

HCI Usability Portfolio Report

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Context:

In this report two website of similar category will be compared and evaluated using Human Computer Interaction principal and professional method in order to analysis, find some best practices as well as some bad practices and also to search for improvement ideas.

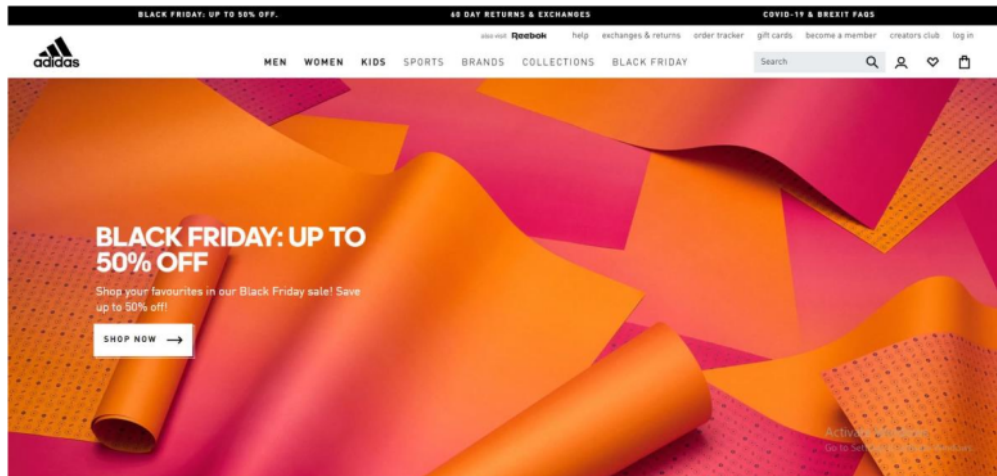
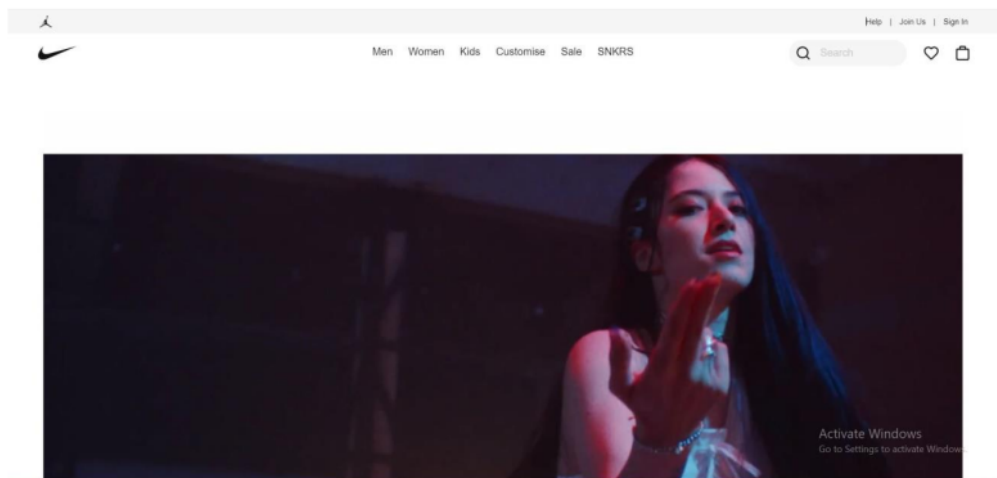


Fig 1: ADIDAS Website front cover



In this report ADIDAS and NIKE websites are chosen for the comparison and analysis according to the HCI principle and some professional techniques. Both

websites are related to popular shoes and cloth brands which are very popular all around the world. Everyone wants to get the shoes or clothes of this brand. In order to find the usability, accessibility, response time, security, user experience etc. These websites will be compared and analyzed. This report has used Shneiderman's Eight Golden Rules of Interface Design for reference to evaluate these two websites.

There are three major topic discussed in this report i.e. Evaluation of the websites, Critical Analysis of the finding and finally there will be reflection of the overall analysis. I will start evaluation of the websites by defining the areas to be compared and decide the evaluation technique and implement it on planned date.

When all the data are collected and organized after evaluation critical analysis of the finding will be discussed. And finally websites will be reflected how much it has follows the rules of HCI and How successful are they in the field of HCI. Possibly further recommendation to improve it may be suggested.

Evaluation of the Website:

An evaluation is used to compare the quality of a behavior or a work product to a list of requirements (Tomas, 2020). In this topic of the report for evaluating these two websites some evaluation criteria will be picked and justified.

Evaluation Criteria:

Websites have become an integral part of our daily lives, and they are utilized to communicate and transmit information amongst user groups. Text, pictures, music, and video are all examples of conveyed information that may be used to enlighten, persuade, sell, offer a point of view, or even change an attitude or opinion (Moustakis, 2004) . Since ADIDAS and NIKE are popular shoes brand website user often visit the site to buy shoes. In this process user have to search for shoes according to trend, rating, review, etc. and compare them with another

one. To evaluate the usability and user experience in these two websites following four evaluation criteria are chosen.

