

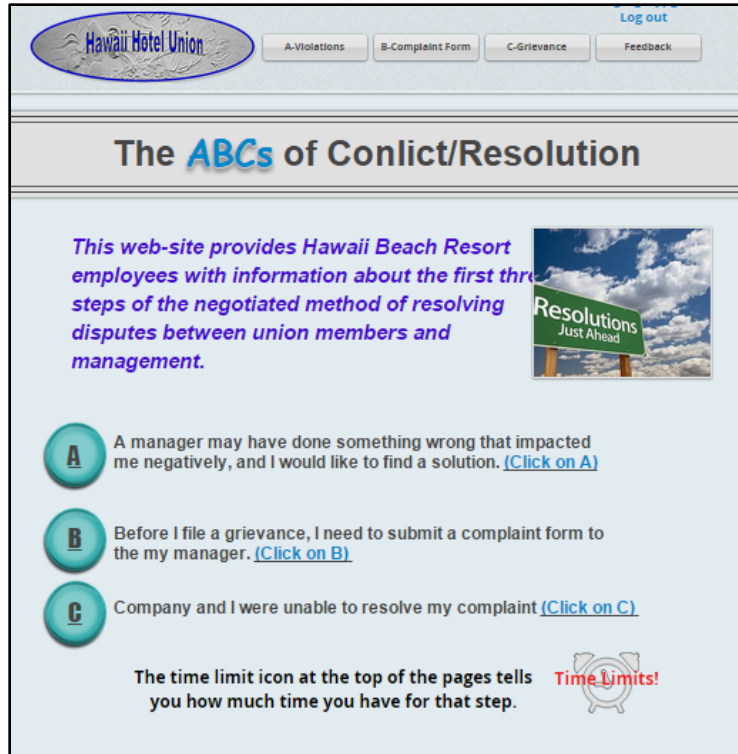
## **A Usability Evaluation of a Website Focusing on the Three Initial Steps of the Conflict/Resolution Process for Union Members**

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**Abstract:** A labor union can only exist based upon a majority consensus of the unionized employees within a particular company. The conflict/resolution process within the collective bargaining agreement, otherwise known as the grievance process, has been found to be more important to unionized workers than any other aspect of that agreement in relation to their perception of the union to which they belong. The Hawaii Hotel Union has developed a prototype website designed to educate its members about the three initial steps of the conflict/resolution process at the Hawaii Beach Resort. The purpose of this usability study was to investigate the ease of use and navigation of a website designed to provide union members at a particular unionized hotel with information about how to utilize the three initial steps within their negotiated conflict/resolution process. The website was designed using features that are considered to be universally desirable and that connote trust. The study was designed to include participants from three separate cycles as they interacted and engaged with the website. Data was designed to be collected via field notes, screen capture recordings, and surveys.

### **Introduction**

The Hawaii Hotel Union's (HHU) role in providing union members at the Hawaii Beach Resort (HBR) with information on how to utilize their conflict/resolution procedure is a core function in enhancing employees satisfaction with the union. A union's relationship with its members is more closely tied in with the procedural and distributive justice within the grievance system than any of the other benefits found within their collective bargaining agreement (Gordon & Fryxell, 1993). The relationship between a union and its members is a crucial one, as a union only exists at a particular company based upon the consensus of a majority of employees at that company. HHU has developed an asynchronous website (Figure 1) that is intended to provide employees at HBR easy access to information on how to utilize the three initial steps of the conflict/resolution process found within their collective bargaining agreement in an effort to preserve and enhance its relationship with its members.



**Figure 1.** Homepage of the Hawaii Hotel Union conflict resolution website.

Until now, the HHU did not have an online educational learning environment for its members. Due to the lengthy intervals between face-to-face training programs, the volume of HHU members, and employee turnover at the hotel, an asynchronous instructional website built using Wix was chosen to supplement the union’s current face-to-face training program. The website includes relevant materials and scenarios for the unionized hotel worker. Utilizing the Internet to educate learners within situations relative to their environment, at their own pace, helps to contextualize the learning (Anderson, 2008). The purpose of this usability study was to investigate the ease of use and navigation of a website designed to provide union members at a particular unionized hotel with information about how to utilize the three initial steps within their negotiated conflict/resolution process.

