

The user interface and usability of Web Design The importance of design in Webb Development

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Abstract

In Web development there is Front-End where the visuals of website take place and where the design comes to life. The design of a website will give a company its digital face and the customers a smile and a welcome to the company with trust and confidence. The process of getting the perfect design for the specific site is a challenge, where you want to achieve its fullest potential with usability and attractiveness to satisfy the customers demands. There are certain principles that you want to follow if you want to avoid people leaving the website and staying instead. The most important principle is the navigation of the site. Navigation is what the user will probably look and use first when they arrive on the site. The user also needs to understand what the site is about and the different pages on the site, this gives a clear purpose of the site to the user. The user also wants to be able to skim through the site fast and find they are looking for in a effective way, so the placement of elements is very important for the usability of the site.

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1 Introduction

Design makes a website come to life and give a company its digital face for the customer. But what makes the design wake a website to life? What is it that makes a good design and what is good design? In this research you will read about this and the importance of design in Web development. Not only will you read about what makes a good design, you will also read about the opposite and what effects does the design have on a user.

The purpose of the chosen subject is to give myself a bigger knowledge and understanding about it and how to think for future projects when it comes to design. I also want the reader to get more knowledge about it and maybe wake up an interest for it that has not been there before. I want to study and give the knowledge of the importance of design and what makes a good or bad design and how it affects the user of the website.

2 Research questions

Why is design important?

The goal of this question is to get a better understanding of why design in web development is so important and why it needs to be thought of thoroughly before implementing. Is design just the visuals or is there more to it behind it?

What makes a good design?

The goal of this question is to find out the principles of what it is that makes a good design and what it is that needs to be thought of when creating the good design that will appeal the user and make them stay.

What makes a bad design?

The goal of this question is to find out the opposite of the previous question. What are the principles to think of when trying to avoid to create a bad design that will make the users leave the site within seconds?

3 Method

I'll start by gathering information about design in web development through various of articles on websites. After the information has been collected, it will be reviewed of what is relevant and what is not and how I can use it for my research questions. When the relevant information has been selected I will formulate it in a describing way for the reader to easy understand what he/she is reading. I want the articles to not be to old for me to gather information from. I want it to be a quite modern and new with a few yours on its neck. I will not use articles that are older than 2010. The chosen way to gather information is a technique that I find suiting for this study. I think I will get the information that I need to fulfill my research questions with relevant information.

4 Literature review

Why is design important?

These links gave me relevant information to the question I had and gave some important principles and aspects of why design is important and answered my question with good facts. The sites complemented each other with different descriptions that helped med come up with the best answer for my question.

- https://www.bopdesign.com/bop-blog/2011/09/why-website-design-is-important/
- https://www.webpagefx.com/web-design/why-is-web-design-important.html
- https://sunriseprowebsites.com/website-design-important/

What makes a good design?

These links where the best links that I found that gave the best description of different principles and aspects that makes a good design in web development how it affects the user experience. As previous question links they complemented each other with different descriptions that helped me formulate my answers in the best way possible.

- https://shortiedesigns.com/2014/03/10-top-principles-effective-web-design/
- https://www.spritzweb.com/resources/good-website-characteristics.html

What makes a bad design?

These links gave a description on how a bad design could be and how it affects the experience and why it is important to avoid different principles. Also here the site complemented each other with different descriptions that helped me formulate the best answer.

- http://www.brandcalling.com/our-blog/what_makes_a_good_and_bad_website
- https://www.crazyleafdesign.com/blog/15-characteristics-bad-website-design/
- https://www.fenclwebdesign.com/bad-design.htm

5 Result

5.1 Why is design important

The design determines how fast the user wants to use the site or move on to the next one in just a few seconds. There are several aspects on why design is important for a website. First of there is the navigation of the site, how easy it is to navigate through the website and find what you are looking for. If the navigation is not easy to understand and use, the user will determine within seconds if they want to stay or leave. They will most likely choose a competitor's website instead of yours. The navigation needs to be as intuitive as possible. The user needs to be able to find what he/she is looking for fast and can be able to navigate through the site with ease. So, the navigation is probably one of the most important aspects of web design because of that's what the user will use first. So it basically determines if the user stays or leaves. [1], [8], [7]