1. Navigation

What am I doing here? What is the best way for me to get to other places? What options do I have? Are there any instructions for using the site? The help offered to the user when traveling all around site is reflected in the navigation. The ease with which you can move about the site, the ease with which you can grasp its structure, and the availability and authenticity of links are all elements of navigation (Tomas, 2020). Using this criteria user experience during the navigation of different pages in the website will be evaluated.

2. Content

Is the content on the site accurate and reliable? The quality, completeness, degree of specialization or generality, and dependability of the material on the website are all reflected in the content (Tomas, 2020). Using these criteria the trust worthiness of the website will be evaluated. IT is really important to know the authenticity of the website in the modern days. A website may now be created by nearly anybody. Individuals, corporations, and governments are all becoming more interested in exploiting the Internet as a competitive tool. The application and execution of various established website rating criteria have received little attention (Selim, 2014). In case for these websites it is very important to find out the authenticity of the publisher of the product in the website.

3. Design and Structure:

Is the relevance, priority, and frequency with which information should be accessed and utilized reflected in the order in which website items are presented? Are the target users aware of the information categories? Is it necessary to have a browser that is too sophisticated to utilize the site?

² Structure and Design considers factors such as presentation order, speed, and browser compatibility (Tomas, 2020). Using this criteria the compatibility of the websites in different devices will be evaluated. To turn your business into an online magnet, you'll need to create a profitable and functional website. Without a website, internet marketing is ineffective. It must change over time in order to achieve this goal and provide an opportunity for engagement. These days, a company's website is really a content provider or an e - shop, rather than just a read-through page with contact details and a street location. Users require the ability to interact, create their own content, and share their experiences and expertise with the firm and their media platforms. Users also require push for communication and involvement (Kauppi, 2014). To address all these problems in the 21th century website should have good structure and design. This will be the third criteria for the evaluation of NIKE and ADIDAS websites.

¹ 4. Appearance and multimedia

Is information displayed in plain, simple and concise text? Are image and icons consistent, e.g., is the same icon used for the same purpose? Have graphics been designed to meet user's needs, habits and expectations? Appearance and Multimedia captures aspects that relate to site's "look and feel" with special emphasis in state of the art graphics and multimedia artefacts Is the data presented in straightforward, basic, and succinct text? Is the picture and icon set consistent, for example, is the same icon used for the same function? Have the visuals been created to fit the requirements, habits, and expectations of the users? ⁴ Appearance and Multimedia includes components of the site's "look and feel," with a focus on cutting-edge graphics and multimedia artefacts (Tomas, 2020). Using these criteria the use of icon in the websites will be evaluated.

Evaluation Techniques:

Evaluation Techniques are the techniques used to evaluate certain object or things. There are various evaluation technique present in the internet. In this report observation and questioner evaluation techniques are used in this report.

1. Participant Observation Techniques:

Observation Technique has a long history as an anthropological research approach. The value of observation is that it allows academics to observe individuals in their natural context in order to gain a better understanding of "things" from their point of view. This techniques necessitates the researcher spending a significant amount of time in the field, with the option of taking on various roles in order to obtain a better knowledge of the individuals being researched (Baker, 2006). The most common and practical form of data collection is observation. It does not demand a lot of technical understanding. Despite the fact that scientific controlled observation necessitates some technical expertise on the part of the researcher, it is still simpler than other methods. During observation, the observer can examine the correctness of the observed directly. This will help to get the more accurate data from the participants. Assumptions based on observation are not very trustworthy because human behaviour cannot be controlled or exploited in laboratory research.

During the evaluation of the websites (ADIDAS and NIKE) to understand the participant's point of view and their activities or trends that they follow while using these website participant observation techniques is used. During this process. While completing the exercise, participants will be encouraged to think freely. This is the first approach that will be utilized in this report.

2. Questionnaire Technique:

In quantitative marketing research and social research, questionnaires are widely utilized. A questionnaire is a set of questions that are asked to

people in order to gather statistically meaningful information about a certain issue. When correctly developed and conducted, questionnaires become an important tool for making statements about particular groups, individuals, or whole communities. They are a powerful tool for gathering a wide range of data from a big number of people, referred to as participants (Roopa s, 2012). A set of questions about a topic or group of topics that respondents answer is called as Questioner. There are various advantages of questionnaire. Such as it require very less to no skill to perform it. Since it required less skill we can say that it need very short training. It is also very cost effective and also cost less compared to other method of data collection. This type of technique is very suitable in the situation of pandemic where people are scattered all around the place and where collection of data by visiting in physical is close to impossible of difficult (Ahmad, 2008).

This is the second approach that will be utilized in this report. Questioner is used to gather the qualitative data from the evaluation of websites. There will be both open-ended and closed-ended questions for the questioner.

Evaluation Plan:

To compare ADIDAS and NIKE website six participants are chosen of the varying age group and of different profession to get the better result in the evaluating task. Note: Age group below the age of 18 years old are not included in this plan. Before involving any participant in any activities consent form will be signed.

For observation a set of task to evaluate the navigation process will be created. And that particular task detail will be shared among the participants. Participant will be doing this task separately. While doing this task every participant will be observed carefully and individually. During observation time taken to navigate to the given task will be noted and their expression and feeling will also be noted. For completing the task participant will be given 5 minute for each task. There will be total of 5 tasks.

