profession has a long history and association leaders have been slow to embrace technology advancements. “. . . the Digital Revolution brought about the information age at a startling pace that has left many businesses antiquated and struggling. Association leaders in this environment battle to continuously remain current and relevant” (Swanepoel, 2015).

Although many boards across the country utilize digital catalogues as well as their websites to inform members of benefits, they are all specific to their organization. For example, the California Association of Realtors®’ guide includes a subscription to the California Real Estate Magazine and their Latino and Women’s inclusion programs. The Chicago Association of Realtors® website provides links to the larger Illinois and NAR benefit catalogues which begins to approach the idea of providing an all-in-one resource. However, benefit programs available for members vary by state and county, and therefore any resources created cannot be duplicated for different boards and associations.

An eBook is defined by the Merriam Webster Dictionary as “a book composed in or converted to digital format for display on a computer screen or handheld device.” Interactive eBooks go beyond digital copies of physical books and include elements like videos, slideshows, quizzes and links. Most studies utilizing eBooks are geared toward analyzing its use with children. Its effectiveness lies in “utilizing the technology components carried around on a daily basis” (Allen, Withey, Lawton & Aquino, 2016). This provides a resource for just-in-time learning, allowing users to find what they need on-the-go. Among many other advantages of using interactive eBooks, Aras Bozkurt and Mujgan Bozkaya identify this as a “pro” for users/readers. They are able to carry a large amount of information stored in an eBook on a portable device.

To be most effective, some important design considerations were made and are expanded upon in the project design strategies section below. There is great diversity in age, experience and competency using electronic devices among Realtors®. “Information presented with clear and logically set out titles, subtitles, texts, illustrations and captions will not only be read more quickly and easily, but the information will also be better understood and retained in the memory” (Müller-Brockmann, 2012, p.13). A clear hierarchy of importance as well as an uncluttered layout created a design that is understandable to users of differing technical capabilities.

Interaction introduces some different considerations than those presented in two dimensional layout design. “In interaction design, the locus of design is *action*” (Nylén, Holmström & Lyytinen, 2014). The designer must think about the user’s experience through a digital device. Nylén, Holmström and Lyytinen suggest that more complex challenges arise because there are multiple aspects of design interacting all at once. In addition to layout and visual design, motion, audio and navigation also need to be accounted for. All of these considerations affect a participant’s experience with the eBook.

The usability portion of this study was largely based upon Steve Krug’s guide in *Rocket Surgery Made Easy*. HBR members and staff were asked to participate in reviewing a prototype of the eBook. An encompassing goal was “to identify major problems and make the thing better by fixing them” (Krug, 2010). In order to achieve this, the following “test plan” (Rubin & Chisnell, 2008) was created as a foundation. According to Jeff Rubin and Dana Chisnell (2008), the test plan addresses the how, when, where, who, why, and what of the usability test and is an important part of design.

Methodology

Research Questions/Goals. For this usability study, the research questions addressed were the following:

1. How easy or difficult was it for members to find information about specific benefits?
2. Was the content organized in a way that members could easily navigate?
3. Was the information provided relevant to their daily business as a Realtor® or with the Board?

The ease or difficulty participants had provided evidence of how well the content was organized as well as the effectiveness of the visual design on the eBook. Ultimately, the goal was to equip members with information and tools which enable them to provide better service to their clients.

During the study, participants were asked to complete a series of 4 tasks. The tasks were designed to move the participant throughout the entire eBook and started with addressing benefits related to new members. Participants then progressed through items that they may encounter throughout their career.

Content Analysis. This study had a large and diverse target audience which is discussed further in the next section. Based on this target, the content needed to be well organized utilizing a table of contents and links not only to outside resources, but links within the eBook itself for quick and easy navigation. To meet the overarching goals of the study this resource also provided points of contact where members could speak directly to an expert for more information. At the same time, this served as a way to make the eBook feel more personal despite the size of its audience. “Personalization can be as simple as listing your phone number or office location” (Schwaar, 2018).

Originally, the content for this resource was based upon all of the topics that are introduced in New Member Orientation. *Figure 1* shows many different aspects of the Board but does not take into account what members need. Much like the end of orientation, members could come away overwhelmed with information overload. In order to focus more on the user and accommodate the time constraints of this study, the content was pared down to the topics in *Figure 2*. The revised content map was based on topics that members consistently call the HBR office about.

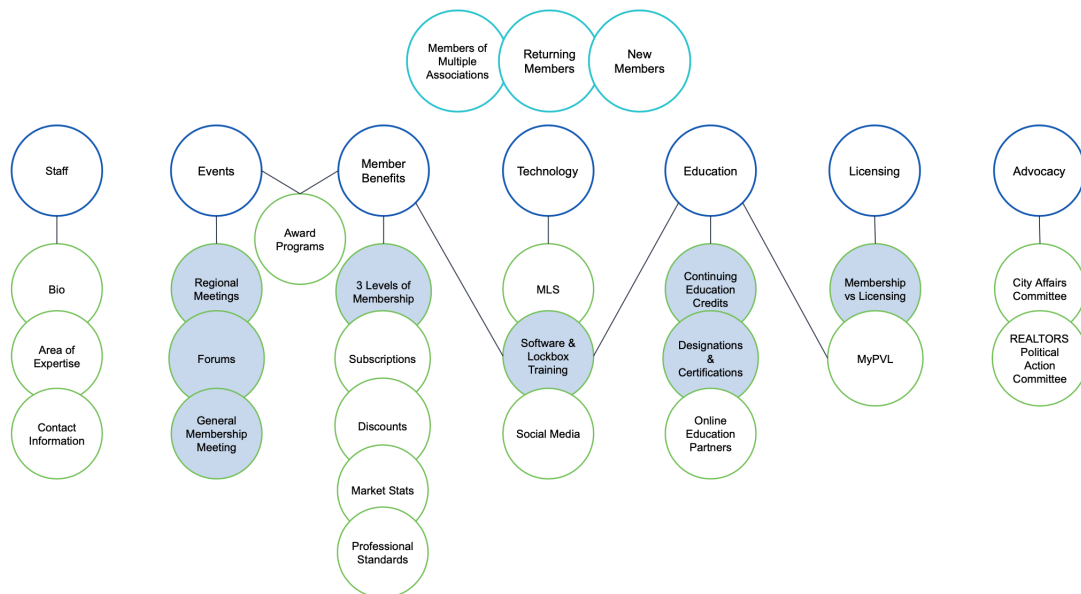


Figure 1. Original Content Map.

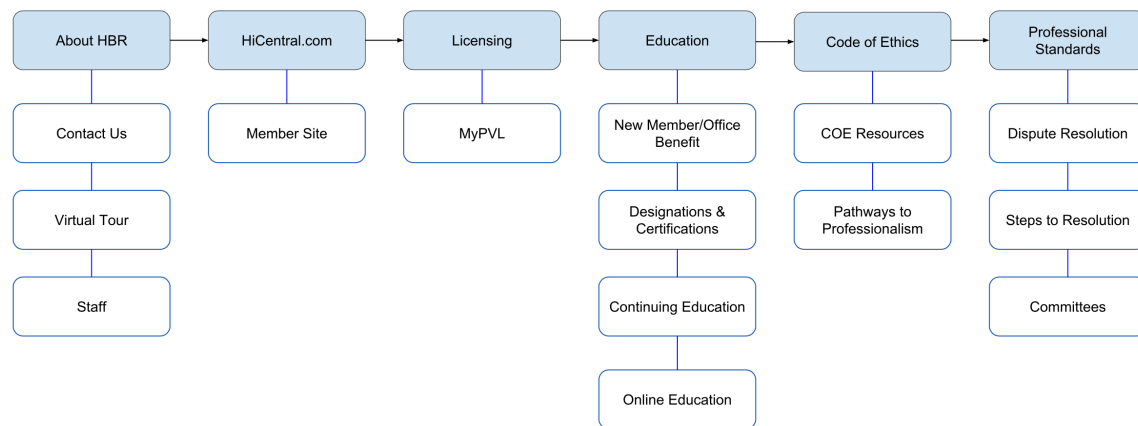


Figure 2. Revised Content Map.

Recruitment and Participants. The target population of this study are members of the Honolulu Board of Realtors®. The average Realtor® member is a 54-year-old female (NAR, 2018), but ages range from 18 to 65 years and older. Real estate is not the first career choice for many members, and their backgrounds can include education, finance or information technology. This creates a wide range of technical abilities and understanding. The diversity of this population can also be seen in the time they allocate to their real estate business. Some people acquire a license just to manage their own properties or sell a family member's home while others designate real estate as their sole career.

As the monitor for classes hosted by HBR, I have made connections with many members in all stages of their careers. Members who were asked to participate included those who were in their first 3 years, students completing the Graduate, Realtor® Institute (GRI) designation, and HBR instructors. HBR instructors are practitioners who are of the Broker level. HBR staff members were also asked to contribute their thoughts as experts because the eBook could help to minimize daily calls for minute issues. Members will be more knowledgeable about their membership, it's benefits, and the staff at the Board.

Prior to contacting potential participants, I completed CITI training on research involving human participants (Appendix A) and also received permission from HBR to recruit members and staff (Appendix B). Potential participants including experts, HBR instructors, and members were contacted through email (Appendix C). Those who agreed to participate in the study were then emailed consent forms (Appendix D) and the pre-study survey (Appendix E) to complete beforehand. They were informed of procedures, intent of the study and that they may withdraw at any time without penalty. Participants were also assured that although the researcher works for HBR, no identifiable information will be shared with the company. Participation was voluntary and would not affect their membership in any way if they declined participation or departed from the study at any time.

Three iterations with three to four participants each were scheduled with time in-between for evaluation and revisions. I planned to have experts from HBR staff participate in the

first iteration of the eBook. Due to a modification to my IRB, contacting staff was delayed and they participated in the second and third iterations. These experts included customer service staff who interact with and receive calls from all members daily. They see first-hand the issues and questions that members have. Experts also included the Multiple Listing Service (MLS) tech coaches. These staff members are trained and experienced in evaluating and troubleshoot websites, apps and programs that members utilize.

In total, 11 participants were scheduled to complete one-on-one usability sessions. Four were HBR staff and seven were members. The diversity of members' time dedicated to real estate business is not seen in this small sample. All participants marked that they spend full-time conducting real estate business. This may be because full-time practitioners are more inclined to engage with HBR. Although recruiting members who have been members of HBR for varying amounts of years was the priority, the participants also fell into different age ranges. *Figure 3* shows that there were no participants under the age of 25 years of age or who have been members for over 40 years.