## Literature Review

This literature review will focus on the following three components: union members understanding and access to their conflict/resolution procedures; *just-in-time* learning; and designing a website for the target audience.

Educating union members about their negotiated grievance process is important to preserve the relationship between the HHU and its members. According to Poole (2007), “One of the cardinal principles of effective complaints and grievance management is that workers must be aware of and have unencumbered access to well-defined procedures that are easy to understand and use” (p. 92). The web provides the HHU with an environment

for members to have open access to information regarding their conflict/resolutions process.

Providing a learning environment for union members that is accessible at the time they are compelled to utilize the resource is consistent with the concept of *just-in-time learning*. Many companies use self-guided tutorials and databases that learners can easily access, *just* at the *time* information is needed, giving employees the opportunity to focus on relevant resources to perform a specific task (Sambataro, 2000). The ability for the HHU to reduce expenses associated with training members in an exclusively face-to-face system, through the supplementation and use of an online, asynchronous learning environment is worth consideration. According to Gagne, Wager, Golas, and Keller (2005), the demand for an asynchronous *just-in-time* learning environment, along with the reduced cost thereof, are “helping to expand the online learning training market” (p. 216).

In an effort to maximize the possibility of engagement with the target audience, including people with anxiety related to the use of digital technology, educational project designers use a variety of media. “It is often wise to post information in multiple ways to ensure that all students have access to it” (Simonson, Smaldino, Albright, & Zvacek, 2012, p. 233). A website can provide the target audience with options such as lectures, video examples, fillable forms, downloadable documents, and other resources in an effort to provide multiple opportunities for a meaningful connection between the material and the learner (Figure 2). According to Ausburn (2004), “learners with different characteristics may differentially prefer and benefit from various instructional features and goals” (p. 334). Obstacles involved with designing an effective product for a heterogeneous audience may be offset by the use of a variety of media.

1. [See videos below](#) to learn how to check the [contract](#) to identify the section(s) a violation may have occurred. Common Contract Sections are listed below:

- Work Opportunity/Seniority ([Section 6.](#))
- Wages ([Exhibit A](#))
- Overtime ([Section 9.](#))
- Discipline ([Section 24.](#))
- Vacation ([Section 13.](#))

2. Examples of researching the contract to find an appropriate section include the [videos](#) below. Afterwards, move onto the next step ([select B](#))