As for the questioner, open-ended and closed-ended question will be prepared in the Google form and will be distributed to the participant through the email. The questioner process will be online. For this task time is not defined.

Participant user Profile:

S.N	Name	Age	Gender	Occupation	Computer Skill	Disability
1	n/a	38	Female	Farmer	Very little knowledge	No
2	n/a	35	Female	Shopkeeper	Medium Knowledge	No
3	n/a	22	Male	Cook	Medium Knowledge	No
4	n/a	21	Male	Student	Good Knowledge	No
5	n/a	22	Male	Student	Good Knowledge	No
6	n/a	22	Female	Student	Good Knowledge	No

Task created for Observation:

Task	Task Description
1	Register in the website
2	Navigate to the trending/popular section
3	Find the login button
4	Find the review section
5	Write a review of the product

Created Questionnaire

The screenshot shows a Google Forms questionnaire titled "HCI_Questioner". At the top, it displays the user's email "ramendang2@gmail.com" and a "Switch account" link. The questionnaire consists of seven multiple-choice questions and two open-ended questions. The questions are as follows:

1. How was the impression of yours when you first see these websites?
☐ Good
☐ Bad
☐ Very Good
2. Was it easy to register in the website?
☐ Yes
☐ No
☐ I don't know
3. Was it simple to locate the website's login/sign-in button?
☐ Yes
☐ No
4. Was it simple to locate the website's reviewing/rating section?
☐ Yes
☐ No
☐ Both
5. Will you write a review or give a rating to a product in any website if the method is simple?
☐ Yes
☐ No
6. Have you ever written review or rated any product in any website?
☐ Yes
☐ No
7. Is it simple to rate or review a product on these sites?
☐ Yes
☐ No

Below the multiple-choice questions are two open-ended questions:

- How do you like navigation?
Your answer: _____
- Which was the best part of the website
Your answer: _____

At the bottom of the form, there are "Submit" and "Clear form" buttons. Below these buttons, a small disclaimer states: "Never submit passwords through Google Forms. This content is neither created nor endorsed by Google. [Report Abuse](#) [Terms of Service](#) [Privacy Policy](#)". The Google Forms logo is visible at the bottom center, and a pencil icon is in the bottom right corner.

Evaluation Findings from Observation:

In usability testing, participants are asked to complete the task according to the prior questions. Six participants were given the task, and the time it took them to complete it was recorded in this graph.