Another important aspect of importance in web design is the consistency. If your company has a logo/colors, they need to follow through out the website so they are consistent and that the user will recognize this with your company. A well thought web design that has the above with navigation and good use of company logo/colors will build trust with the user and will make the user feel positive when using the website to find what he/she is looking for. [1]

At the end, the website needs to have a good look and feel for the user. But it's not just that what's important, on every website the designer needs to take usability in account when designing. The usability should not be put a side just because of the site needs to look good. The design needs to lead the user to secondary things on the site. It can be done with such as space and typography. You can use calls for actions with the help of different colors. [7]

The design can also help the SEO – Search Engine Optimization, so to increase this you need to place the most important content on the place where the user expects it to be. When a user looks through a website it can be related to a book, you read from the top and to the right. So what might be the best spot to place the most important information would then be the top left corner. And by adding such as company key words to your HTML based text, it will help search engines to crawl through your site and place your site at a higher place and will make users find you more easily. [1]

- [1] <u>https://www.bopdesign.com/bop-blog/2011/09/why-website-design-is-important/</u>
- [8] https://www.webpagefx.com/web-design/why-is-web-design-important.html
- [7] https://sunriseprowebsites.com/website-design-important/

5.2 What makes a good design?

Purpose:

Every site has a purpose that needs to be clear for the user when they arrive at the site. The site needs to be able to fulfill the needs of every user in the most effective way as possible. The site needs to have a clear purpose and it needs to be consistent through out the page and follow through every page. [5]

Communication:

The information on your site needs to be clear and easy to read and digest. You can fulfill this principle by using organization on your page by placing your elements of information at the right place where it needs to be. Some examples with clear communication would be, that you use headlines and sublines for what is most important and what comes next. Another is that instead of a bunch of text of an information, use a bullet list. By applying this, the user will find what he/she is looking for fast and effectively. This principle will also make the site more attractive and appealing for the user and get a positive response from it. [5]

Colors:

A simple but very important principle and aspect of good design, is the right choice of color scheme the site has throughout every page. By applying a good color scheme through out the page will make the site look more professional and appealing for the user and leave them with a positive response and will also make them feel different emotions. A good way to achieve this principle would be to use around 2-4 colors that works well together. With the right choice of color scheme the site will also stand out more. [5], [6]

Navigation:

One of the most important aspect and principle for web design is the navigation that the user will use on the site to find what he/she is looking for. To achieve a good design, you need to apply a nearly perfect navigation that fits your site. For the navigation to be good for the user it needs to be as intuitive as possible so that the user can navigate with ease and find what he/she is looking for. A good rule to have when you're trying to apply "the nearly perfect navigation" is to have something called the "three click rule" in your mind. It's basically, that the user within three clicks should be able to find the information that he/she is looking for. [5], [6]

Placement:

This is also a principle you read about in the previous question that is important for web design. It's not just important but it also states your design as a good design. To apply this principle, you need to place information at the right place. So as before, it needs to be as natural for the user as possible. The best place for the most important information is at the top left corner. [5]

Load time:

Design is not just the visuals its also how it handles the visuals. A pleasing website has a smooth load time that does not take long time to load. So for an example how to increase the load time for your page is to optimize images better with size and scale. Because, if each page takes long time to load the user will eventually be frustrated and leave your page and choose a competitor. [5]

Responsive:

Another relative small but very important principle and aspect of web design is to optimize the site for smaller screens so they become responsive. Today almost everyone has a smartphone with access to internet, so if the site is not responsive it will not be as appealing and professional as on a desktop screen and will leave the user with a negative response. [5]

Simplicity:

Keep your site as simple as possible to make it more pleasing, it will not only make it more pleasing but it will help the user to focus on the message of your website. So to fulfill this, make the right use of whitespace and don't overload the site with complex design features such as "cool" animations and effects. [6]