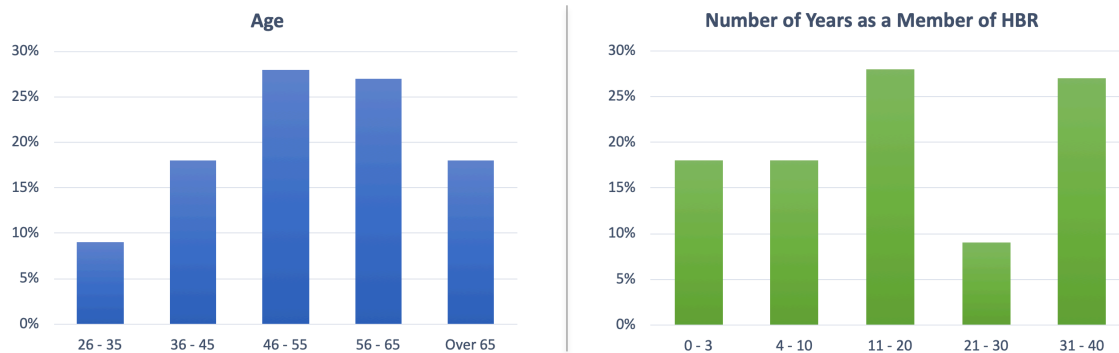


Figure 3. Demographics.

Evaluation Instruments. Prior to the one-on-one sessions, participants were emailed a link to a demographic survey created on Google Forms (Appendix E). The survey gathered data on basic information like age, length of membership at HBR, and if they have utilized some of the benefits that membership offers. Participants were also asked to complete a post study survey through Google Forms to help evaluate their experience using the eBook (Appendix F). The questions included in the post survey were related to the three research questions addressed in this study.

A script and protocol, modified from Steve Krug, were used to conduct the usability study sessions (Appendix G). The sessions, both in person and online, were recorded through Zoom. Only the participants audio and computer screen were recorded using this tool. The recording supplemented my observations and were not viewed or released to anyone. All identifiable data has been removed for presentation of the study's results. Nielsen's Severity Rating for Usability Problems, detailed in Table 1, was used to evaluate the priority of revisions between iterations and at the end of the study.

Table 1

Nielsen's Severity Rating for Usability Problems (Nielsen, 1995)

Rating	Description
0	Not a usability problem
1	Cosmetic problem only: fix only if time is available
2	Minor usability problem: fix should be given low priority
3	Major usability problem: important to fix, should be given high priority
4	Usability catastrophe: imperative to fix before product can be released

Project Design Strategies. The prototype for this eBook was created exclusively in Adobe InDesign. Although InDesign was introduced as a print layout product, it now has interactive capabilities for digital and PDF files. I am already familiar with the Adobe Creative Suite and have worked extensively with InDesign. The challenge came with learning all of the capabilities of the Digital Publishing workspace. Initially, the eBook was planned to be a classic eBook PDF, but with Adobe Creative Cloud's Publish Online feature there were many more options for interactivity.

Through Publish Online, motion graphics, slideshows, buttons and more were available to incorporate into the presentation of the content. It also eliminated complications introduced to an eBook usability study of program readers and fixed versus responsive layouts. A published file through InDesign was hosted by Adobe and was viewed online (*Figure 4*) through any web browser. This enabled a fixed layout to be viewed exactly as it was designed on any device. The Adobe Online reader had some built-in navigation options that was also somewhat customizable for the publisher.

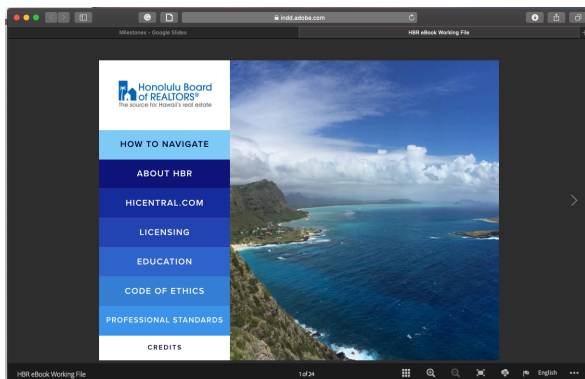


Figure 4. Adobe Publish Online Viewer.

The question of how the eBook would be distributed was also influenced by Adobe Creative Cloud's capabilities. InDesign is able to save files into different digital publishing formats, as a PDF for download or as an online published file. The online file can be embedded into a website, downloaded as a PDF or shared with a single link. HBR

has subscriptions to Creative Cloud allowing multiple staff members access to its programs. This means that the publication can also be managed easily by logging into the Adobe account. If anything on the eBook file was changed or updated, a simple save also updated the published version without changing its link. All a member needed to do to view these changes was to refresh the page in their browser.

In consideration of the target audience, a grid system (*Figure 5*) was put in place to create consistency within the eBook layout. The grid was applied to all pages and main navigation icons and titles were always located in the same position. The pages also took on the look of slides rather than split book pages because of the way it was presented through Creative Cloud. Landscape slides fit better into most screens and made sense with the built-in navigation options. Although there was a lot of content included in the eBook, body text and large paragraphs were kept to a minimum. For quick reference on-the-go, some infographics were incorporated to help illustrate information.

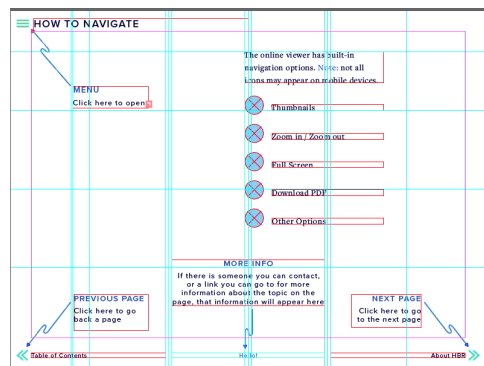


Figure 5. Grid System.

There are no absolute standards for critiquing the design of eBooks in usability studies. However, there are many similarities between different proposed systems of evaluation. Shiratuddin, Hassan and Landoni (2003) focus on the usability study itself and propose four usability qualities: effectiveness, efficiency, learnability and user satisfaction. Wang and Huang (2015) focus more on visual design and propose four usability principles: visibility, ease, efficiency and enjoyment.

Effectiveness is defined as “the accuracy and completeness of users’ tasks” (Shiratuddin, Hassan and Landoni (2003). Wang’s first principle, Visibility is based on the presentation and readability of the design. Shiratuddin and Wang relate efficiency to how successfully an interface assists a user in completing tasks. Both also describe learnability and ease with how quickly the user is able to understand the system created. This can refer to navigation and available interactive options. In the same way, a users’ perception or how they feel about the design is called user satisfaction and enjoyment. However, in Shiratuddin’s view through the usability study, this standard is about how useful and easy to use the product is. From a visual design point of view, Wang looks at the users’ interest in the interactive elements, content and aesthetics.

In this eBook, a minimalistic approach to the design was taken to keep navigation and interactive items visible and aid in successful completion of tasks. Efficiency was

addressed by having a full menu available on every page of the eBook along with options to navigate by page. Familiar icons were used to designate actions like left and right arrows to go to previous or next pages, and the “hamburger menu icon” (three horizontal lines). This was done to facilitate learnability, ease, and user satisfaction. Lastly, relevant content was gathered from many different HBR resources and multiple visual representations and modes of interactivity were included.

Procedures. Appendix H details a full timeline for the project. The usability study consisted of one-on-one sessions conducted at the Honolulu Board of Realtors office in a closed conference room, at the members’ office, and online through Zoom. During the month of February 2019, sessions were conducted on weekdays, and weekends were utilized to complete revisions before the next iteration. Both in person and online sessions had audio and screens recorded through Zoom. All sessions utilized the usability protocol (Appendix G) which asked participants to complete 4 tasks. The tasks were designed to take the participant to different parts of the eBook with scenarios they may encounter throughout their career.

At the end of the session, participants were given a link to the post-study survey and were asked to complete it before leaving. In addition to the surveys and Zoom recordings, I collected data through observations during in-person sessions and while reviewing recordings. Appendix I shows an observation protocol, based on those used in action research implementation, which was also used while reviewing recordings of usability sessions.

This study involved identifiable information that was only available to myself as the researcher. All information was compiled and de-identified for the presentation of the findings of this study. Information gathered from the surveys on Google Forms were kept with a secure Google Login. Data, recordings, and observations from the study were taken and saved on a personal, password protected laptop. HBR laptops were not used in order to assure participants that identifiable data was solely for the researcher. Data was only retained for the duration of the study and was erased upon its completion.

Results

In total, 11 participants were scheduled to complete one-on-one usability sessions. Four were HBR staff and seven were members. Although recruiting members who have been members of HBR for varying amounts of years was the priority, the participants also fell into different age ranges. There were no participants under the age of 25 years of age or who have been members for over 40 years.

There was a disparity found between the quantitative data collected from the post-study survey and qualitative data collected during usability sessions. In the survey, participants rated the organization of the content and visual design highly showing that both did not interfere with navigation (Appendix J). However, participants comments and actions during sessions demonstrated the opposite at times. One participant took two minutes to find the correct page to complete a task and then commented that “it was a quick find.”

Their ratings in the survey may be due to the fact that many were familiar with the content and all have a relationship with the researcher. These differences led to qualitative data taking the forefront in prompting revisions between iterations.

Qualitative data was collected through open ended survey questions, participant comments, and observations during usability sessions. All responses and observations were separated into positive, negative, and neutral statements within three categories: navigation, interactivity, and content (Appendix K). Negative and neutral statements were then summarized and given a rating based on Nielsen's Severity Rating for Usability Problems. Table 2 shows the revisions made after iterations one and two and the planned revisions after iteration three.

Table 2

Revisions by Iteration

Iteration	Revisions	Severity Rating
1	Moved page navigation icons	3
	Redesigned/added animations to the navigation page	3
	Redesigned/added registration button to benefits page	3
	Made the table of contents the same as the menu	2
2	Added course descriptions to benefits page and took out link to PDF flyer in Google Drive	4
	Underlined all linked items (on relevant pages for study)	3
	Small redesign on education page with mini table of contents	3
3	Redesign navigation page	4
	Make menu more visible on every page	3
	Give all possible contacts or topics internal links	3
	Create table of contents for each major topic page	3
	Add page numbers for staff reference	1

The first iteration involved four participants who were observed to be the most comfortable with technology. No usability catastrophes (severity rating of 4) were found, but two pages of the eBook were completely redesigned in order to address major problems (severity rating of 3). When completing the task to find information about member benefit classes, participants expressed that they would want to register for the classes after finding the information. In order to meet this need, a link to the registration portal was added.

