

Usability Test of Fuller Center Bike Adventure Web Pages

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Elon University, May 2012

Overview

This study was conducted with an objective of determining the user-friendliness and ability of the Fuller Center Bike Adventure website to convey pertinent information. I asked five people to participate in the study by completing a few tasks on the site. I conducted and observed the study's task completion by all five individuals.

After greeting the participants, I explained what would take place with a prepared script (appendix A). I collected each participant's signature on a consent form (appendix B) and asked the participant if they were ready to begin. These tasks were recorded using the screen-capturing software, Silverback.

Then I observed each participant as they began, completing four tasks according to the instructions. As the participant worked, he or she spoke his or her thoughts aloud. Occasionally I requested clarification about the participant's reaction to the tasks, doing my best to avoid interfering with the participant's workflow. I noted when the participants had trouble completing a task in that they spent more time or appeared puzzled.

The participants were asked to complete four tasks through the Bike Adventure pages of the Fuller Center website while I observed. After completing the tasks, the participants were given a thorough response survey to complete.

RESULTS

Graphed survey results and responses can be found in Appendix C.

Data

Participants

The five participants ranged in age from 22 to 27. Three of the five were Christian. One of the five was African-American. Two were men and three were women. All were very familiar with technology and should be considered power users of websites.

Survey

Respondents were asked to choose from a list of adjectives which described the site. In total, 40 words were chosen from a list of 117 to describe participants' reactions to the site. No single option was chosen by more than three participants.

The following words were selected once total: helpful, familiar, usable, meaningful, clear, organized, controllable, met expectations, comfortable, approachable, ordinary, appealing, clean, professional, predictable, unpredictable, disruptive, confusing, stressful, annoying, boring, old, distracting, time consuming, unattractive, not valuable, annoying, overwhelming, hard to use, ineffective.

The following words were selected twice: convenient, friendly, accessible, complex, slow, dated, dull, frustrating, inconsistent.

The only word selected three times was 'busy.'

Next, the participants ranked their level of agreement with statements regarding their interaction with the site. The majority of respondents were in agreement with the following statements (Meaning either 3 of 5 chose somewhere between 4-6 (neutral-strongly agree) or, if one was neutral, the average selection was slightly above 3):

I was able to complete my tasks in the given amount of time. (4)
Terminology used in the website was clear. (3.57)
The content of the website met my expectations. (3.57)
It was easy to move from one page to another. (3.43)
The website is visually appealing. (3.14)
The overall organization of the site is easy to understand. (3.14)
I would be likely to use this website in the future. (3)

Overall the site was easy to use. (2.86 of only four responses)

The majority of respondents were in disagreement (3 of 5 chose '2') with the following statement:

Individual pages are well-designed. (3.14)

The tasks were ranked in order of difficulty. Based on average response the tasks were ranked as follows:

1. "You want to find out more about the ride." (average rank: 2.5)
2. "You want to get involved with the ride." (2.75)
3. "You want to find more about the reasons behind the ride." (3)
4. "You want to donate to the ride." (4.25)

Individual tasks

One - Find out more

Recall was high for this task. All five remembered general locations of the rides. No one remembered exact dates, but all knew the ride would take place in the summer. Four of the five remembered at least one of the goals of the ride. All reported finding the task easy.

In the rankings of the ease of finding the three pieces of requested information, the results were somewhat unclear. All five participants listed "when is the ride" as the second-easiest task to accomplish. But two found the first task most difficult and three found it the hardest. The slight majority found the question "what are the goals of the ride" to be the most difficult to answer of the three. (Q1 - 3; Q2 - 3.3; Q3 - 3.6)

One possibility is that the tasks were all relatively the same ease to answer, so they were difficult to rank effectively.

Two - Get involved

Two of the five want to join the ride. Reasons were listed as not wanting to bike, not having time or being interested in “church stuff,” and wanting more information.

Recall was best for getting involved by donating. Other things participants remembered were: volunteering (2) and supporting on Facebook (1). Some variation of “donate” was mentioned five times in the responses. Some variation of “sponsor” was used four times.