**B**

Discipline

Seniority

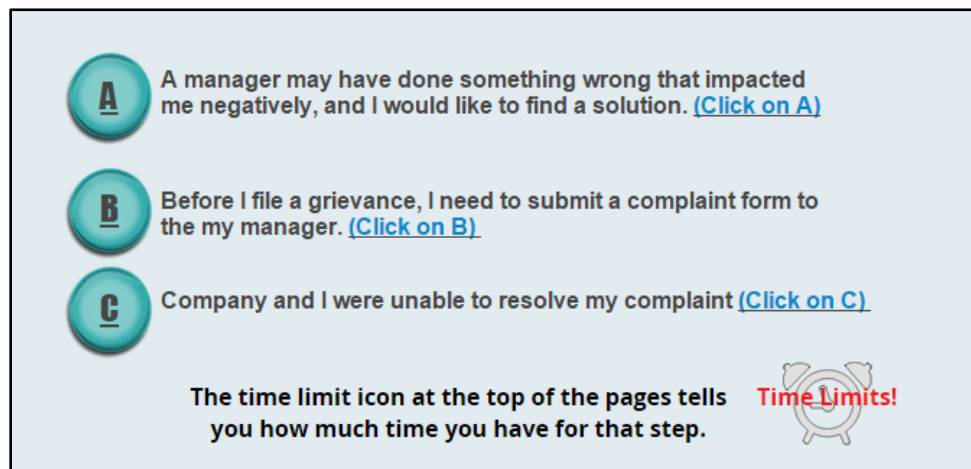
**Resources**

**Figure 2.** Example of multiple resources from website, including text, video, and downloadable PDF documents.

## Website Design

The free Wix online website creation software provided a workable canvas to create the conflict/resolution website. Careful consideration was given to design a universally simple and acceptable interface for the target audience. Though the web provides easily accessible information to the adult learner, it is important to “recognize learner’s levels of anxiety as they begin new learning endeavors” (Conrad, 2002, p. 214). According to Cyr (2013), “Navigation design, consistency of page layout and quick access to navigational features are universally desirable” (p. 382). In an effort to provide consistency in layout, the information on the website follows a linear design, utilizing an A-B-C themed format (Figure 3). Navigational buttons are clearly marked throughout, and the index is located at the top of each page. A “Home” button is prevalent on every page but the Home page, as the Wix software did not have a “Back” button feature at the time of this website’s creation. The “Back” button allows a user an opportunity to quickly move back to their previous step in case of error or misdirection. The Back button is the most highly utilized command in Web browsers (Krug, 2014). In this case, the “Home” button is intended to be the next best alternative to the “Back” button.

The dominant colors throughout the website are blue with a light grey background. Blue was specifically chosen for its cross-cultural appeal and added credibility. In a study analyzing Chinese, South Korean, Japanese, and American cultural perspectives related to website design and content, Fletcher (2006) shows that blue is considered to be perceived as both high quality and trustworthy.



**Figure 3.** Web-page depicting the A-B-C themed format, a linear design choice.

## Methods

The methodology for this study utilized and was guided by Krug’s definition of a product’s usability, which states, “A person of average (or even below average) ability and experience can figure out how to use the thing to accomplish something without it being more trouble than it’s worth” (2014, p. 273). Therefore, instruments, participants, implementation, and analysis were designed to measure whether the target audience could easily use the website to easily accomplish the tasks it was designed for.

## Target Audience

There are over 600 employees at the HBR, ranging in age from 18 to 73, with an ethnic and cultural dynamic that is quite diverse. The gender make-up is relatively evenly split. As prerequisites to hire, employees at HBR are required to have at least a high school education, and are required to understand, speak, and read English; thus providing easily identifiable entry-level skills for me to incorporate into the design.

## Implementation

This usability study consisted of three phases (see Table 1). Each phase was framed using an act, observe, and reflect cyclical model of evaluation.

**Table 1.** Implementation Schedule.

<u>Phase</u>	<u>Schedule</u>	<u>Event</u>	<u>Sample</u>	<u>Action</u>
1	Oct. 2014	Rapid Prototype	2 Subject Matter Experts	Revise
2	Jan. 1 -15, 2015	Prototype	3 Union Shop Stewards	Revise
3	Jan. 16-31, 2015	Beta	3 Non-union employees	Revise

**Phase 1.** The rapid prototype of the website was released to two subject matter experts (SMEs) in October of 2014 in an effort to review the content. Each SME worked full-time for a labor union, and had at least ten years of experience representing unionized employees in grievances within their respective function. One of the roles of the SME is “assisting the designer's conceptualization by clarifying and verifying the content” (Keppell, 1999, p. 599). On October 1<sup>st</sup>, 2014 each SME was sent a video invitation to participate in the project. In the video, each SME was directed to spend at least one to two hours navigating through the website and to complete an online Survey I created in Google Forms. The survey included multiple choice, open, and Likert questions using a seven point scale. Based upon the results of the evaluation by each SME, it was determined that the website did not provide enough emphasis on informing union members about key timing guidelines associated with each step of the conflict/resolution process on the website. In response to the need to emphasize time guidelines within each of the steps outlined in the website, I chose to utilize the symbol of a clock and the corresponding amount of days a union member from the hotel has to complete the task (Figure 4) at the top of the corresponding web-page.