Page navigation icons were moved from their original location at the bottom of the page to the top in order to take into account the position of Adobe's built-in navigation options which came into view over the bottom of the eBook. Although this was not observed or commented on by any participants, I noticed that participants did not utilize the eBook

navigation because they could not see them. Moving the location of the navigation icons also prompted a redesign of the “How to Navigate” page shown in *Figure 6* below.

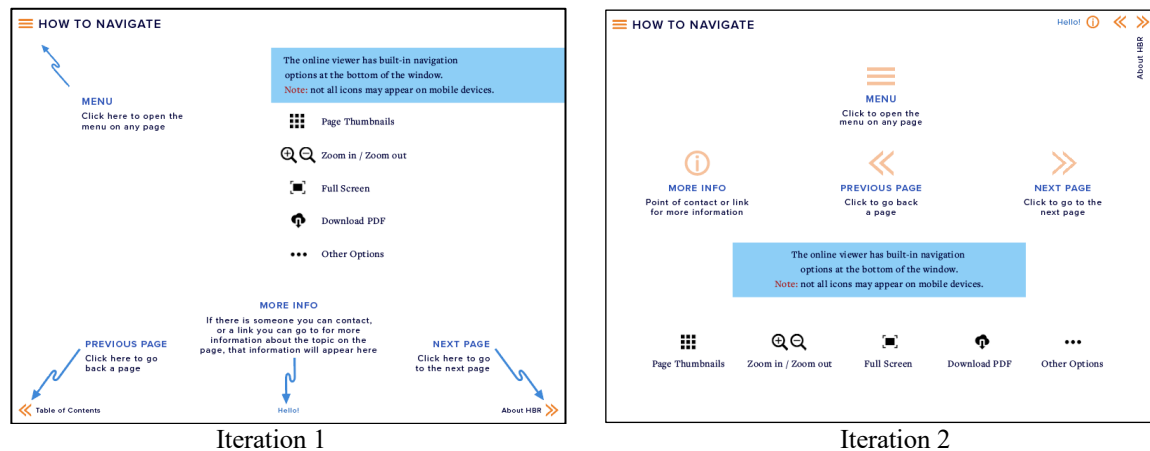


Figure 6. Navigation Page Redesign.

In the second iteration, even with the added registration button within the eBook, participants still wanted to register from the external PDF link but could not do so. Participants stated that they wanted to know more about a class before registering which is why they opened the PDF. Short course descriptions were then added to the eBook so that the external links could be removed. A comparison between the linked page in iteration 2 and the open course descriptions is shown in *Figure 7* below. When the title of a course was clicked on, the course description would appear and the “X” icon would close the description. Beyond the page options in the menu, participants in both the first and second iterations looked for a table of contents on the first page of the major topic sections. *Figure 8* below shows the small list of contents added to the “Education” page because a redesign of all sections could not be completed before the next round of sessions.

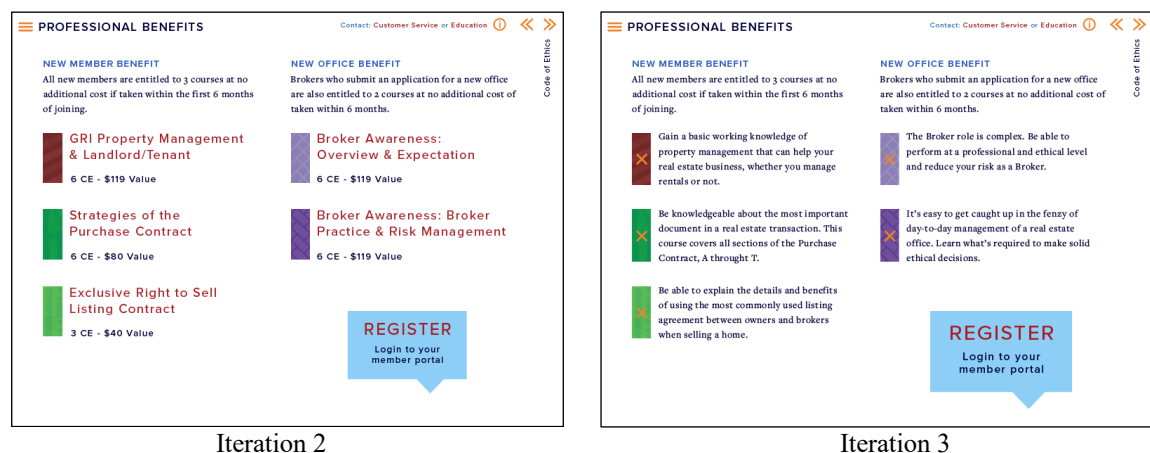


Figure 7. Professional Benefits redesign.

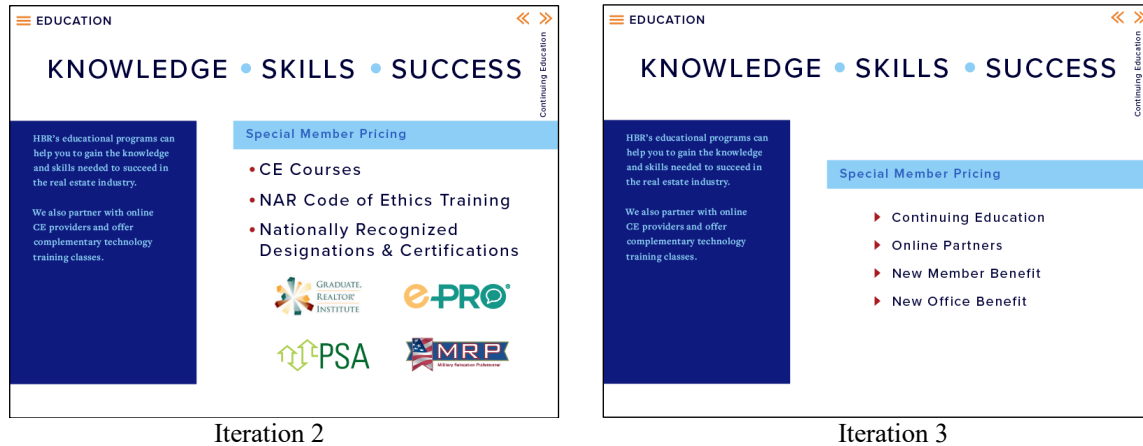


Figure 8. Education contents redesign.

The third iteration included participants who were observed to be the least comfortable with technology. This group encountered issues in navigation and content that did not occur in previous iterations. In order to accommodate the wide range of skills and comfort with technology within the target audience, changes will need to be made to make the navigation items more apparent. Appendix L shows screenshots of the full eBook as of the end of this study.

Three out of four of the participants in the third iteration tried to click on unlinked icons on the navigation page. In order to make sure that this confusion was avoided in the future the page was redesigned (*Figure 9*). The way the menu is displayed on each page was also changed to accommodate users who are less familiar with technology and the “hamburger menu icon” (*Figure 10*). Although all major topic sections could not be redesigned with a table of contents within the timeline of this study, I was able to create a sample using the “About HBR” section shown below in *Figure 11*.

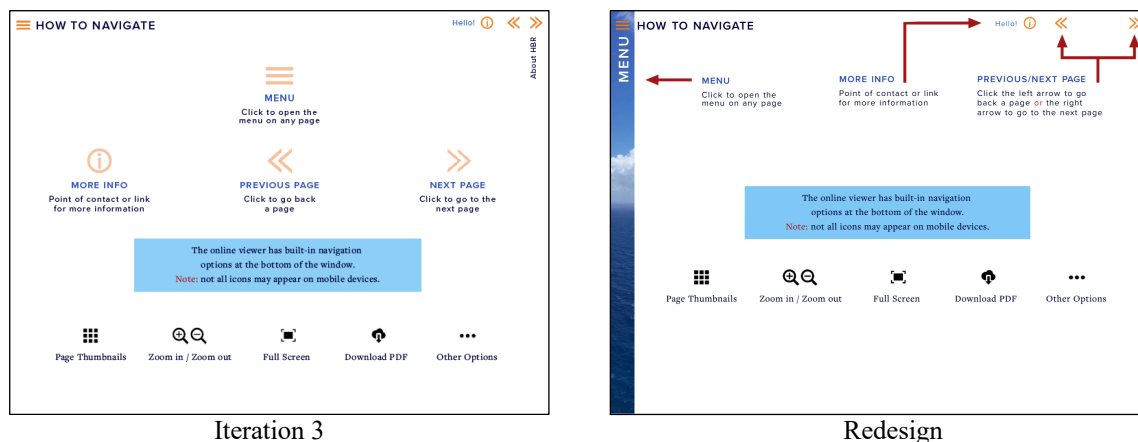


Figure 9. Navigation page redesign.

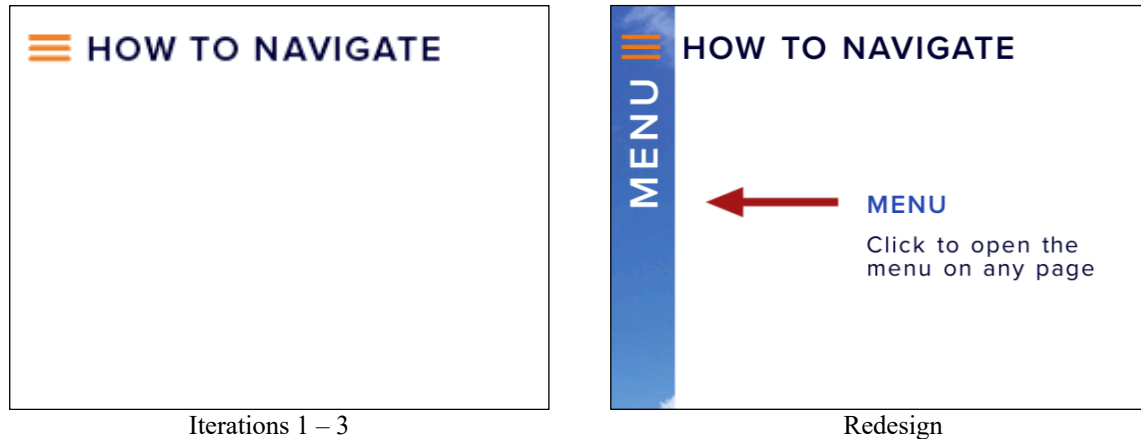


Figure 10. Menu redesign.