Three - Reasons for the ride

No one was able to recall all three of the reasons for the ride and no one was able to recall any of the specific goals for the 2012 ride.

However, four of the five participants had some recall on the reasons for the ride. Three mentioned raising money. Each of the following were mentioned one time: get rid of poverty housing, raise awareness, create partnerships.

The 2012-specific goals were confused with the overall goals. Three mentioned raising money again. One mentioned “something about Jesus.” One mentioned partnerships.

Four - Donate

Observations

Based on observations made during the testing and through the Silverback recordings, there were several repeated notes not obvious through the responses. The majority of the testers made comments about the navigation buttons of the site, confusion was felt regarding where to go for information, and the path taken to donate varied greatly from participant to participant.

Because the main navigation found on all the pages is for the Fuller Center for Housing (not specifically the Bike Adventures), many testers seemed annoyed (but notably, not confused) by the added complexity of the navigation.

These written comments draw attention to issues reinforced by spoken commentary:

- It seemed that all of the buttons about the bike ride were the same size/hierarchy. I wasn't sure where to click first. I think it would be helpful to have a clear introduction to the bike ride, that briefly outlines the who/what/when/where etc.
- Some of the navigation I wished was moved above the fold.
- The logo at the top of the page should take you back to the homepage of the ride, not the homepage of the ministry. That was frustrating for me. I kept clicking that to go home, and went all the way home.

Analysis

For initial site feedback portion of the survey, roughly half the words chosen were positive and half negative. The repetition of busy in combination with the choice of related adjectives like overwhelming, time-consuming, unpredictable, complex, confusing and stressful suggest the site might have too much going on. It could benefit from some simplification.

Based on the level of agreement in the overall site statements, the biggest issues with the site appear to be design-related.

The highest-rated observations were all related to functionality. Meaning, the site was generally observed to be doing what it is meant to do. The tasks were able to be completed and the content and messaging were understandable.

The less highly-rated statements involved visuals, organization and design. It's safe to deduce from these responses, that the site is stronger in function than in design. This in combination with the adjectives portion of the survey suggests the design is too busy. The repetition of choices like: *dated, dull, frustrating, inconsistent* confirm that most issues with the site were visual or design related.

The task ranking portion showed that the most difficult task to complete was the donate portion. The other three tasks were near each other in rankings, each separated by only .25. The donation task was ranked a whole 1.25 more difficult than the next task. While the first three tasks may have been somewhat similar in ease for the participants, there was something notably more difficult to them about donating. (It's also worth taking into consideration that the average ranking followed the order the tasks were listed and completed. Convenience may have factored into this result.)

Responses to task one indicated that finding the goals were slightly more difficult than the other questions to answer. If observations are considered as well, no one of the questions was significantly more difficult than another.

Task two demonstrated that support language like sponsor and donate is used effectively in the site. Responses suggest that the donation page is the least user-friendly. In combination with oral observations this would most likely be a result of the amount of information gathered there as well as the lack of a consistent and prominent Bike Adventure donate button. The donate button conflicts with the overall site donation button.

Task three demonstrated a muddling of goals. This could be a result of growing tired with the survey. But it also could be related to the complexity of the site and that the language from page to page either needs to be succinctly consistent or purposefully different. Additionally of note is the fact that fewer participants were able to complete this task than the previous tasks. So this would indicate that it's the language/goals on the 2012-specific page ("About the ride") that is the most confusing.

The responses to task four are somewhat inconsistent with earlier findings about the donate task. Therefore these suggestions should be taken with a grain of salt. Only one participant seemed to have a specific user-related issue with the donation task which would suggest that donating in general is more the issue. Still, observations included, the donation area could afford to be as simple as possible.

Limitations/Imperfections

This survey had some limitations including limited variety of participants, distractions in testing area, excess of power users, and length of survey.