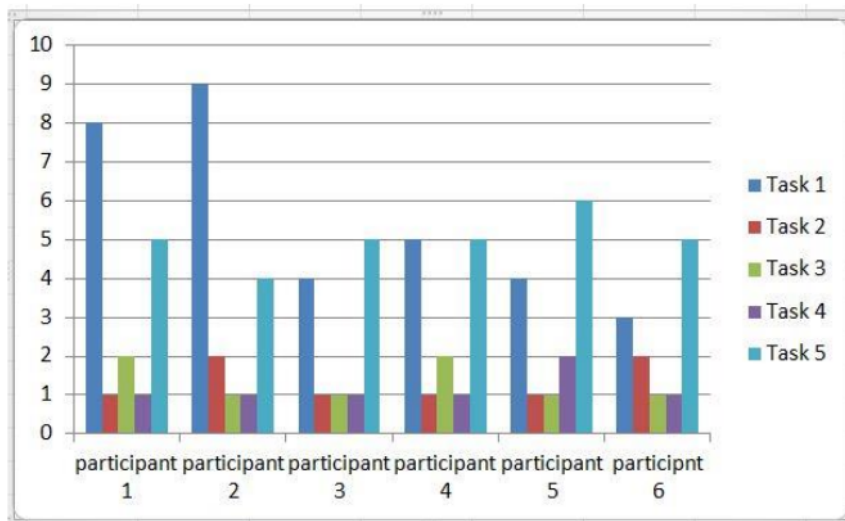


Fig 2.1.0 time taken in ADIDAS

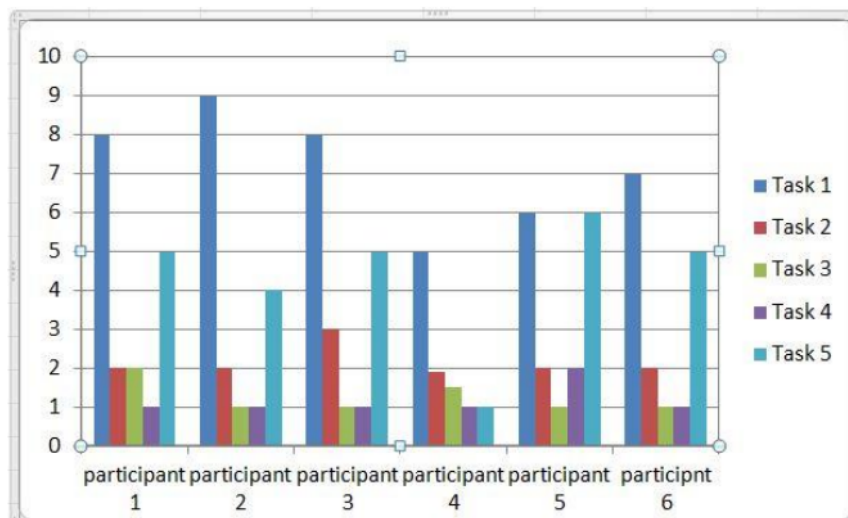


Fig 2.1.1 Time taken in NIKE

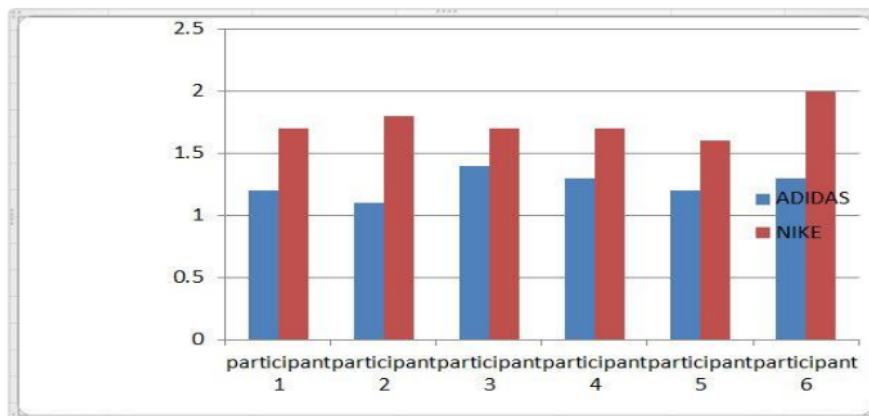
Through the above graph data and from the observation made during the task following finding are seen.

1. Participant having medium level of knowledge about computer were able to easily register on ADIDAS website using login with social account and

participant having very less level of knowledge about computer weren't able to consider this option. In Nike this option was not available.

2. Navigating to the trending/popular section was not difficult since it was present in the first page of the website.
3. Finding login page was not difficult in both websites. Still it took more time than expected because of its small font size.
4. Finding review section for the little knowledge of the website was little bit hard but they were able to find it somehow. Though there expression after seeing this task was little irritated. Participants were able to find review section in ADIDAS was faster than the NIKE.
5. Writing review for the participant in ADIDAS website was easy while in the NIKE the website was asking the user to register so it made thing little bit difficult for the participant.

The speed performance to open each site is depicted in the graph below, based on the participant user's reported results:



By observing the loading time of both website it is clear to find that NIKE website was opening slower compared to ADIDAS but they did not violate 2s rule.

These are the finding of the observation done among the selected participants.

Evaluation Findings from Questioner:

For open end Questions in questioner

S.N.	question	Users finding
1	How do you like navigation?	It was good
2	Which was the best part of the website	Navigation and Product review section

1. How was the impression of yours when you first see these websites?

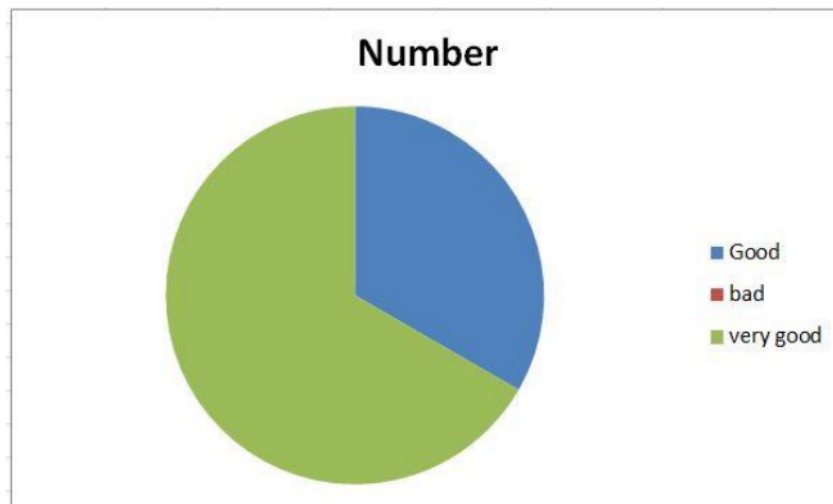


Fig 2.2.0: impression in ADIDAS

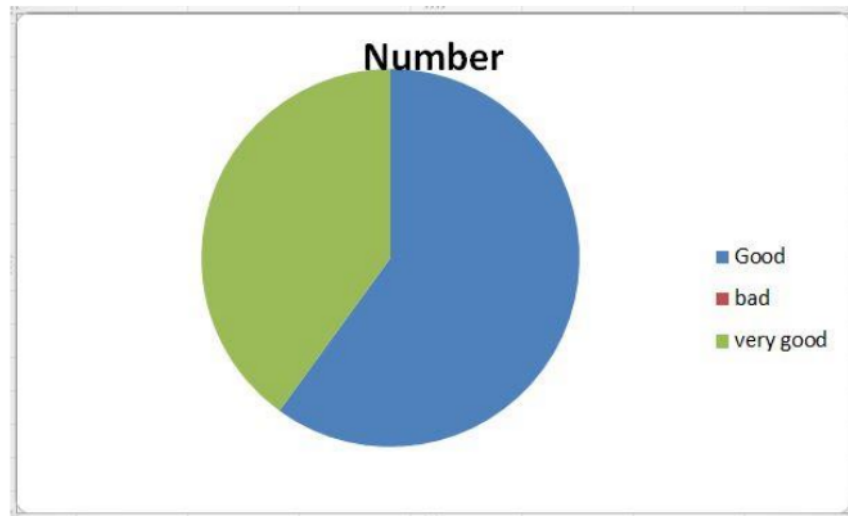


Fig 2.2.1 impression in NIKE

According to the data obtained from the questioner, the first impression of the website to the participant was, it was attractive.