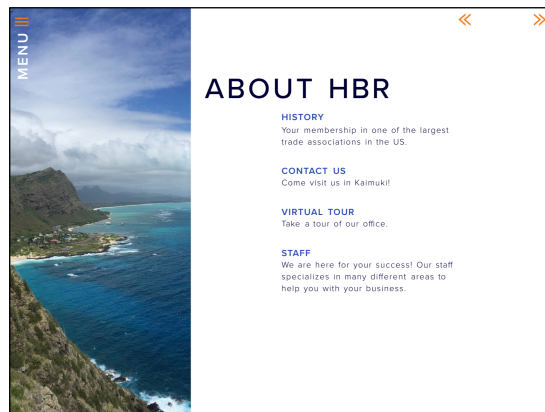


Figure 11. About HBR Section Contents.

Two of the three participants did not complete the last task and one participant did not complete three of the four tasks. The participant who did not complete most tasks expressed the most discomfort with using technology. The participants who were observed to be more comfortable with technology also used a combination of the different navigation options available to them. Those who were less comfortable almost solely clicked through pages without identifying the menu icon. Despite participants having some of these difficulties, they all had positive reactions to the eBook overall.

Discussion

In evaluating the ease of use and design of this interactive eBook, I learned about the connection between interactivity, visual design, and user experience. It would have been interesting to have been able to make changes after the last iteration and test it with a group of members who are comfortable with technology. I assume that designing for the lowest level user would cause little disruption to their experience. Although I tried to do this from the beginning, there were still some actions that took me by surprise and I needed to make changes.

In order to collect more useful quantitative data, any future studies need to create more specific survey questions. I was trying to be respectful of my participants time as they are all busy professionals. However, it would have helped to receive more data related to their use of technology, their thoughts on specific tasks and actions, and how all of this affected their experience. I would also suggest recruiting participants who do not have relationships with the designer or researcher. Although my participants were asked to give candid and honest opinions and reactions, they may have held back more critical thoughts because we work together.

Currently there is no guide or resource for members of HBR to consult on-the-go in their busy lives as real estate agents. The ultimate goal of this project was to better equip our members so that they can provide their clients with excellent service and knowledge about real estate transactions. During the implementation and design of this project, staff changes were made and unfortunately this file will not be released. However, this study provided valuable insight into members' needs and use of technology. This can be utilized in many other projects that HBR has planned for the future.

References

- Allen, P., Withey, P., Lawton, D., & Aquino, C. T. (2016). Andragogical teaching methods to enhance non-traditional student classroom engagement. *I-managers Journal of Educational Technology*, 13(2), 47-59. Retrieved October 17, 2018, from <https://files.eric.ed.gov/fulltext/EJ1131815.pdf>
- Bozkurt, Aras, & Mujgan Bozkaya. Evaluation criteria for interactive e-books for open and distance learning. *International review of research in open and distributed learning*, vol. 16, no. 5, Sept. 2015, pp. 58–82. ERIC, <https://files.eric.ed.gov/fulltext/EJ1077792.pdf>
- Krug, S. (2010). *Rocket science made easy: The do-it-yourself guide to finding and fixing usability problems*. Berkley, CA: New Riders.
- Müller-Brockmann, J. (2012). *Grid systems in graphic design: A visual communication manual for graphic designers, typographers and three dimensional designers (8th ed.)*. Germany: Druckerei Mosel GmbH.
- National Association of Realtors® (NAR). (2018, May 11). *Quick real estate statistics*. Retrieved October 21, 2018, from <https://www.nar.realtor/research-and-statistics/quick-real-estatestatistics>
- Nielsen, J. (1995, January 1). Severity ratings for usability problems. Retrieved December 2, 2018, from <https://www.nngroup.com/articles/how-to-rate-the-severity-of-usability-problems/>

- Nylén, D., Holmström, J., & Lyytinen, K. (2014). Oscillating between four orders of design: The case of digital magazines. *Design Issues*, 30 (3), 53-68. Retrieved December 2, 2018, from <http://www.diva-portal.org/smash/get/diva2:738307/FULLTEXT01.pdf>
- Rubin, J., & Chisnell, D. (2008). *Handbook of usability testing, second edition: How to plan, design, and conduct effective tests (2nd ed.)*. Indianapolis, Indiana: Wiley Publishing. Retrieved October 17, 2018, from <http://ccftp.scu.edu.cn:8090/Download/efa2417b-08ba-438a-b814-92db3dde0eb6.pdf>
- Schwaar, C. (2018, May 4). Put the personal back in your technology. *REALTOR AE Magazine*. Retrieved December 2, 2018, from <https://www.nar.realtor/realtor-ae-magazine/put-the-personal-back-in-your-technology>
- Shiratuddin, N., Hassan, S., & Landoni, M. (2003). A usability study for promoting content in higher education. *Educational Technology & Society*, 6 (4), 112-124. Retrieved December 2, 2018, from https://www.researchgate.net/profile/Monica_Landoni/publication/220374810_A_Usability_Study_for_Promoting_eContent_in_Higher_Education/links/09e4150d07bf07a951000000.pdf
- Swanepoel, S. (2015). *D.A.N.G.E.R. (Definitive analysis of negative game changers emerging in real estate) Report*. Washington, D.C.: Swanepoel, T3 Group.
- Wang, C., & Huang, C. (2015). A study of usability principles and interface design for mobile e-books. *Ergonomics*, 58 (8), 1253-1265. Retrieved December 2, 2018, from https://www.researchgate.net/profile/Chao_Ming_Wang/publication/272184570_A_Study_of_Usability_Principles_and_Interface_Design_for_Mobile_e-Books/links/54f5d34b0cf27d8ed71cc849.pdf

APPENDICES

Appendix A: CITI Training Certificates



Completion Date 24-Aug-2018
Expiration Date 23-Aug-2021
Record ID 28303716

This is to certify that:

Courtney Hara

Has completed the following CITI Program course:

Information Privacy Security (IPS) (Curriculum Group)
Exempt Researchers and Key Personnel IPS (Course Learner Group)
1 - Basic Course (Stage)

Under requirements set by:

University of Hawaii



Verify at www.citiprogram.org/verify/?w6d908509-24de-4ec7-b738-30867fa050b6-28303716



Completion Date 25-Aug-2018
Expiration Date 24-Aug-2021
Record ID 28303717

This is to certify that:

Courtney Hara

Has completed the following CITI Program course:

Human Subjects Research (HSR) (Curriculum Group)
Exempt Researchers and Key Personnel (Course Learner Group)
1 - Basic Course (Stage)

Under requirements set by:

University of Hawaii



Verify at www.citiprogram.org/verify/?w6f5b3cd1-9c59-46eb-8a38-58a157cd3d7c-28303717

Appendix B: Letters of Authorization



1136 12th Avenue, Suite 200 • Honolulu, HI 96816-3796 • TEL: 808.732.3000 • FAX: 808.732.8732 • www.hicentral.com

2018 Board of Directors

President
Darryl Macha, R
 ABR, AHWD, CRS, e-PRO, GRI, SFR, SRS

President-Elect
Jenny L. Brady, R
 CRB, CRS

Secretary
Kevin K. Inn, RA
 CRB, SFR

Immediate Past President
Sue Ann S.H. Lee, R
 AHWD, CRS, e-PRO

Directors

Sue Alden, R
 ABR, AHWD, e-PRO, GRI, MRP, SFR

Trevor W. Benn, R
 ABR, AHWD, e-PRO, GRI, SFR

Kehaulani Breault, R

Amanda N. Frazier, R

Lorraine M. Fukumae, R
 CRS, e-PRO, GRI

Patrick T. Graham, R
 ABR, CRS, SFR, SRS

Ashley Lee, RA
 SRS

Earl S. Mente, R
 GRI

Joyce R. Nakamura, R
 AHWD, CRB, CRS, e-PRO, GRI, SFR

Tricia Nekota, R
 ABR, BPOR, CRS, SRES

Mark A. Stewart, R
 GRI

Chad M. Takesue, R

Lael Wheeler, R
 CRB

Chief Executive Officer
Suzanne Young



REALTOR® is a registered collective membership mark that may be used only by real estate professionals who are members of the NATIONAL ASSOCIATION OF REALTORS® and subscribe to its strict Code of Ethics.

November 26, 2018

Courtney Hara
 Professional Development Administrative Assistant
 Honolulu Board of REALTORS®
 1136 12th Avenue, Suite 200
 Honolulu, HI 96816

Aloha Courtney,

Thank you for meeting with me last week to discuss your project regarding an HBR Interactive eBook. HBR is lucky to have you on board with us and helping to improve our Professional Development program for our members.

I understand that in pursuit of developing the eBook, you will be conducting a Usability Study which will require reaching out to some of our members. You have HBR's permission to make such contacts with our members and solicit their input.

Prior to reaching out to these members, all I ask is that you provide the list of member names and the questions to be asked to Daryl Nishizawa, Professional Development Administrator, and Nelson Higa, Director of Strategic Development/Government Affairs for our reference.

I am looking forward to reading the results of your study and what our members think of having an eBook.

If you need any assistance, please know that you have our full support and feel free to reach out to me, Daryl or Nelson for assistance.

Sincerely,

Suzanne Young, CEO

cc: Nelson Higa
 Daryl Nishizawa



1136 12th Avenue, Suite 200 • Honolulu, HI 96816-3796 • TEL: 808.732.3000 • FAX: 808.732.8732 • www.hicentral.com

2018 Board of Directors

President

Darryl Macha, R
ABR, AHWD, CRS, e-PRO, GRI, SFR, SRS

President-Elect

Jenny L. Brady, R
CRB, CRS

Secretary

Kevin K. Inn, RA
CRB, SFR

Immediate Past President

Sue Ann S.H. Lee, R
AHWD, CRS, e-PRO

Directors

Sue Alden, R
ABR, AHWD, e-PRO, GRI, MRP, SFR

Trevor W. Benn, R
ABR, AHWD, e-PRO, GRI, SFR

Kehaulani Breault, R

Amanda N. Frazier, R

Lorraine M. Fukumae, R
CRS, e-PRO, GRI

Patrick T. Graham, R
ABR, CRS, SFR, SRS

Ashley Lee, RA
SRS

Earl S. Mente, R
GRI

Joyce R. Nakamura, R
AHWD, CRB, CRS, e-PRO, GRI, SFR

Tricia Nekota, R
ABR, BPOR, CRS, SRES

Mark A. Stewart, R
GRI

Chad M. Takesue, R

Lael Wheeler, R
CRB

Chief Executive Officer
Suzanne Young



REALTOR® is a registered collective membership mark that may be used only by real estate professionals who are members of the NATIONAL ASSOCIATION OF REALTORS® and subscribe to its strict Code of Ethics.