The participants weren't necessarily perfectly representative of the target demographic for fullercenter.org/bikeadventure. All were power users. Two-fifths weren't Christian. All were between the ages of 22-27. This means results should be considered with this in mind and other studies should be done to determine the site's usability to those not within the demographics represented here.

Having a separate sheet of paper with the adjectives listed confused one responder, so she ended up filling out both forms. This could have slightly altered her responses.

Another unforeseen limitation was that the survey was somewhat long and participants were observed to be increasingly distracted or impatient in the final few pages. Those feelings had the potential to affect the sincerity of the answers.

Specifically, the rank of difficulty of the donate task is possibly a reflection of this imperfection because in the first page of the survey, the majority of the respondents named it the most difficult of the four tasks. Yet, on the final page of the survey (toward the end when participants were potentially getting tired) the majority of people said there was nothing that would inhibited them from donating. Whatever the cause, it's an inconsistency in the responses that should be taken into consideration when evaluating the results.

Conclusion/Recommendations

Based on this usability test and a close look at the results, a few key observations come to mind. The site's functionality is its strength. The design appears to be what is somewhat detrimental to overall user success. That breaks down in three major ways.

First, the navigation of the Bike Adventure pages. Because the navigation is fighting for attention with the overall Fuller Center site, it needs to work harder and more cohesively to win. It probably shouldn't fight with itself via both a sidebar navigation and a top (second-level) navigation. One suggestion offered that seems like it would solve this problem is to have one specific, cohesive and simple place to look. In other words, if one button/textbox/color stood out above all the others that had the single most important take away or description of what users should expect from diving deeper, it would help guide the user toward doing so. And I think all the participants would agree the shopping cart shouldn't be displayed so prominently. Most weren't even sure how it related to the ride at all.

Another suggestion that would solve multiple of the issues that arose during this study is that one unified message be simplified and included on each page. For example, there were a lot of opportunities for involvement people seemed to miss. The Facebook 'likes' goal was only noted by one participant. And no one noticed they could sign up for a newsletter. If a hierarchy of important information is developed, simplified and displayed in a way that reflects that hierarchy, people will be more naturally guided into the areas that are most important.

The donation area is a tricky one because in general people are going to be more critical of any person, place or website asking them for money. Still, that's precisely why it shouldn't be an

area left ungroomed. One person mentioned that usually nonprofit site's make it impossible to miss the way to donate through one consistent opportunity on each page and this one didn't really do that. I think the Fuller Center's overall website does that, but again the respectively-purposed navigations contribute to unhelpful complexity. My suggestion would be to replace the shopping cart with a 'donate to the ride' button. Maybe even one that looks somehow different than the standard FCH button (a new color or additional graphic), so visitors are given a clear sign that this is a separate thing.

One more specific area of recommendation would be that the goals for the 2012 ride, if that's something you want to be memorable, should be clarified and moved up the page. A lot of the supporting text could either be moved to another page or cut down.

It's important to keep in mind of course that despite some general confusion about the complexities and navigation of the site, the main functions are strong. Visitors can successfully accomplish what you want them to without hitting major problems. That is a strong base to improve from.

Appendix A: FCBA Procedure/Script

Thanks for agreeing to take part in this! I hope it helps serve more people who need homes. I'm going to ask you to do a few tasks on Fullercenter.org. That's all I'm going to tell you because I want to evaluate how successful the presentation of the site is in expressing the Fuller Center's goals, etc. Feel free to ask any questions as you go. I want honest reactions, so if it's difficult or annoying in any way, I want to know so.

Ready? Here we go. [record time]

--Please navigate to fullercenter.org/bikeadventure.

--What is your overall first impression?

--Take a moment to familiarize yourself with the site, click what seems most interesting.

--Navigate back to fullercenter.org/bikeadventure.

I am going to ask you to perform four tasks. Please tell me any reactions you have to the ease of use of the site as you do so. Is something annoying? Is something catching your eye?

Task 1 - **What is the ride?**

You want to find out more about what this is. Take two minutes to see if you can find the answer to the following questions:

- Where is the ride?
- When is the ride?
- What are the three goals of the ride?