2. Was it easy to register in the website?

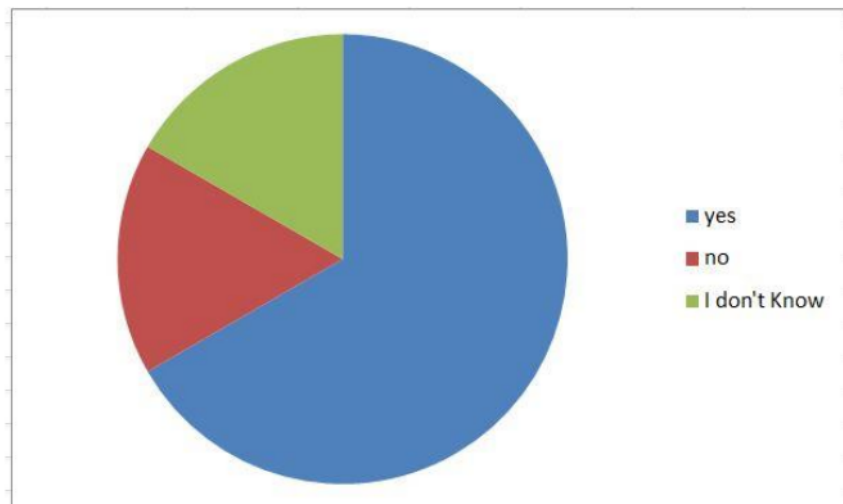


Fig: 2.3.0: register in ADIDAS website

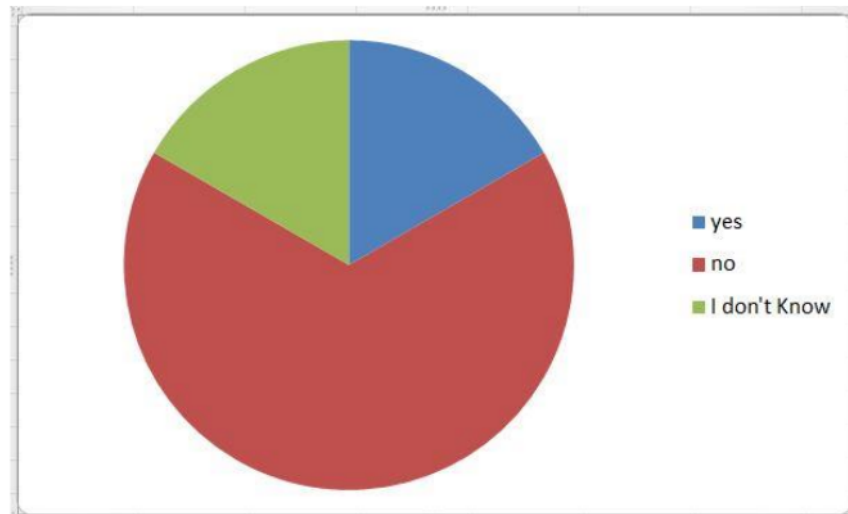


Fig: 2.3.1: register in NIKE website

3. Was it simple to locate the website's login/sign-in button?

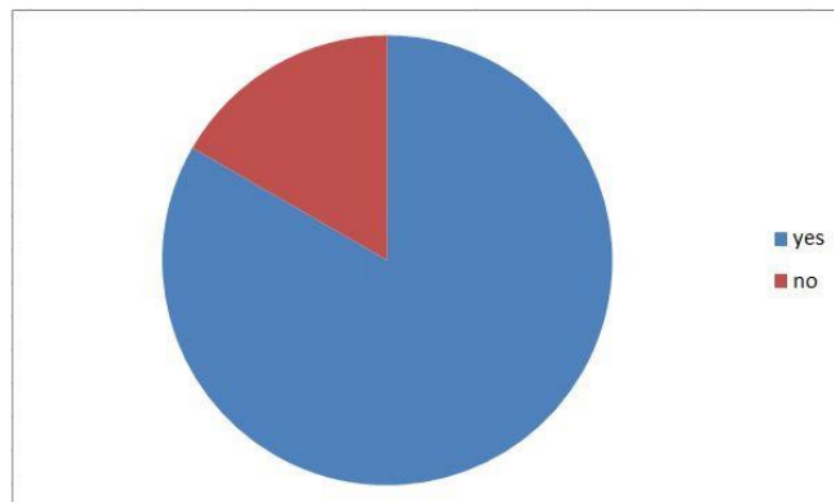


Fig: 2.4.0 finding login in ADIDAS website

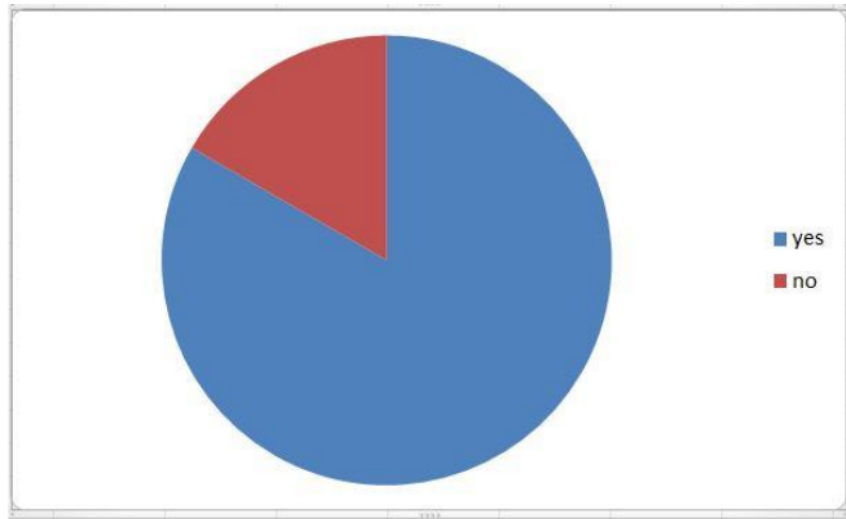


Fig: 2.4.1 Findings login in NIKE website