January 14, 2019

Courtney Hara
Professional Development Administrative Assistant
Honolulu Board of REALTORS®
1136 12th Avenue, Suite 200
Honolulu, HI 96816

Aloha Courtney,

I hear that your project is coming along nicely and I'm looking forward to seeing the final product when it's ready.

This letter will confirm that you have HBR's permission to also reach out to HBR staff to solicit their input, in addition to the member input. Please be sure to coordinate the staff selected with your superiors, Daryl Nishizawa and Nelson Higa so that they can arrange with the various Staff's Directors too.

If you need any assistance, please feel free to reach out again.

Sincerely,

Suzanne Young, CEO

cc: Nelson Higa
Daryl Nishizawa

Appendix C: Recruitment Email

To: Email Recipients
From: courtney.hara@hicentral.com
CC: ccnhara@hawaii.edu
Subject: Call for Usability Study Participants

Aloha,

As a part of the degree requirements for a Master of Education in Learning Design and Technology at the University of Hawaii at Manoa I am conducting a usability study of an eBook resource for members of the Honolulu Board of Realtors®.

The purpose of this usability study is to evaluate the ease of use and design of an interactive eBook with curated information on benefits and resources.

Usability studies can take place online or in-person with participants using their own laptop/desktop computer and internet connection. The eBook opens in a web browser, so no special programs are necessary to participate. All information will be kept strictly confidential. A report of the study will be available to study volunteers.

If you are interested in participating, please click the link below to complete a short survey through Google Forms.

[Pre-Study Survey](#)

For more information, please contact me at ccnhara@hawaii.edu.

Mahalo,

Courtney Hara

Professional Development Administrative Assistant
Honolulu Board of REALTORS®

1136 12th Avenue, Suite 200, Honolulu, HI 96816

Direct: (808) 792-4949

www.HiCentral.com

Disclaimer: The information transmitted is intended only for the person(s) or entity to which it is addressed and may contain confidential and/or privileged material. If you are not the intended recipient of this message you are hereby notified that any use, review, retransmission, dissemination, distribution, reproduction or any action taken in reliance upon this message is prohibited. If you receive this in error, please contact the sender.

Appendix D: Participation Consent Form



University of Hawai'i
Consent to Participate in a Research Project

Courtney Hara, Principal Investigator

Usability Study of an Interactive eBook for Members of the Honolulu Board of Realtors®

Aloha! My name is Courtney Hara and you are invited to take part in a research study. I am a graduate student at the University of Hawai'i at Mānoa in the College of Education: Learning Design and Technology. As part of the requirements for earning my graduate degree, I am doing a usability study.

What am I being asked to do?

If you participate in this project, I will meet with you for an interview at a location and time convenient for you. You may also choose to meet me online through a screensharing applications called Zoom.

Taking part in this study is your choice.

Your participation in this project is completely voluntary. You may stop participating at any time. If you stop being in the study, there will be no penalty or loss to you. Your choice to participate or not participate will not affect your rights to services at the Honolulu Board of Realtors®.

Why is this study being done?

The purpose of this usability study is to evaluate the ease of use and design of an interactive eBook with curated information on benefits for members of the Honolulu Board of Realtors®.

What will happen if I decide to take part in this study?

Before the study I will send you a demographic survey through email and Google Forms. The usability study will consist of four tasks and I will ask you to think out loud as you complete them. At the end of the four tasks, I will ask you to complete a post-study survey. It will take 20-30 minutes.

Only you and I will be present during the study. With your permission, I will record the audio and device screen of the session so that I can analyze the responses later. You will be one of about 15 people I will ask to participate in this study.

What are the risks and benefits of taking part in this study?

I believe there is little risk to you for participating in this research project. If you do become stressed or uncomfortable, you can skip the question or task or take a break. You can also stop the interview or withdraw from the project altogether.

There will be no direct benefit to you for participating in this study. The results of this project may help improve the Honolulu Board of Realtors® Professional Development program to benefit current and future members.

Privacy and Confidentiality:

I will keep all study data secure on a password protected computer. Only my University of Hawai'i advisor and I will have access to the information. Other agencies that have legal permission have the right to review research records. The University of Hawai'i Human Studies Program has the right to review research records for this study.

When I report the results of my research project, I will not use your name. I will not use any other personal identifying information that can identify you. I will use pseudonyms (fake



University of Hawai'i
Consent to Participate in a Research Project

Courtney Hara, Principal Investigator

Usability Study of an Interactive eBook for Members of the Honolulu Board of Realtors®

names) and report my findings in a way that protects your privacy and confidentiality to the extent allowed by law.

Future Research Studies:

Even after removing identifiers, the data from this study will not be used or distributed for future research studies.

Questions:

If you have any questions about this study, please call 808-792-4949 or email me at ccnhara@hawaii.edu. You may also contact my advisor, Dr. Catherine Fulford, at 808-927-8009 or fulford@hawaii.edu. You may contact the UH Human Studies Program at 808.956.5007 or uhhrb@hawaii.edu to discuss problems, concerns and questions; obtain information; or offer input with an informed individual who is unaffiliated with the specific research protocol. Please visit <http://go.hawaii.edu/jRd> for more information on your rights as a research participant.

If you agree to participate in this project, please sign and date this signature page and return it to: ccnhara@hawaii.edu

Keep a copy of the informed consent for your records and reference.

Signature(s) for Consent:

I give permission to join the research project entitled, "*Usability Study of an Interactive eBook for Members of the Honolulu Board of Realtors®.*"

Please initial next to either "Yes" or "No" to the following:

<input type="checkbox"/> Yes	<input type="checkbox"/> No	I consent to be audio-recorded for the interview portion of this research.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	I consent to my screen being recorded for the interview portion of this research.

Name of Participant (Print): _____

Participant's Signature: _____

Signature of the Person Obtaining Consent: _____

Date: _____

Mahalo!

Appendix E: Google Forms Demographic Survey

Demographic Survey

* Required

Email address *

Your email

Name: *

Your answer

NEXT

Page 1 of 3

Never submit passwords through Google Forms.

Demographics

Age *

- ☐ 18 - 25 years
- ☐ 26 - 35 years
- ☐ 36 - 45 years
- ☐ 46 - 55 years
- ☐ 56 - 65 years
- ☐ Over 65 years

Gender *

- ☐ Male
- ☐ Female
- ☐ Prefer not to answer
- ☐ Other: _____

Number of years as a member of the Honolulu Board of Realtors® (HBR) *

- ☐ 0 - 3 years
- ☐ 4 - 10 years
- ☐ 11 - 20 years
- ☐ 21 - 30 years
- ☐ 31 - 40 years
- ☐ Over 40 years

Time spent conducting real estate business *

- ☐ Only to manage my own properties
- ☐ Part-time
- ☐ Full-time

Have you ever viewed an eBook before? *

- ☐ Yes
- ☐ No
- ☐ Not sure

[BACK](#)[NEXT](#) Page 2 of 3

Never submit passwords through Google Forms.

HBR Resources

How often do you contact any HBR staff to ask about CE credits or licensing related information? *

- ☐ Never
- ☐ Once or twice a year
- ☐ Three to five times a year
- ☐ More than five times a year

How often do you contact any HBR staff member to ask about membership benefits? *

- ☐ Never
- ☐ Once or twice a year
- ☐ Three to five times a year
- ☐ More than five times a year

How often do you contact any HBR staff member for tech support? *

- ☐ Never
- ☐ Once or twice a month
- ☐ Three to five times a month
- ☐ More than five times a month

How many HBR sponsored events have you attended in the past year (excluding CE classes)? *i.e. Regionals, Forums, YPN events, or GMMs *

- ☐ None
- ☐ 1 - 5
- ☐ 6 - 10
- ☐ 11 - 20
- ☐ More than 20

Have you ever contacted HBR to inquire about Professional Standards or dispute resolution? *

- ☐ Yes
- ☐ No

How would you rate your knowledge of the benefits the Board provides? *

	1	2	3	4	5	
Not knowledgeabl e	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Knowledgeabl e

BACK

SUBMIT

Page 3 of 3

Never submit passwords through Google Forms.

Appendix F: Google Forms Post-study Survey

Post-study Survey

* Required

Email address *

Your email

Name: *

Your answer

NEXT

Page 1 of 4

Never submit passwords through Google Forms.

Design

How would you rate the organization of the content? *

- ☐ Very Good
- ☐ Good
- ☐ Acceptable
- ☐ Poor
- ☐ Very Poor

How often did the visual design distract from the content? *

- ☐ Always
- ☐ Very Frequently
- ☐ Occasionally
- ☐ Rarely
- ☐ Never

This eBook met my needs as a real estate agent. *

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

[BACK](#)[NEXT](#)

Page 3 of 4

Never submit passwords through Google Forms.

Comments

What did you like the best about the eBook? *

Your answer

What did you like the least about the eBook? *

Your answer

Is there any other information you would like to see included in a resource like this? *

Your answer

Please include any further comments, questions or suggestions if applicable.

Your answer

[BACK](#)[SUBMIT](#)

Page 4 of 4

Never submit passwords through Google Forms.

Appendix G: Usability Protocol

Interactive eBook for Members of the Honolulu Board of Realtors®

Modified from Usability Script - Rocket Surgery Made Easy © 2010 Steve Krug

Technology Set-Up Checklist (Facilitator Computer)

Possibility of remote testing through Zoom

1. Set up facilitator computer and attach all cords/peripherals - make sure to use a wired mouse
2. Plug in to a power outlet
3. Make sure computer is connected to the internet
4. Prepare Zoom and do a brief test to ensure
 - a. Video of screen is captured
 - b. Video from webcam is captured
 - c. Audio is captured

After computer is set up:

1. Load eBook
2. Start Zoom recording

Facilitator Script

Hi, [insert participant's name]. My name is Courtney, and I'm going to be walking you through the session today. Before we begin, I have some information for you, and I'm going to read it to make sure that I cover everything.

You probably already have a good idea of why you're here, but let me go over it again briefly. I am a graduate student at the University of Hawaii at Manoa in the College of Education, Learning Design and Technology program. What I'm asking you to take a look at today is an interactive eBook that I've designed as a masters project in my LTEC 687 course. The session should take about 20 minutes.

The first thing I want to make clear right away is that I'm testing the *eBook*, not you, so don't worry about making mistakes. I'll be giving you some short scenarios or tasks to guide you through the study. As you complete the tasks, I'm going to ask you as much as possible to *think out loud*: say what you're looking at, what you're trying to do, and what you're thinking. Also, please don't worry that you're going to hurt my feelings. This is to improve the eBook, so please give your honest reactions.