I will tell you when 2 minutes are up...

Task 2 - **Get involved**

You want to get involved. Navigate to something on the site that will allow you to do so.

Express to me why you are clicking where you do.

Let's say you can't join the ride for some reason. Can you find another way to help?

List some:...or navigate to them

Task 3 - **What's the point of the ride?**

If you haven't already done so, find the About the ride button and click it.

Take two minutes to see if you can find

- the reasons for the ride
- the goals for the upcoming ride

Task 4 - **Donate**

You want to contribute to your friend Anne Troyer's fundraising goal. Do it. Stop before you're asked for your credit card info.

Appendix B: INFORMED CONSENT FORM

Elon University

Title of Project: **COM501 Independent Study FCBA Usability**

Principal Investigator: Kelli Yoder
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Co-Investigators: Kelli Yoder

1. Purpose of the Study: The purpose of this study is to gather information about the usability of fullercenter.org/bikeadventure. The study has been designed as part of a graduate course project in interactive nonprofit strategies (COM501) and will therefore reflect a number of different research. This project is designed to give practical experience to students in usability test for communication media. This project will look into the uses and effects of the website on users.
2. Procedures to be followed: You will be asked to first interact with a webpage and then answer a few questions raised by the student researchers or fill out an questionnaire.
3. Discomforts and Risks: There are no risks in participating in this research beyond those experienced in everyday life.
4. Benefits: There are two potential benefits to participation: (a) You might learn more about yourself by participating in this study. You might have a better understanding of how important communication is to you; and (b) This research might provide a better understanding of how use of media affects college students. This information could help plan programs and make student services better.
5. Duration: It will take about 30 minutes to complete the study.
6. Statement of Confidentiality: Only the person in charge and the student researchers will know your identity. All data related to this study will only be accessible to the principal investigator and the student investigators for this study and will be kept in locked closets and/or secured computers of the investigator and student investigator desks, in Elon university offices.
7. Right to Ask Questions: You can ask questions about this research. Contact Kelli Yoder at 336-266-1917 with questions. You can also call this number if you have concerns about this research, or if you feel that you have encountered any problem in the study.

8. Compensation: There is no compensation involved in this study.
9. Voluntary Participation: You do not have to participate in this research. You can end your participation at any time by telling the person in charge. You do not have to answer any questions you do not want to answer. Refusal to take part in or withdrawing from this study will involve no penalty or loss of benefits you would receive otherwise.

You must be 18 years of age or older to consent to participate in this research study. If you consent to participate in this research study and to the terms above, please sign your name and indicate the date below.

You will be given a copy of this consent form to keep for your records.

Participant Signature

Date

Investigator Signature

Date

Appendix C: RESULTS

Participants

- 1 Ryan, female, white, age 25, non-Christian, cyclist
- 2 Elyssa, female, white, age 22, Mormon, bikes occasionally
- 3 Chris, male, white, age 27, Mormon, cyclist
- 4 Anne, female, white, age 23, former Catholic, cyclist
- 5 Matt, male, black, age 24, Baptist, athletic, not a huge biker

TEXT RESPONSES

What do you now know about the Fuller Center?

1. They are a non profit that raises money to help underprivileged people
2. The fuller center is a religious-affiliated organization.
They are trying to get people to donate money by riding bikes, because for some reason people are more willing to donate money when you're completing a race or marathon or something? I don't know, whatever that's about.
Also they are trying to end poverty housing? BUT WHERE WILL THE POOR PEOPLE LIVE.
3. I know that they are an organization that builds houses that also sponsors a bike ride down the east and west coasts (of the US).
4. It is church related and they do bicycle rides to raise money and build relationships.
5. The Fuller Center is an organization that sponsors bike ride.

What do you now know about the Bike Adventure?