**Figure 4.** The time clock symbol indicating the time limit for the action on the corresponding web page.

**Phase 2.** Phase 2 began in the first half of January, 2015, and was completed by January 15, 2015. Three union shop stewards participated in the study. Union shop stewards are regular union members that work at a particular unionized company and have been elected to represent the workers within their department concerning all matters negotiated within their respective collective bargaining agreement. Nearly all union stewards have received training in conflict resolution handling through the HHU’s traditional face-to-face training dynamic within the previous three years.

Each steward was asked to participate individually in a screen and audio recorded session, as they engaged with the website. Participants were asked to complete a consent form prior to the usability study. I used Google Hangouts Air for this part of the process. The participants were asked to “think aloud,” or provide “oral protocol” (Gentry, 1994, p. 166), as they familiarized themselves with, and described their impressions of the website in the presence of the facilitator. The facilitator read from a prepared script that had been modeled on an example found in Krug’s book entitled, *Rocket Surgery Made Easy* (2009).

During the interaction, each participant was given four specific scenarios and was asked to consider and react to each within the parameters of the website. The scenarios were chosen based upon common complaints, grievances, and inquiries I have received from hotel union members over the past thirteen years. Measurements for each scenario included whether or not each respective task was completed, and the amount of time it took to complete each task (Table 2). The facilitator took field notes during the interaction and transcribed the audio recordings from the screen sharing sessions. The participants were asked to complete an online survey before the recorded session and an attitudinal survey afterwards. Surveys included a combination of open questions, list responses, multiple choice, and Likert scale inquiries.

**Table 2.** Participant task table.

<b>Participants</b>	<b><u>Task 1</u></b>	<b><u>Task 2</u></b>	<b><u>Task 3</u></b>	<b><u>Task 4</u></b>
	<b>Challenging a written warning</b>	<b>How long to file after an unresolved complaint form</b>	<b>Find wage rate for a job classification</b>	<b>Print Complaint Form from website</b>
<b>Expected Time</b>	<b>(1:30)</b>	<b>(0:30)</b>	<b>(0:45)</b>	<b>(1:00)</b>

**Phase 3.** Phase 3 took place between January 16<sup>th</sup> and 31<sup>st</sup>. Phase 3 utilized three participants that have not been members of a union, and used most of the same instruments as phase 2.

All participants in the study were sent a token of appreciation for their involvement in the form of a \$20 Starbucks gift e-gift card.

### **Analysis**

Between each phase of the usability study, I compiled the data retrieved from the surveys, field notes, and the facilitated participant interactive sessions onto a spreadsheet, analyzed them, and made the minimum adjustments necessary to improve the website; or, as Krug states, “When fixing problems, try to do the least you can do” (2009, p. 111). Charts, notes, and corresponding records of the improvements were included as part of a final project report.

### **Conclusion**

It is incumbent upon a union to provide its members with easily accessible information related to the procedural justice found within their respective collective bargaining agreement in an effort to enhance and preserve the relationship between itself and its members. An online web-based solution may provide an effective link between the union member and important information that they may otherwise rarely have an opportunity to engage with. This conflict/resolution website usability study is the first effort by the HHU to analyze its members interactions with an online learning environment. The potential for expanding the online learning environment to other topics the HHU deems appropriate will likely depend, at least in part, on the participants perceptions of the usability of the website in this study. The HHU should continue to research ways of providing its members with resources that maintain, and even enhance their relationship, so as to stay viable as an entity.

**Limitations.** It is important to note that this study had some limitations. Participants for this study were not chosen at random, and the sample size was minimal. It should also be noted that I am both the designer of the website and the author of this study, which may have allowed for an unintentional bias.

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