You may have noticed that the screen and audio are being recorded. With your permission [on the form you were sent before participating in the study] I'm going to record what happens on the screen and our conversation. The recording will only be used to help me figure out how to improve the eBook, and it won't be seen by anyone except myself and possibly my instructor who is helping me work on this project.

If you have any questions as we go along feel free to ask; although I may not be able to answer them right away. I'm interested in how people do when they don't have someone who can help, but if you still have questions when we're done I'll try to answer them then.

Also, if you need to take a break at any point, just let me know. Do you have any questions so far?

Ask participant a few preliminary questions:

Ok. Before we look at the eBook, I'd like to ask you just a few quick questions about your experience with digital books.

1. Have you ever read a digital version of a book or publication?
2. If so, what program or software did you use to view it?
3. Also, what device did you view it on?
4. Have you ever experienced viewing an interactive eBook?

Ok great, now we can start testing out the eBook.

Today we will be viewing the eBook online through your internet browser.

Have participants do a narrative of the eBooks' overall appearance for one or two minutes, at most:

I'm going to ask you to look at the first few title pages of the eBook and tell me what you make of it: what strikes you about it, whose publication do you think it is, what you can do here, and what is it for. Just look around and do a little narrative. You can scroll around and click through the first few pages if you need to.

Ask participant to complete a few specific tasks (be sure to give the participant a handout of the scenarios):

Thanks for doing that. You did great. Now I'm going to ask you to try doing some specific tasks. I'm going to read each one out loud and give you a printed copy. Again, as much as possible, it will help if you can try to think out loud as you go along.

Allow the user to proceed from one ask to the next until you don't feel like it's producing any value or the user becomes frustrated. Repeat for each task or until time runs out.

Scenarios/Tasks

Scenario #1:

- You are a new member and are entitled to 3 specific classes at no additional cost. Where would you look for more information on this benefit?

Questions:

1. How did you arrive at this part of the eBook?
2. Explain what you are seeing on this page?
3. How did you complete the task?
4. What do you think you should do next?

Scenario #2:

- You just registered to take your first class at HBR and want to know where you can park. Where would you look to find this information?

Questions:

1. How did you arrive at this part of the eBook?
2. Was the information easy to find/navigate?
3. What do you think you should do next?

Scenario #4:

- It is a licensing year and you have a question about your CE credits and licensing. You are wondering how many CE credits you have and what classes you've taken for credit. Where would you go to find information about the DCCA and MyPVL?

Questions:

1. Explain what you are seeing on this page?
2. Was the information easy to find/navigate?
3. How did you complete the task?
4. What do you think you should do next?

Scenario #5:

- During a transaction, you encountered issues with another Realtor and would like find out more about how the Board might help you solve these issues. How would you find this information?

Questions:

1. How did you arrive at this part of the eBook?
2. How did you complete the task?
3. What do you think you should do next?

Thanks, that was very helpful.

We are done with the main questions, but I have a few more general questions to ask you.

1. On a scale of 1 to 5, with 1 representing very easy and 5 representing very difficult, how would you rate your experience during today's testing?
2. How is the flow of the eBook? Was it easy to navigate?
3. After participating in this study, would you recommend this eBook to other members? Why?

That's the last question, Do you have any questions for me, now that we're done?

Thank you for your time and willingness to participate in this study.

Stop the screen recording

After the Session:

1. Save recording to local computer
2. Quickly scrub through the video to ensure the integrity of the audio and video

Appendix H: Project Timeline

Date	Task
October	<ul style="list-style-type: none"> • Write detailed project plan
November	<ul style="list-style-type: none"> • Create data collection tools: surveys, scripts, templates • Design eBook
December	<ul style="list-style-type: none"> • Finalize project plan for approval • Submit to IRB for approval • Conduct peer reviews on eBook design
January	<ul style="list-style-type: none"> • Complete final revision to prototype by Week 2 • Upon IRB approval begin project implementation no later than the end of Week 3 • Contact all participants and collect necessary forms and consent
February	<ul style="list-style-type: none"> • Continue implementation and finish by the end of Week 7 • Analyze data collected
March	<ul style="list-style-type: none"> • Complete data analysis and interpret for final paper • Create presentation for TCC
April	<ul style="list-style-type: none"> • Finalize and complete TCC presentation
May	<ul style="list-style-type: none"> • Complete final paper and Scholarspace paper • Complete IRB Report

Appendix I: Observation Protocol

Behavior \ Participant	1	2	3	4	5 Staff	6 Staff	7	8	9	10 Staff	11 Staff
1				+	+						
2	+		+	+			+	+	+	+	
3											
4											
5											
6											
7											
8a											x
8b		-	-					-			-
8c											x
8d		*				*	*	*	x	x	x

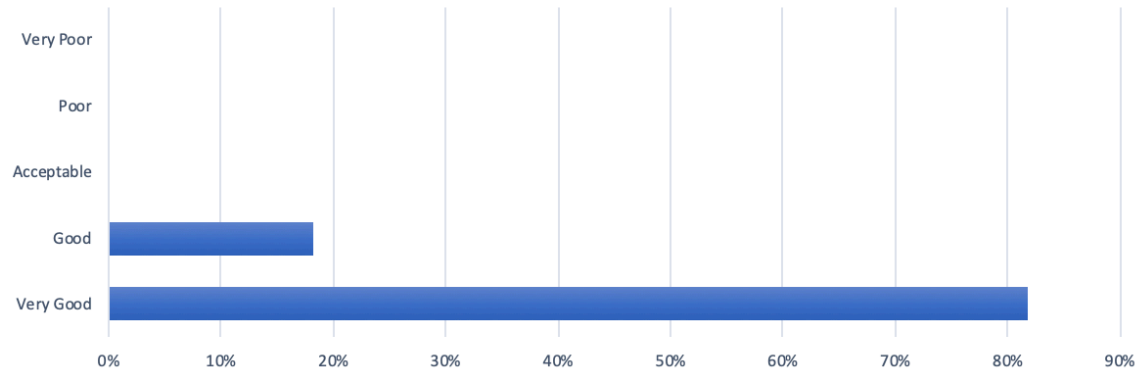
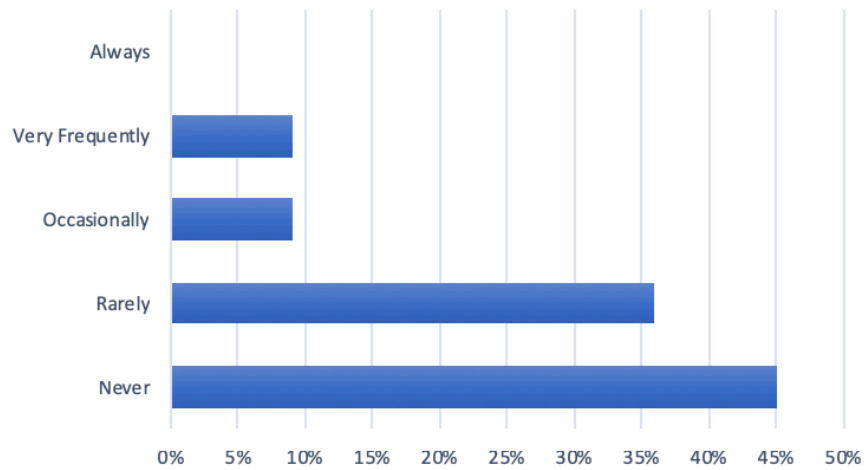
1. Used menu icon
2. Used ebook page navigation
3. Clicked i to open email (contact)
4. Clicked external link
5. Needed help
6. Tried to click on unlinked item
7. Had to contemplate what topic to choose on menu

8. Completed task
 - a. Found professional benefits page
 - b. Found parking + more info
 - c. Clicked link to MyPVL
 - d. Find steps to resolution/resolution options
contact Lynn

- Found page with task info, but didn't click

x Did not complete task

Appendix J: Post-study Survey Results

How would you rate the organization of the content?**How often did the visual design distract from the content?**

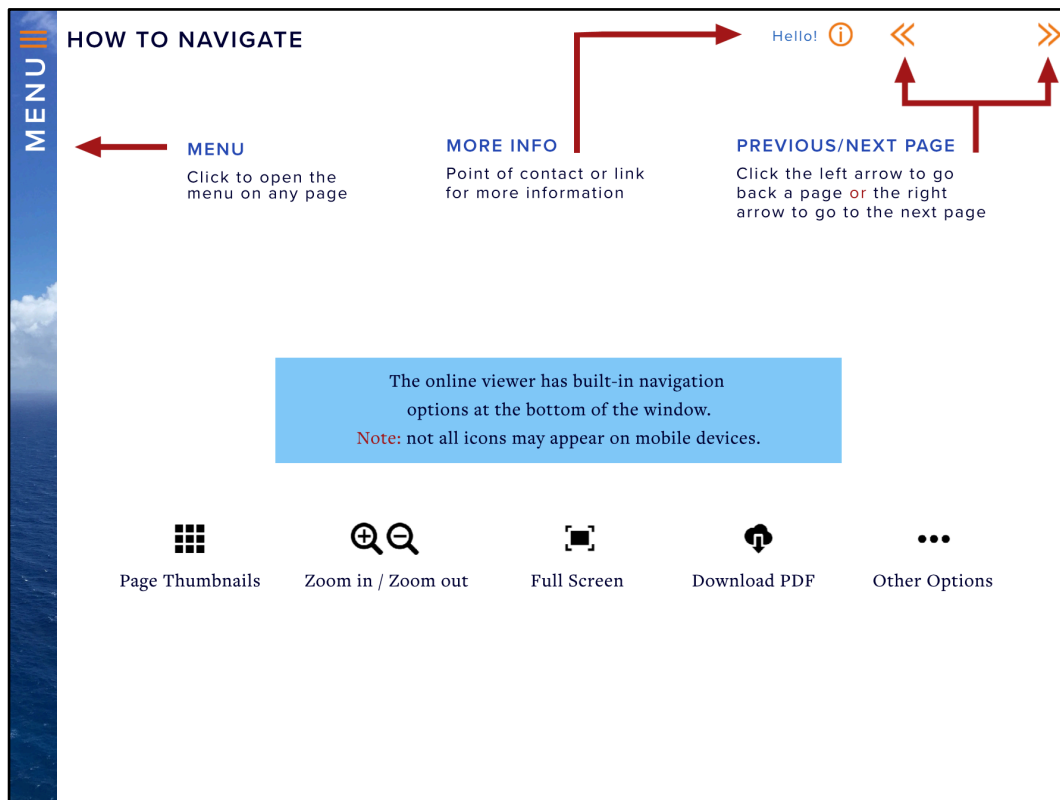
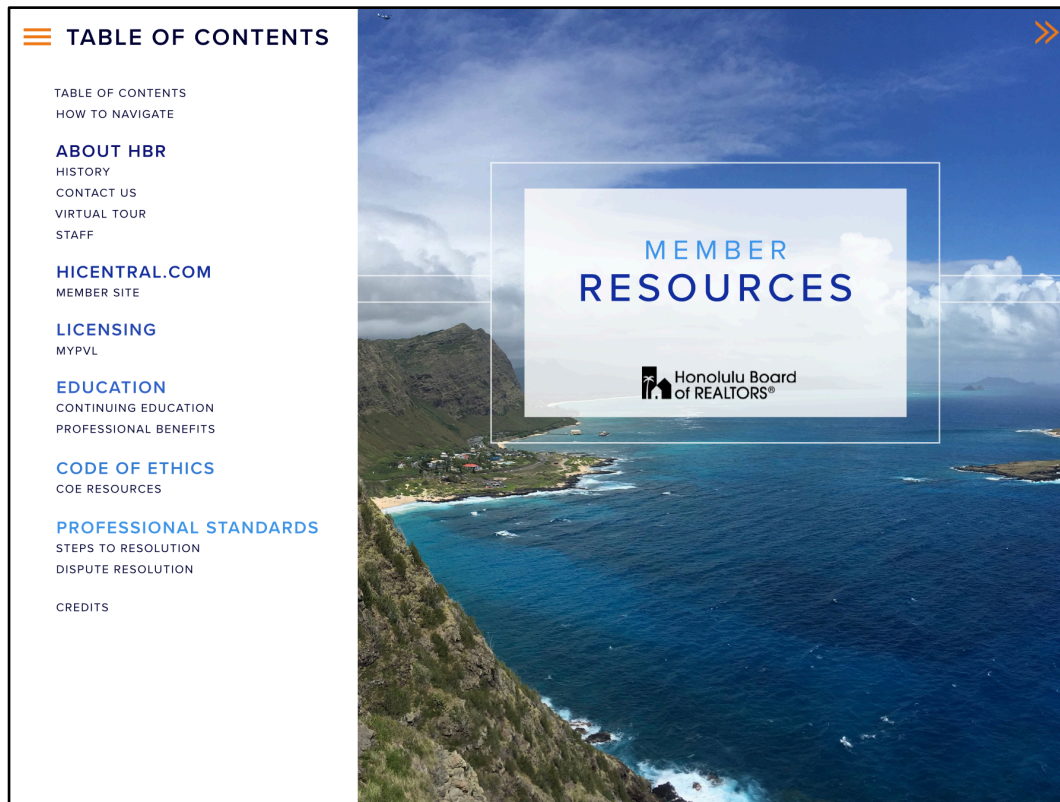
Appendix K: Categorized Observations and Comments