4. Was it simple to locate the website's review/rating section?

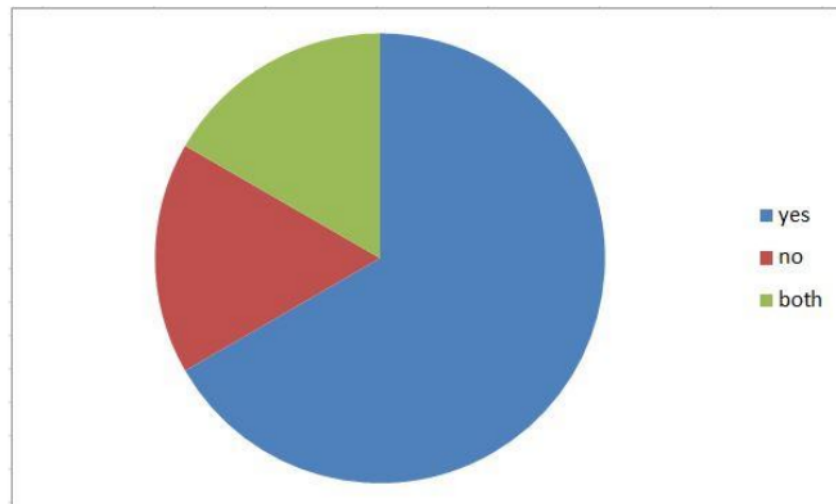


Fig: 2.5.0 finding review section in ADIDAS Website

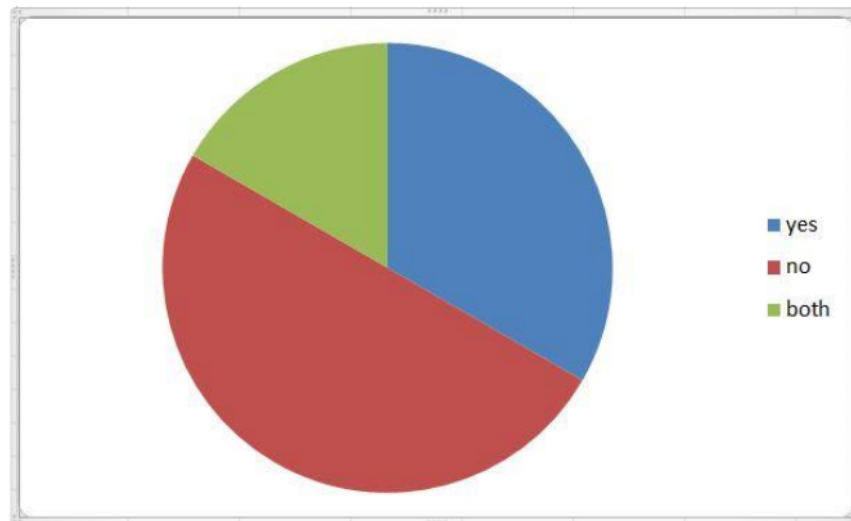


Fig: 2.5.1 finding review section in NIKE Website

5. Will you write a review or give a rating to a product in any website if the method is simple?

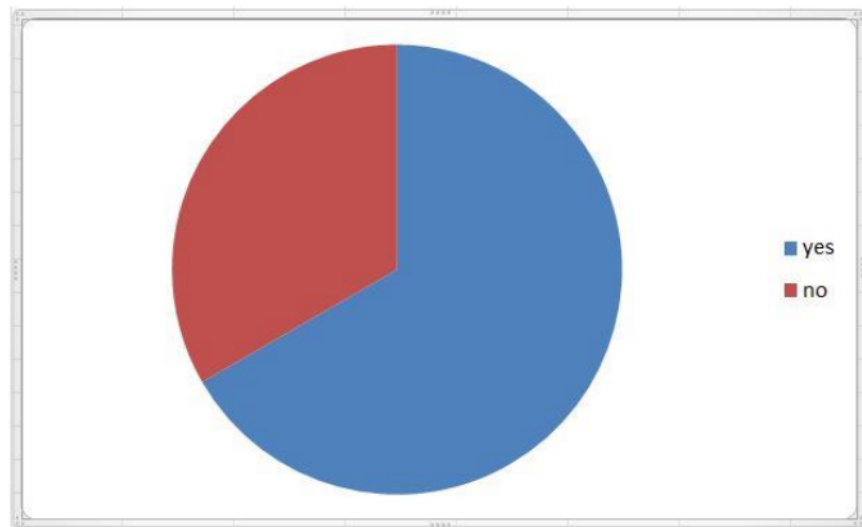


Fig: 2.6.0 write review if method is easy