[5] - https://shortiedesigns.com/2014/03/10-top-principles-effective-web-design/

[6] - https://www.spritzweb.com/resources/good-website-characteristics.html

5.3 What makes a bad design?

Incoherent design choices:

By having incoherent design choices in your design will make it a bad design and will not be pleasing for the user to use. An example of what this could be would be the use of inconsistencies in sizing and fonts and colors. This will result in a non professional site that will not build trust to the user and have a negative response on the user. [2]

Poorly placements of elements:

By not not following the principle of good placements of elements with information and having the opposite will result in a bad design. The reason this states as a bad design is because the result of bad placements will make the user have to scroll to find information or skim through the site, it will only leave the user confused and they will have a hard time using the site. [2]

Bad navigation:

Navigation was one of the most important principle and aspect of achieving good design for a site. So if this principle is not fulfilled it will result in a bad design or the site because of that the user will have a hard time navigating around on the site and might not be able to find the information they were after. This will only result in a frustrated user and they will leave the site within seconds. [2], [3]

Unreadable fonts:

By using fonts that are hard to read will make the users not want to stay on the site because they will get a negative response from your website that you are not to be taken serious. Some fonts are from decades ago and will not work on modern web browsers. [2]

Not responsive:

Another very important aspect and principle for a good design was that the design needs to be responsive for smaller screens. So if this is not achieved for the site it will result in a bad design because the user will not find the site appealing and professional looking on their mobile and will not build trust and will leave the site within seconds. [2]

Not up to date technologies:

One principle that will make a design a bad design is that it's not up to date with the modern technologies. It will result in that it will hurt the functionality and usability of the site for the users and will not make your site professional and appealing for the user. The site will not impress or build trust to the users because they will have the response that the site is not to be taken serious. [3]

Hard to find contact info:

A lot of user wants to find the contact information on a site easy and fast. If this not achieved and the contact information is buried within the site, it will result in that the user will have a hard time finding it with ease and will make them frustrated and probably leave the site for a competitor. [4]

Poor load time:

By having a lot of heavy images and flash effects will make your website slow and take time to load and will make the user have to wait to have to watch something they are not looking for. This will only result in frustrated users that will have a negative response and will leave for a competitors site. [3], [4]

Not optimized for SEO:

If the design does not optimize the SEO it will make it hard for the search engines to crawl through it and this will result in that your site will not be listed as high as it could have been if this would have been fulfilled and achieved. [3]

^{[2] -} http://www.brandcalling.com/our-blog/what_makes_a_good_and_bad_website

^{[3] - &}lt;u>http://www.crazyleafdesign.com/blog/15-characteristics-bad-website-design/</u>

^{[4] -} https://www.fenclwebdesign.com/bad-design.htm

6 Discussion

6.1 Why is design important?

Design is important in various of different ways. The goal of your website to catch your user's attention and curiosity so that they will stay on your site instead of going to a competitor's website. But the design is not just visual effects of a website that many will think, it's more to it than that, design is also taking usability in to account.

The things I found out and got knowledge of are both things that I have known before and things that I maybe haven't thought of before, such as that design can improve the SEO and others are more clear to me now. Through this question I found some principles that I thought were some principles that answered my question as I wanted to and gave an answer into why design is an important part in web development.

One of the most important aspects of the design on your site is the navigation. If the user can not navigate easy and understand it, they will determine within seconds if they want to stay on your site or move to the next one. The navigation needs to be as intuitive as possible and the users needs to find the information they are looking for with ease through it. This is something that I personally can relate to, because it has happened a lot of time that If I go to a site and try to find something through their navigation and if that navigation is not easy to understand and navigate through it make me frustrated and most often choose another site.

If your company has a logo and company colors they need to follow through the website with repeatable so that the users will recognize this with your company and leave them with a positive impression and make you feel trustworthy. This is something that I haven't really thought of before, well of course I have known that it obvious that there will be the company's logo and colors through the page. But that it has such an impact on us users is more clear to me now. That such a simple thing makes the site a lot more professional and appealing than it would have been and then the company's logo and colors will be more recognizable after the visit on the site.