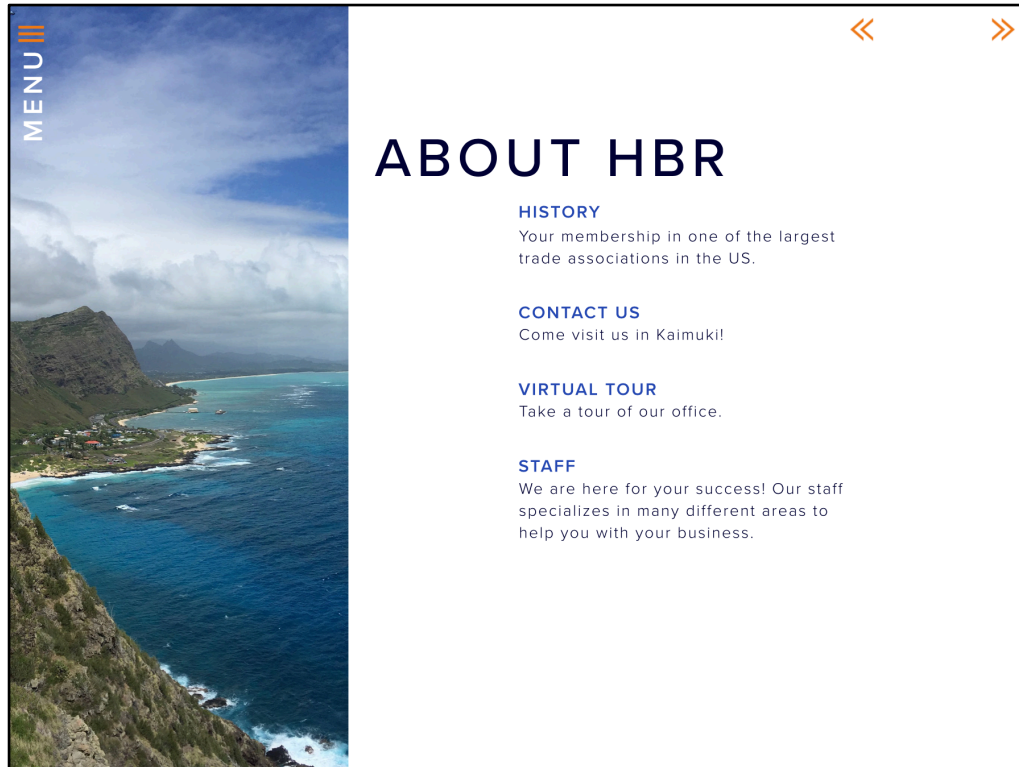
	Iteration 1	
Navigation	Intuitive and easy to navigate	Positive
	Navigates like a website	Positive
	Multiple ways to find information	Positive
	Easy to get back to the first page. Made me more comfortable to explore	Positive
	Ease of navigation in finding the answers to my questions	Positive
	Simple and easy to navigate	Positive
	Clear navigation instructions	Positive
	Easy to navigate	Positive
	Used Adobe back button to manually go back to 1st page	Negative
	Didn't see menu button even after seeing How to Navigate page	Negative
	Clicked on main topic then clicked through pages to find info	Neutral
	Clicked through pages to find info	Neutral
	Didn't use menu button	Neutral
Interactive	Found more info on parking (2/4 participants)	Positive
	Liked page animations	Positive
	Linked text looks like unlinked body text	Negative
	Tried to click on unlinked arrow bullet list	Negative
	Didn't see 'more info' links on bottom	Negative
	Wanted to register from PDF but couldn't (2/4 participants)	Negative
	Didn't click on anything on Member Benefit page	Negative
	Didn't click + for more info on parking (2/4 participants)	Negative
	Didn't see direct link to COE from COE page	Negative
Content	Good to know the number of HBR members	Positive
	Well organized	Positive
	Helpful for new members to have info all in one place	Positive
	Liked resources for COE	Positive
	Good font size	Positive
	Had to decide between COE and PSAC menu items (3/4 participants)	Negative
	Clicked to MyPVL from Licensing vs. Membership page	Neutral
	CE credits and licensing can be confusing for new agents, they don't know it's connected	Negative
	Maybe (add) links to HAR and NAR (not sure if this is already here and maybe I didn't see?)	Neutral
	State that license number and login is needed to access MyPVL	Neutral
	Maybe a page with helpful links or contact info	Neutral
	Put steps to resolution first in PSAC after COE	Neutral
Other	Liked that links opened in another tab	Positive
	Good font size	Positive
	Easy to read	Positive
	Clean and simple	Positive
	Worked smoothly without glitches between pages	Positive
	Had to page through the chapter to find some answers instead of going straight to a page	Negative
	Closed webpage with eBook while trying to go back to first page	Negative

	Iteration 2	
Navigation	Read submenu, but went to main heading and clicked through pages to find info	Positive
	Education section was confusing (had to search for things)	Negative
	Suggested additional submenu for smaller topic on each page	Neutral
	Suggested making parking it's own page	
	Suggested table of contents for each section	
Interactive	Clicked + for more info on parking (3/3 participants)	Positive
	Saw contact info on <i>Resolution Options</i> page	Positive
	Didn't realize steps to resolution arrows were clickable links	Negative
	Suggested showing phone number on hover	Neutral
Content	Liked having contact info for more info	Positive
	Still usefull for more seasoned agents	Positive
	Looked for member benfits under 'special member pricing'	Negative
	Didn't remember where parking was and didn't connect right away to Contact Us	Negative
	Thought parking info would be in Virtual Tour	Negative
	Suggested making 'register' link bolder	Neutral
	Suggested adding heading over card imgs in <i>Membership vs. Licensing</i>	Neutral
Other	Convenient online resource	Positive
	Easy to see and read	Positive
	Visually very easy to read	Positive
	Good colors	Positive
	Flow is easy, clickable and fun	Positive
	Never found menu button or went back to <i>Table of Contents</i>	Negative
	Suggested search option	Neutral

	Iteration 3	
Navigation	Movement on <i>How to Navigate</i> helps guide	Positive
	Easy to navigate	Positive
	Streamlined, better than HBR website	Positive
	Easier than HBR's website	Positive
	Smaller topics under PSAC helped make decision to select menu item	Positive
	Hesitant where to click on first page	Negative
	Had to guess and search for info instead of there being a menu	Negative
	Didn't remember menu icon and got lost in the pages	Negative
	Clicked through pages past licensing and clicked on menu icon only on last page	Negative
	Clicked back to <i>Table of Contents</i> to find menu	Negative
	Suggested menu that's always visible	Neutral
Interactive	Clicked + for more parking info (2/4 participants)	Positive
	Found 'more info' for PSAC contact info	Positive
	Didn't find more info for parking (2/4 participants)	Negative
	Tried to click faded icons on <i>How to Navigate</i> page after animation (3/4 participants)	Negative
	Tried to click on unlinked topics from <i>Staff</i> page (2/4 participants)	Negative
	Wanted to click on course or elective unlinked text in CE breakdown	Negative
	Suggested link to licensing from <i>Education</i> pages 'confirm credits click here'	Negative
Content	Likes that set up is very clear and easy to read	Positive
	Likes having info in one place with brief summaries	Positive
	Had to decide between HBR or EDU for parking because of task wording	Negative
	Knew where to look because of familiarity with topics	Neutral
	Suggested tutorials for PVL	Neutral
	Suggested more landmarks on parking map for people not familiar with Kaimuki	Neutral
	Suggested driving instructions coming from different directions	Neutral
	Wanted to see a full calendar of dates	Neutral
	Wanted to see actual class dates	Neutral
	Many members don't connect CE to licensing	Neutral
	Many people don't know what <i>Professional Standards</i> means	Neutral
Other	Likes that it's organized similar to HBR website	Positive
	Clean and easy to pull info	Positive
	Clean, simple, professional	Positive
	You can tell you're in HI on the first page	Positive
	Eye catching, easy to see and looks like it would be easy to maneuver on mobile	Positive
	Thinks tech savvy REALTORS would prefer to look online before calling for more info	Neutral
	Thinks agents prefer to look for info on own before calling or asking for help	Neutral

Appendix L: Final Version of eBook Screenshots





[illegible]

The image displays a virtual tour application interface. On the far left, a dark blue vertical bar features the word "MENU" in white capital letters, preceded by three horizontal orange bars. To the right of this bar, the title "VIRTUAL TOUR" is displayed in large, bold, black capital letters. Below the title, four categories are listed in blue capital letters: "LOBBY", "CONFERENCE ROOMS", "BOARDROOM", and "CLASSROOMS". Each category has associated items listed below it in black text. The "LOBBY" section includes "REALTOR Store" and "Member Work Stations". The "CONFERENCE ROOMS" section includes "Diamond Head", "Small Conference Room", "Alakai", "Ewa", and "Manao". The "BOARDROOM" and "CLASSROOMS" sections currently have no items listed. In the center-right portion of the screen, there is a photograph of the exterior of a modern building with large glass windows and doors. A semi-transparent blue banner is overlaid across the middle of the photo with the text "Coming Soon" in white. Above the photo, navigation controls include a link "Reserve a Room: Pua Ajifu" next to an information icon, and two sets of double arrows pointing left and right. The bottom of the interface shows a light gray floor area in front of the building entrance.