1. It seemed like a marathon and people could sponsor a cyclist to raise money for the distance they traveled
2. There are three -- one on the east coast, one on the west and somewhere near Nashville. They hope to raise \$200,000 in 2012 and spread the Good Word. ?
3. It'd be a lot easier in the Southern US. I just know that the western coastal highway would be a beeyatch to ride a bike down.
4. The Bike adventure is to raise money and build partnerships. It goes up and down the east and west coast in the summer.
5. The Bike Adventure sponsors bikers to ride.

What questions (if any) do you still have about the Fuller Center and its Bike Adventure?

1. None
2. I want to see pictures of past bike adventures !!! Also, what church are they affiliated with?
3. How many people do this every year? Why are they so much better than I am?
4. What church is the Fuller center associated with? Why did they start doing the bike adventure, why bikes.
5. I still do not know how much money I should donate and where my money goes. I know the goals of Bike Adventure but I do not know what the overall objective of the Fuller Center is.

[Task: Pick words that describe the site.]

If you'd like, explain any of the selections you made.

1. No answer
2. It seemed that all of the buttons about the bike ride were the same size/hierarchy. I wasn't sure where to click first. I think it would be helpful to have a clear introduction to the bike ride, that briefly outlines the who/what/when/where etc.

3. No answer
4. No answer
5. Some of the navigation I wished was moved above the fold.

Task One Response

These questions refer to task one - You want to find out more about the ride.

If you remember, where is the ride taking place?

1. On the east and west coast, and in the south
2. east coast, west coast starting in seattle to san diego, nashville.
3. East and West coasts of the united states
4. East and west coast
5. I remember it was one on the east coast & and one on the west coast.

If you remember, when is the ride taking place?

1. During summer 2012
2. aug 2012?
3. July-August 2012
4. summer 2012
5. The east coast ride is at the end of May and the beginning of June.

If you remember, what are the goals of the ride?

1. To raise money for housing
2. make church relationships raise \$200,000 get 1500 facebook likes media coverage
3. Raise awareness of the ministry. Make new friends.
4. create partners raise money ?
5. I do not remember the goals of the ride.

Task Two Response

These questions refer to task two - You want to get involved with the ride.

Do you want to join the ride? Yes - 2 No - 3

If not, what would make you want to?

1. No answer.
2. If I wouldn't have to bike 70 miles a day. Or at all.
3. No answer.
4. If I had the time and was interested in church stuff.
5. I need more information about the ride. The website needs to be reorganized.

If you remember, what were some ways you can help with the ride?

1. By donating
2. I can sponsor a rider, or donate to the overall cause. It would probably also help to like their Facebook.
3. Sponsorships, donations, putting people up, things of that nature.
4. donate, sponsor, volunteer,
5. You can donate time by being a volunteer and you can donate money by sponsoring a rider.

Any other comments about this task?

1. No answer
2. No answer
3. The logo at the top of the page should take you back the the homepage of the ride, not the homepage of the ministry. That was frustrating for me. I kept clicking that to go home, and went all the way home.
4. no

5. No.

Task Three Response

These questions refer to task three - You want to find out the reasons behind the ride.

If you remember, what is the point of the ride?

To raise money for housing.

To get rid of poverty housing.

Raise money and awareness about the ministry

raise money, create partnerships

I do not remember.

Do you remember any of the goals for the 2012 ride? If so list them below.

To network, raise money and one other thing I cant remember
did't I just answer this question?

Raise awareness, make friends, jesus. Something about jesus.

raise money, create partnerships, ?

I do not remember.

Any other comments about this task?

1. No answer

2. No answer

3. I like you very much. All of you. Everyone.

4. No answer

5. This organization needs a better slogan/ mission statement/ and rememberable goals.

Task Four Response

These questions refer to task four - You want to donate to Anne's ride.

If you have made an online donation before in your life, how did this donation process compare to others?

1. I have donated online with paypal and it was easy

2. It was pretty easy to use.

3. Easier. Mucho easier.

4. similar

5. I have not donated before in my life.

Was there anything about the donation process that would have inhibited you from actually donating?