6. Have you ever written review or rated any product in any website?

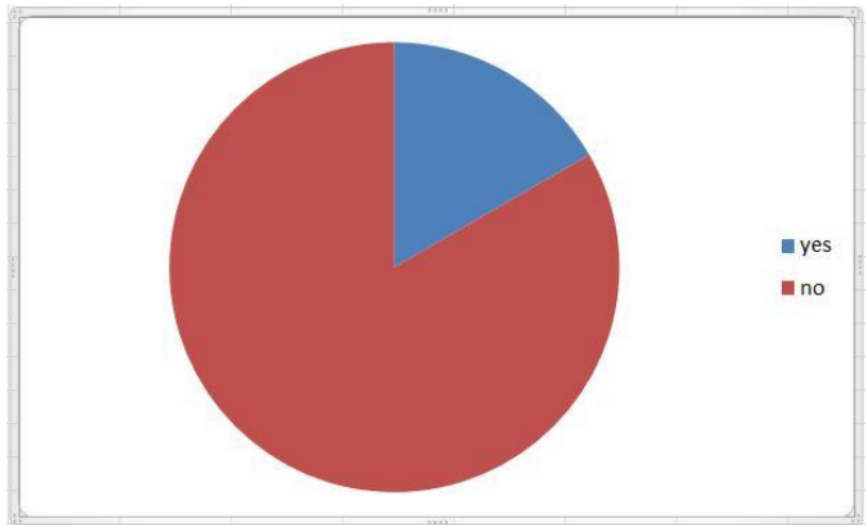


Fig 2.7.0 written review in any website

7. Is it simple to rate or review a product on these sites?

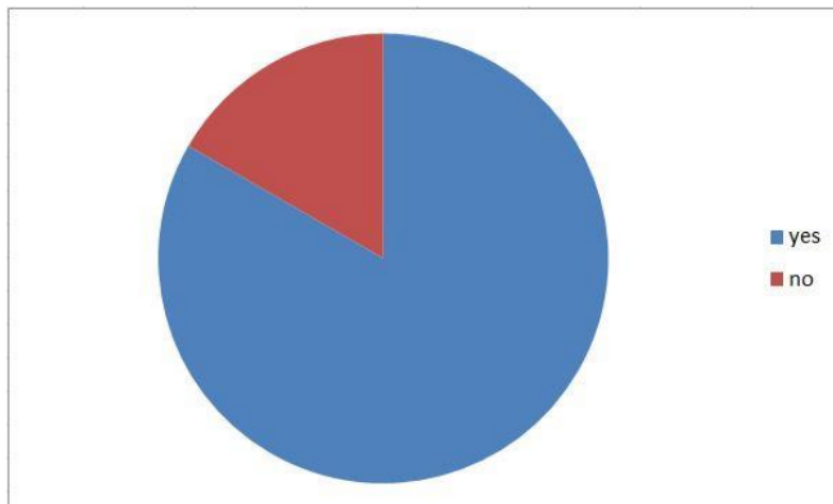


Fig 2.8.0: easy to review in ADIDAS

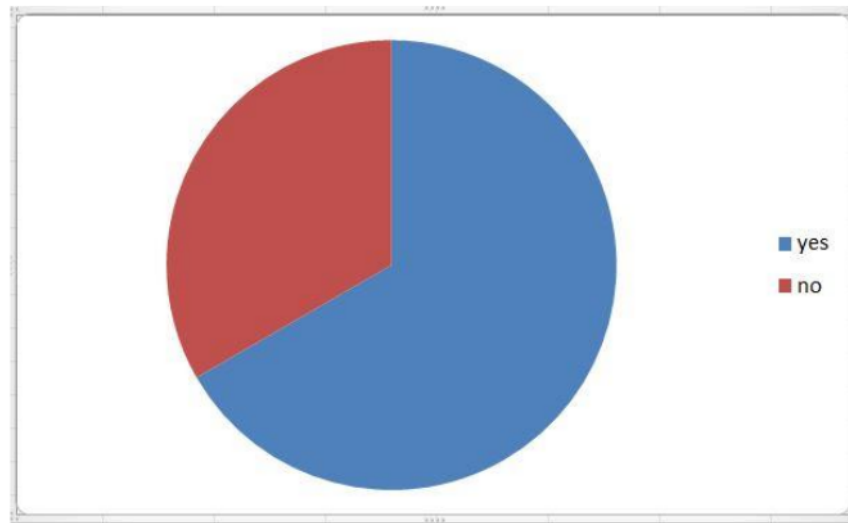


Fig 2.8.0: easy to review in NIKE

Critical Analysis and Data Discussion:

Both ADIDAS and NIKE are shoe brands whose data and information were collected through observation testing and questioner analysis techniques, in which six participants were involved and assigned to complete the tasks, and thus the tasks were recorded and the problems were discovered, and in this task. One of the most important things in navigation that both of these website are missing is breadcrumbs. A breadcrumb trail is a short navigational menu that is commonly found at the top of a page. It illustrates how to return to the homepage from the current page (CHRIS, 2021). Breadcrumbs are one of Google's favorite webpage components. In all of their SEO-related articles and instructions, Google emphasizes the value of breadcrumbs. The explanation is simple: both search engines and consumers benefit from breadcrumb trails. They let people explore a website more easily and are used by search engines to gain a better picture of how your website is structured (CHRIS, 2021). Because of all these reasons having the breadcrumbs design pattern in any website is necessary. In the observation done to the participant shows clearly that user were feeling little bit difficult to reach the same page again. For user to know where they are and

also for SEO ranking breadcrumbs design patterns should be added on both of the websites.

In one of the observation task that is register to the website, Participants having medium level of knowledge about computer were able to easily register on ADIDAS website using login with social account and participant having very less level of knowledge about computer weren't able to consider this option. In Nike this option was not available. Users can utilize their social networking accounts to authenticate with third-party content providers (CPs). They've become one of the most common ways for web sources that aren't linked with one other to share user and use statistics (Krämer, 2018). For the modern websites login with social accounts is the most. It makes things really easier for the user. So for this part NIKE website is lacking compared to the ADIDAS website.

Another task in the observation was finding the login page. In both of the website login pages were found to be pretty small icon in the top right corner of the website. Although the participants were able to find that login page very quickly but still they were taking some time to find it. For this problem if the login button were to be little bigger in size that it could be solved easily.

Data Discussion:

The 5 activities I gave the 6 participants and their responses that were discovered in the findings, as well as the problems that were recognized and discussed in the findings, are all linked to the evaluation criteria chosen for the evaluation. During this observation process I noticed that in both the websites participant were having hard time to recall where they are in the website. Examples are the time taken to find something for the second time was different. I did my own research and find out that it was due to not having any indication in the website that user can see where they are. Through this finding I was able to confirm that both website lacks something in the navigation criteria for evaluation.

As they attempt to satisfy their information demands, web users show a series of Website pages. This action is commonly referred to as navigating. Supporting navigation should be a top focus for designers, because few Web sites will thrive unless users can quickly access the material they want (D. Farkas, 2000). Also solving this problem is very easy. They just had to include the breadcrumbs design pattern in the navigation section.

As for the overall content of the website, from the observation, participants were feeling confidence in the authenticity of the products available in the website. May be it was due to the product listed in the websites were already popular and authentic in the market. The way these website were displaying products were attracting the participants and it was really interactive. Participants were found enjoying clicking, hovering, checking details in this websites because of some animation, attractive images, etc.

During the observation participant were using this website in different devices. The websites were loading fast. It did not violate the two second rule principle. Design of these websites was very attractive. The responsive design of the website was mind blowing. Participants were not having hard to play around with it. To sum up the design and structure of these websites was really good.

When participants were completing their task in mobile devices, everyone was able to identity that the bar icon was for navigation. Participants were able to find the icons for the respective task easily.

Reflection and further work:

Certain tasks are performed according to usability testing for the objective of website evaluation. I've chosen six people to participate and requested them to fill out a consent form. Two evaluation procedures are chosen in this case. The outcome is determined based on the information gathered from the questioner and observations. According to the breakdown, each participant was assigned a

task. All of the necessary data was gathered with the aid of evaluation technique choose. In most of the task it was found that ADIDAS was performing better than the NIKE website. Although it was a very small margin in different. For the first evaluation criteria i.e. Navigation, Both website's score was outstanding. Although they did not follow the certain rules such as navigation menu should not be less than 5 and more than 7. To summarize navigation was good after analyzing the result but it can still be improved by implementing breadcrumbs design patterns. In this report participant observation and questionnaire technique for gathering data was used which has its own pros and cons. There may be some better data collection methods which was possible to include to get more accurate data and evaluation. For example interview may be was better alternative for the questionnaire.

Conclusion:

To summarize, I used observation technique and questioner techniques to examine the navigation, design, performance, usability testing, and other aspects of the website, which is one of the quality indicators. Problems were examined, and options for improving the websites were suggested. Although the data collection method chosen was found to be less effective but the evaluation was made.

HCI Usability Portfolio Report

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