MEMBER SITE

Members.HiCentral.com


Home

Honolulu Board of REALTORS® MEMBER WEBSITE

[Home](#)
[Education](#)
[MLS](#)
[Advocacy](#)
[Professional Standards](#)
[Resources](#)
[About](#)


Below are the main buttons on the member site allowing you to conduct your day-to-day business with us.

Access our calendar of events and classes




CALENDAR

View market statistics current and historical




MARKET STATS



MAKE A PAYMENT/
REGISTER FOR CLASS

Login to your member portal to make payments or register for classes



FORMS

Download forms for your day to day business with HBR

LICENSING

Detailed Membership Vs. Licensing

LICENSE NUMBER

RS - 12345

EXPIRATION DATE

12/31/2020

STATE OF HAWAII DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS

REAL ESTATE SALESPERSON



NELSON HIGA

1136 12TH AVENUE, SUITE 200

HONOLULU HI 96816

(SIGNATURE OF LICENSEE)





PVL.EHAWAII.GOV/MYPVL

HICENTRAL.COM

Real estate licencing with the DCCA is separate from membership with HBR. Not all real estate licensees are REALTORS® (members of HBR).

The Real Estate Branch issues the pocket license (pictured left) and HBR issues a membership card (pictured right).

MENU

MYPVL

How To: Create an Account and Link a License ⓘ << >>

24/7 ACCESS

Create an account and link your license to keep track of your continuing education credits, download course certificates, and make payments.

MENU

EDUCATION

<< >>

KNOWLEDGE • SKILLS • SUCCESS

HBR's educational programs can help you to gain the knowledge and skills needed to succeed in the real estate industry.

We also partner with online CE providers and offer complementary technology training classes.

Special Member Pricing

- ▶ Continuing Education
- ▶ Online Partners
- ▶ New Member Benefit
- ▶ New Office Benefit

MENU

CONTINUING EDUCATION

Contact: Courtney Hara or Daryl Nishizawa ⓘ ⏪ ⏩

Licenses intending to renew their license on an active status by the renewal deadline of November 30 (even-numbered years), must complete 20 hours of approved continuing education (CE) courses during the biennium.

Core A	3 CE
Core B	3 CE
Electives	14 CE
Total	20 CE

The Honolulu Board of REALTORS® has also partnered with online providers for CE. Providing online CE courses offers more opportunities and convenience for members to fulfil CE requirements required by the Hawaii Real Estate Commission.

CENTER FOR REALTOR® DEVELOPMENT

THE CE SHOP

INNOVATING CAREER EDUCATION

ONCOURSE LEARNING

REAL ESTATE

MENU

PROFESSIONAL BENEFITS

Contact: Customer Service or Education ⓘ ⏪ ⏩

NEW MEMBER BENEFIT

All new members are entitled to 3 courses at no additional cost if taken within the first 6 months of joining.

GRI Property Management & Landlord/Tenant

6 CE - \$119 Value

Strategies of the Purchase Contract

6 CE - \$80 Value

Exclusive Right to Sell Listing Contract

3 CE - \$40 Value

NEW OFFICE BENEFIT

Brokers who submit an application for a new office are also entitled to 2 courses at no additional cost of taken within 6 months.

Broker Awareness: Overview & Expectation

6 CE - \$119 Value

Broker Awareness: Broker Practice & Risk Management

6 CE - \$119 Value

REGISTER

Login to your member portal

COE RESOURCES

Pledge of Performance and Service

Helpful one-liners for
each article of the
Code of Ethics

COE Translated

NAR provides translations of the Code of
Ethics for REALTORS® and their clients

- [▶ Chinese - Simplified](#)
- [▶ Chinese - Traditional](#)
- [▶ Danish](#)
- [▶ French](#)
- [▶ German](#)
- [▶ Italian](#)
- [▶ Japanese](#)
- [▶ Korean](#)
- [▶ Portuguese](#)
- [▶ Romanian](#)
- [▶ Russian](#)
- [▶ Spanish](#)
- [▶ Tagalog](#)
- [▶ Vietnamese](#)

For Members:

Code of Ethics Training

Fulfill your Code of Ethics training requirement with free courses for new and existing members, as well as a paid CE option.

[Learn More](#)

Pledge of Performance and Service

The Code of Ethics is a detailed document that spells out the professional responsibilities of every REALTOR®.

[Learn More](#)

Pathways to Professionalism

Issues of courtesy and etiquette are also important factors when it comes to NAR's Code of Ethics & Standards of Practice.

[Learn More](#)

(revised 5/2015)

COE Articles Explained

A video learning series by NAR. Fifteen short video segments covering the Preamble, Articles, and Standards of Practice. Including supporting material.

Presenting and Negotiating Multiple Offers

Arbitration Guidelines

STEPS TO RESOLUTION

Contact: Lynn Murison or Lloyd Lim ⓘ ⏪ ⏩

1

Principal Broker

Ask your Principal Broker for assistance resolving any issue that you may have with a fellow REALTOR®

2

Professional Standards Administrator

Contact HBR's Professional Standards Administrator (PSA), Lynn Murison



- **Ombudsman service:** A mediator tries to resolve an issue by phone
- **Mediation service:** In-person mediation is free for HBR members

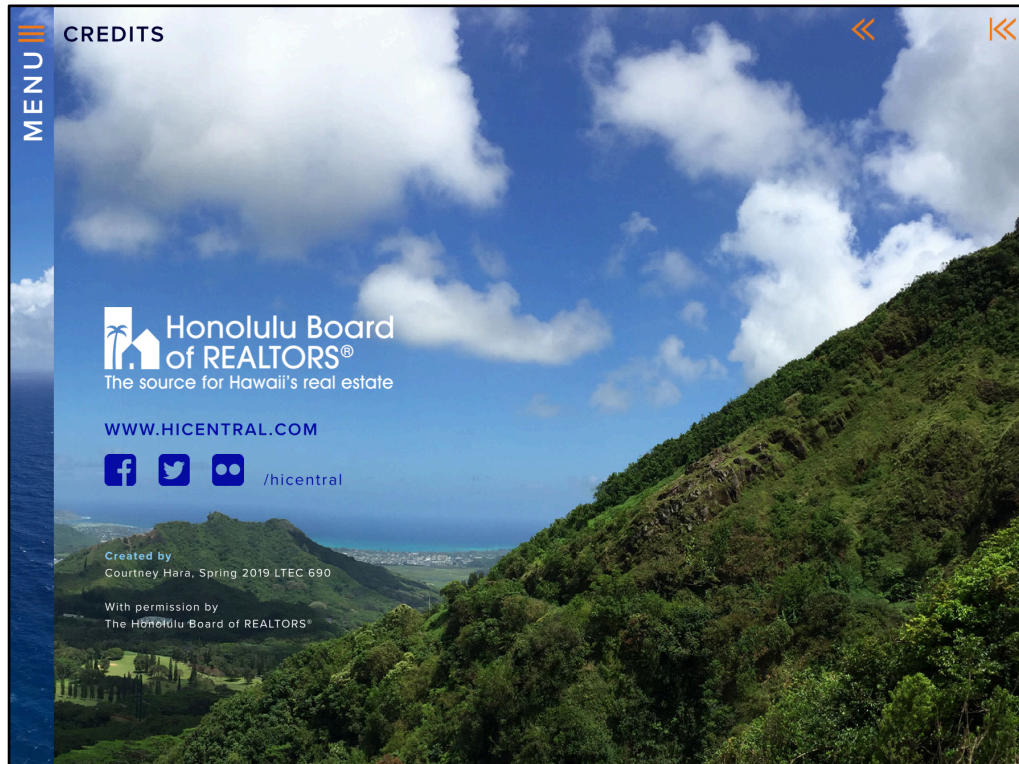
3

Formal Complaint Process

If the issue cannot be resolved using these methods, HBR has a formal complaint process

- ▶ [Before You File an Ethics Complaint](#)
- ▶ [Complaint Process Detailed](#)

RESOLUTION OPTIONS		
<div> <div>Contact: Lynn Murison or Lloyd Lim</div> <div>    </div> </div>		
<div>1</div> <div>Ombudsman</div> <div> <div>No cost</div> <div>No delay</div> <div>Maximum flexibility, may open dialogue</div> <div>Parties control outcome</div> <div>Uncertain closure</div> <div>Maintain/improve relationships</div> <div>Prospective</div> <div>Communicate typically via phone</div> </div>	<div>2</div> <div>Mediation</div> <div> <div>Low cost</div> <div>Little delay</div> <div>Maximum range of solutions</div> <div>Parties control outcome</div> <div>Uncertain closure</div> <div>Maintain/improve relationships</div> <div>Prospective</div> <div>Typically held in person</div> </div>	<div>3</div> <div>Arbitration</div> <div> <div>Moderate cost</div> <div>Moderate delay</div> <div>Win or lose</div> <div>Arbitrators control outcome</div> <div>Definite closure</div> <div>May harm relationships</div> <div>Retrospective</div> <div>Held in person</div> </div>




MENU




CREDITS

<<

>>

 Honolulu Board
of REALTORS®
The source for Hawaii's real estate

WWW.HICENTRAL.COM

   /hicalentral

Created by
Courtney Hara, Spring 2019 LTEC 690

With permission by
The Honolulu Board of REALTORS®