1. no

2. "Meet the riders" does not necessarily imply i can sponsor them. I might ignore that button if I was specifically looking to donate.

3. Lack of money in my personal bank account.

4. getting to the donation area is not completely obvious, which it normally is.

5. No. But I do like the fact that they are connected with PayPal.

Any other comments about this task?

1. no answer

2. no answer

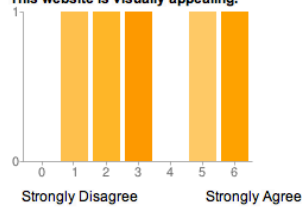
3. I still like you. Even more today than ever.

4. no

5. no answer

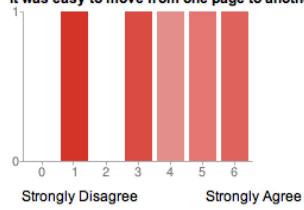
Select a number based on your level of agreement with the statements below. '3' is a neutral answer.

This website is visually appealing.



0 - Strongly Disagree	0	0%
1	1	20%
2	1	20%
3	1	20%
4	0	0%
5	1	20%
6 - Strongly Agree	1	20%

It was easy to move from one page to another.



0 - Strongly Disagree	0	0%
1	1	20%
2	0	0%
3	1	20%
4	1	20%
5	1	20%
6 - Strongly Agree	1	20%

The overall organization of the site is easy to understand.



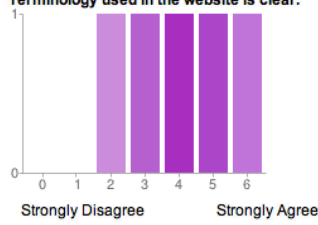
0 - Strongly Disagree	0	0%
1	1	20%
2	1	20%
3	1	20%
4	0	0%
5	1	20%
6 - Strongly Agree	1	20%

Individual pages are well-designed.



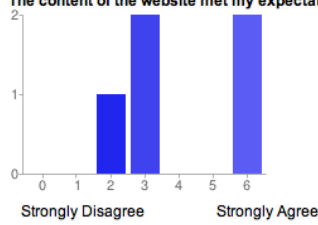
0 - Strongly Disagree	0	0%
1	0	0%
2	3	60%
3	0	0%
4	0	0%
5	1	20%
6 - Strongly Agree	1	20%

Terminology used in the website is clear.



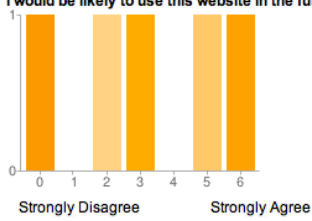
0 - Strongly Disagree	0	0%
1	0	0%
2	1	20%
3	1	20%
4	1	20%
5	1	20%
6 - Strongly Agree	1	20%

The content of the website met my expectations.



0 - Strongly Disagree	0	0%
1	0	0%
2	1	20%
3	2	40%
4	0	0%
5	0	0%
6 - Strongly Agree	2	40%

I would be likely to use this website in the future.



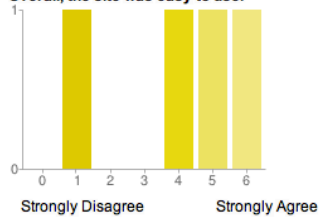
0 - Strongly Disagree	1	20%
1	0	0%
2	1	20%
3	1	20%
4	0	0%
5	1	20%
6 - Strongly Agree	1	20%

I was able to complete my tasks in the given amount of time.



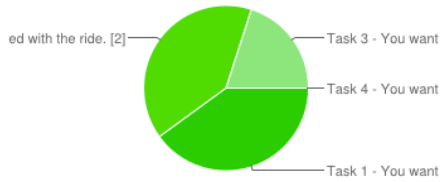
0 - Strongly Disagree	0	0%
1	0	0%
2	1	20%
3	0	0%
4	1	20%
5	1	20%
6 - Strongly Agree	2	40%

Overall, the site was easy to use.