As said above, design is not just the visual effects, its more than that. With the design you affect the SEO and improve it so that search engines can crawl better through your site and give you a better result. Before this I did not know that through the design I could improve SEO and help search engines crawl through the site better and give a better result for the site.

The answers to this question was good I think and they give a good perspective in why design is important and why it needs to be thought of thoroughly. Many might think that just making a website that looks good and is appealing is enough but there is a lot more to it as stated. I think that these answers are good for those who does not really care about the design and will give them a new and improved feeling for it and might think of it a bit more next time they build a website.

For me, these answers gave me a clearer look into the design and why it is so important. I have always known that design is important but I have never really thought of why it is important and why we need to think one extra time before implementing it. In the future, I will take these principles in mind when designing or redesigning a site, how can I increase the usability of a site? Is the navigation user friendly for users and will they find their information with ease instead of getting frustrated and leave for a competitor's site.

6.2 What makes a good design?

When you want to create a good design or trying to redesign a site, you need to think of some principles to achieve that good design that will be satisfying for the user to use and look at. It's the design that decides whether the user wants to stay at your site or move to the next one and this will be decided in matter of seconds, so its all about trying to catch the attention and curiosity of the user in all possible ways. The different principles listed in the result of this question are some of the important ones that needs to be thought of.

I think that the principles that I listed as answer to this question are some of the most important principles to think of and take into account when trying to create a good design for a website. Before I made the research for this question my mindset was kind of the opposite of what I found. My mindset was more of I wanted to make the site look as good as possible instead of maybe thinking of the small aspects and principles that makes the bigger changes. My new mindset now is that you need to think of the user's perspective and how they will see and use the website, and to achieve this I will take these principles into account.

I also think that this answer will encourage those who is not interested in design and what comes with it will get a new understanding of it and think one more time before implementing the design of a website instead of maybe just putting something together.

6.3 What makes a bad design?

Some might think that there is not much to think of when creating the design for a website or redesign a website. But there are some principles that will make a design a bad design and will leave the users with a bad impression and will not feel that the site is satisfying to use and appealing and have that professional look to build trust with the user. With this questions answer I have listed a few important principles that makes a design a bad design and why it does so. These principles will help to avoid creating that bad design and fulfill a better design. It's not just all about thinking of the principles that makes a good design, you also need to think of the opposite to create that perfect design.

The principles that are I listed in the answer are principles that I can relate to and probably many others will do the same. There are several times we have encountered them and felt frustration because of the design and left the site. I think that if the design is not good and appealing and have a professional look and feel I will not take the site as serious as I would otherwise. So these principles are just as important as the principles of a good design to take in to account when designing or redesigning a website to achieve the perfect design.

7 Conclusion

If you want make that perfect design for a website you first need to know why design is so important in web development and you need to know what it is that makes a good design and what principles there is when it comes to a bad design so that you can improve your design for the good.

In this study we have evaluated and researched about the design part of web development. We have focused on why design is so important and what it is that makes a good design and what makes a bad design. We have stated that there are more to design that what many think of it. It's not just about the visuals that is design but it is how we want the user to feel when using our site and make them understand the site within seconds by catching the attention and curiosity. We have found the most important principles to think of when trying the to create the good design and what we have found out the most important aspects in when a design becomes bad and try to avoid it.

Let's summarize each question with a little text.

Question 1 - We researched of why design is important we found out that there is more to it than just the visuals of the website, the design is the part that catch the the users attention and curiosity. You need to fulfill that within seconds, because the user decides within seconds if they want to stay on the site or move on to another one. The navigation needs to be as intuitive as possible so the user can navigate through the site with ease and find what they are looking for with ease. Your site needs to be repeatable of colors and logos so that will be recognized by the user and of course the site needs to have an appealing look and feel but have the usability in mind. We also found at the design can improve the SEO of the site by search engines in various of ways.