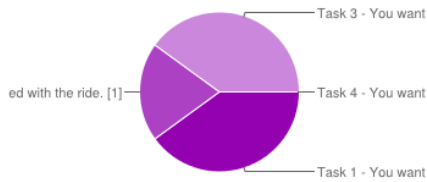


0 - Strongly Disagree	0	0%
1	1	20%
2	0	0%
3	0	0%
4	1	20%
5	1	20%
6 - Strongly Agree	1	20%

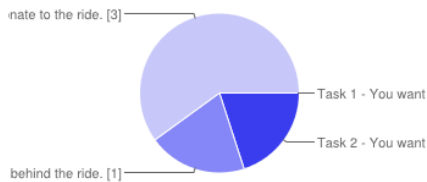
Rank the tasks in order of ease.



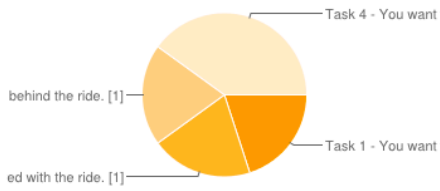
Task 1 - You want to find out more about the ride.	2	40%
Task 2 - You want to get involved with the ride.	2	40%
Task 3 - You want to find more about the reasons behind the ride.	1	20%
Task 4 - You want to donate to the ride.	0	0%



Task 1 - You want to find out more about the ride.	2	40%
Task 2 - You want to get involved with the ride.	1	20%
Task 3 - You want to find more about the reasons behind the ride.	2	40%
Task 4 - You want to donate to the ride.	0	0%

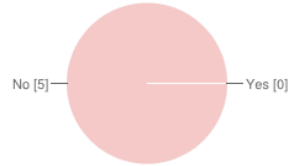


Task 1 - You want to find out more about the ride.	0	0%
Task 2 - You want to get involved with the ride.	1	20%
Task 3 - You want to find more about the reasons behind the ride.	1	20%
Task 4 - You want to donate to the ride.	3	60%



Task 1 - You want to find out more about the ride.	1	20%
Task 2 - You want to get involved with the ride.	1	20%
Task 3 - You want to find more about the reasons behind the ride.	1	20%
Task 4 - You want to donate to the ride.	2	40%

Did you face any difficulty with this task?

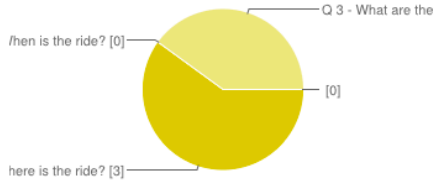


Yes	0	0%
No	5	100%

If the answer is yes, please explain:



Rank the Task One questions in order of ease.

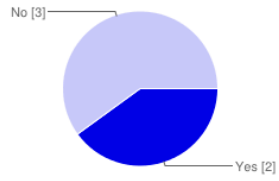


Q 1 - Where is the ride?	3	60%
Q 2 - When is the ride?	0	0%
Q 3 - What are the goals of the ride?	2	40%

Task Two Response

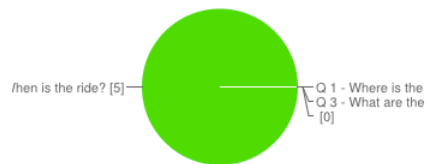
These questions refer to task two - You want to get involved with the ride.

Do you want to join the ride?



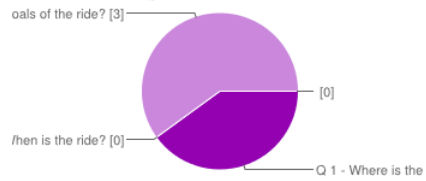
Yes	2	40%
No	3	60%

Rank the Task One questions in order of ease.



Q 1 - Where is the ride?	0	0%
Q 2 - When is the ride?	5	100%
Q 3 - What are the goals of the ride?	0	0%

Rank the Task One questions in order of ease.



Q 1 - Where is the ride?	2	40%
Q 2 - When is the ride?	0	0%
Q 3 - What are the goals of the ride?	3	60%