Question 2 – We researched about what it is that really make a good design of a website and we found out that there's a lot of important principles to take in account when trying to create a good web design for your site. The principles that where found might have been some that you or I have not though of before and that is more clear for us now than before and have changed our mindset for the next time we design or redesign a website. To summarize the principles:

Purpose:

Have a clear purpose of the site and each subpages for the user to easy know what he/she can get out from this site and pages.

Communication:

The information on your site needs to be clear and easy to read and digest.

Colors:

Use 2-4 colors in your sites color scheme to achieve a professional look.

Navigation:

The navigation needs to be as intuitive as possible for the user to use and be able to find what he/she is looking for effectively.

Placement:

Place elements with information at the right place where users expects it to be.

Load time:

The site needs to have a smooth load time and optimize images for example in an effective way.

Responsive:

The site needs to be responsive to different screen size and look as professional on the phone as on the desktop.

Simplicity:

Keep the site as simple as possible for the user instead of adding cool effects and animations.

Question 3 – The last question was about the opposite of question two where researched of what it is that that makes a bad design of a website and we found out that there some principles we have to avoid when we try to create a good design. To summarize the principles:

Incoherent design choices:

Using inconsistencies in fonts and colors for an example results in bad design.

Poorly placements of elements:

The user needs to able to find what he/she is looking for and not instead have to scroll and look for it.

Bad navigation:

If the navigation is not as intuitive as possible, the user will just be frustrated and leave the site.

Unreadable fonts:

Fonts that are hard to read will result in a bad design and fonts that are outdated will result in a non professional site.

Not responsive:

If the site is not responsive and adapt to different screens it will result in a non professional look and will not be taken serious.

Not up to date technologies:

Not up to date technologies will hurt the sites functionality and usability.

Hard to find contact information:

Contact information that are buried deep within the site will make the users that are looking for it frustrated and will result in them leaving.

Poor load time:

Heavy images and flash effects will hurt the load time of the page and will make it non smooth and will result in that the user have to wait for something they might not want to see.

Not optimized for SEO:

If its not optimized it will make it hard for the search engines to crawl through it.

8 Future work

In this study I found out something that I wanted to research more of it get better answers to than what I found out on the internet and that is how a design can affect the user in different ways and make them feel different feelings.

So for the future work I would like to create two different where one has the principles of a good design and the other the principles of a bad design. The websites are going to have the same purpose and try to achieve the same thing.

To research this, I will make people try out the both websites and afterwards fill in questionnaire with different questions of how they felt when using the site and why the felt the different feelings.

References

[1] - <u>https://www.bopdesign.com/bop-blog/2011/09/why-website-design-is-important/</u> Danielle Hill, "Why Website design is important", bop design, September 2011, 11/10-17

[2] - <u>http://www.brandcalling.com/our-blog/what_makes_a_good_and_bad_website</u> Diane Park, "What makes a good and bad website", brand calling, June 2015, 11/10-17

[3] - <u>http://www.crazyleafdesign.com/blog/15-characteristics-bad-website-design/</u> CRAZYLEAF EDITORIAL, "15 Characteristics of Bad Website Design", crazyleaf design, November 2014, 11/10-17

[4] - <u>https://www.fenclwebdesign.com/bad-design.htm</u> fencwebdesign, "Bad website design", fenclwebdesign, W.Y, 11/10-17

[5] - <u>https://shortiedesigns.com/2014/03/10-top-principles-effective-web-design/</u>
Sofia Woods, "10 TOP PRINCIPLES OF EFFECTIVE WEB DESIGN", shortiedesigns, March 2014, 11/10-17

[6] - <u>https://www.spritzweb.com/resources/good-website-characteristics.html</u> spritzweb, "Does Your Website Have What It Takes", spritzweb, W.Y, 11/10-17

 [7] - <u>https://sunriseprowebsites.com/website-design-important/</u> sunriseprowebsites, "WHY IS WEB DESIGN SO IMPORTANT", sunriseprowebsites, January 2016, 11/10-17

[8] - <u>https://www.webpagefx.com/web-design/why-is-web-design-important.html</u> webpagefx, "Why Is Web Design important", webpagefx, W.Y, 11/10-17