# Opposition on written thesis

Alexander Carlsson alecarls@kth.se

IA150X

2021-09-02

### Thesis

Creating a Wiki through User Experience Design Authors: Anna Nilsson & Johanna Hansen

# Reviewing student

Alexander Carlsson alecarls@kth.se

### Summary and Overall assessment

The thesis is generally well written with minor structural issues and spelling errors which are easily resolved by additional proof reading. The thesis presents information in a manner which is mostly easy to follow. Issues that stand out are related to the thesis introduction where mentions of User Experience design are lacking. The connection between the thesis' problem, purpose and goal could also be refined. Suggestions on how these issues can be resolved are presented in the *Abstract and Introduction* section of this opposition.

Something that can be refined throughout the entire thesis is the usage and choices of sources. Many sources are web-articles, blogs and YouTube videos from people who lack authority on the subjects covered. It should be mentioned that this does not apply to all web-articles. Suggestions and comments on how to resolve these issues can be found in Section 7 References & Sources of this opposition.

Throughout the entire thesis it is made unclear what the purpose and aim of the thesis is. This is the main issue of the thesis. It is unclear what the authors actually want to do and achieve with the thesis. In order to illustrate this issue some different thesis descriptions, collected from different chapters, are listed below:

- The abstract describes that the thesis "examines how User Experience design can be applied to the creation of a wiki in order to ease the acquisition of information".
- The research question asks how the application of User Experience design principles can help create a model for an improved wiki.
- The purpose of the thesis focuses on investigating the impact of UX design in the creation of a wiki.
- The goal of the thesis is to create a wiki.
- Chapter 1.6 Delimitations mentions that the thesis aims to conclude how UX design is best used.
- The thesis hypothesis focuses on the benefits of UX design when creating a wiki.
- Chapter 3.4 Research Process mentions ways to measure how the developed wiki compares to other wikis.
- Chapter 3.6 Data analysis states the following: "Since this thesis' main focus is to look deeper into the UX process and its benefits"
- Chapter 6 Discussion summarizes the following: "This study aimed to design a wiki according to the UX-design process"
- Section 6.2.1 states that the research question asks how UX design can improve current designs of wikis.

As a reader it is unclear if the authors aim to (1) create a model for an improved wiki, (2) measure the effects of UX design on a wiki, possibly in comparison to other wikis, (3) create a wiki according to the UX design process or (4) something else entirely.

This issue can be resolved by adding a descriptive subtitle, the problem, purpose and goal could be refined in order to make it clearer what the thesis aims to achieve. The thesis results

and conclusions should be connected to the problem and aim of the thesis. If the thesis aims to present a model, a model should be presented etc. Connecting to the same purpose and aim throughout the thesis instead of conflicting ones would help resolve this issue.

### 1 Abstract and Introduction

Apart from the issues with the disconnection between the aim and result of the thesis the abstract is well written and quickly summarizes what the thesis will cover and how the research is conducted and how it can be continued.

The introduction chapter and background section gives a broad view and provides information on the wiki part of the thesis. While the User Experience design is described in a later chapter the introduction and background should at least mention UX design and perhaps that further information on the subject will be presented later on.

### Problem, purpose and goal

A lot of content in the problem section is well written and informative. Some of the content here could however fit better in the background. This would also prevent the lack of UX design information in the background section. By making the problem section a bit shorter it would be easier to specify what the problem is and better connect it to the purpose of the thesis.

The purpose should be closely connected to the problem while the goal can be more open about the contributions the authors aim to make. This can be achieved by having the current purpose and goal switch contents. If the problem is that there is no model for a better wiki, the now moved and new purpose should be to develop such a model. If the problem is that no one has measured the effects UX design has on a wiki, the purpose should be to measure the effects UX design has on a wiki. Connecting these two in a better way will help specify what you aim to accomplish with the thesis.

#### The remaining introduction chapter

The method section has a good first paragraph. The second paragraph can be better introduced and closer tied to the problem, purpose and goal. Remind the reader why UX design is used and how. This can be done by explaining that UX design is used during the wiki development in order to develop a model, measure UX design effects or whatever the purpose of thesis is. The rest of the paragraph will then provide details about how you work with the process itself. Some mentions of the qualitative/quantitative and deductive/inductive nature of your work would also provide a better picture of the content to come. One short sentence for this final detail would suffice.

The delimitations are well explained. Just make sure that they are better connected to the problem, purpose and goal of the thesis.

## 2 Background

This chapter is extensive and presents a lot of interesting information. The background chapter ensures that the reader has understood what User Experience design is and how it works. It is however unclear if all information present in this chapter is necessary and connected to the

remaining parts of the thesis. Information here is supposed to help the reader understand the rest of the thesis. Removing information which you do not use could therefore prove beneficial. If all information presented is used, reference this information more in the later chapters as many concepts and details here are never mentioned again. This will tie the thesis together and make it feel more coherent.

Some phases described in Section 2.1.2 can be made a bit shorter as all details found here are not necessary for the reader to understand your future chapters. In the context of this thesis, does the reader have to know what a front-end and back-end developer does? Removing these details will make the chapter easier to consume and the reader will easier memorize more important details.

Section 2.1.3 describes plenty of psychology. The visual and human aspects mentioned in section 2.2.1 is mentioned later on in the thesis which is very good. Many of the other topics here are not mentioned later on. Are they still used during the development process without being mentioned or could they be removed?

The same applies to Section 2.2 which feels heavy in information which may provide too much context that is not used or required for the reader to understand your work. Some concepts here are used later on and should remain. If these sections are to remain as extensive as it currently is, more mentions of these concepts later on would prove that all these concepts are used and relevant to the thesis.

Section 2.3 presents information that clearly is relevant to the thesis as learning and accessibility are mentioned key parts of the wiki that is to be made. This section contains good information and is well written. The chapter does however start by presenting what feels like a new introduction with new takes on the thesis aim. Much of the content here could fit better in the Method chapter as this section contains what seems to be criteria for the wiki the authors aim to create. The entire chapter could also be refined by the usage of some better sources. This is discussed further in Chapter 7  $References \, \mathcal{E} \, Sources$  of this opposition.

### 3 Method

The method chapter has plenty of good information that is provided to the reader. The information about the various research strategies do however lack any statements on what you have chosen to do. Instead of explaining that it is important to choose between open- and close-ended questions depending on the situation you could explain which one you have chosen and why this fits your situation. When you discuss surveys, interviews and case studies I mostly want to know about your surveys, interviews and case studies specifically. Currently the reader gets a very broad and general description of these and has to guess how you applied these strategies.

The chapter could also be refined by the usage of some better sources. This is discussed further in Chapter 7 References & Sources of this opposition.

When writing about data collection it would be clearer if the respondent group was explained a bit more in detail. How did you find and contact your respondents, were surveys sent to people you knew or were links posted around campus? It would also be interesting to know how you chose which students were sent surveys and which were selected for interviews, were there any criteria for this?

When discussing the literature study more information on how you found sources would be a good addition. Mention databases, search engines, keywords etc in order to give the reader a good image of where your information is based. This would also make your less good sources become a bit more excuseable as you have been very honest where you have searched. Finding better sources obviously still preferred.

### 4 The first iteration

Chapters 4 and 5 are where the thesis shines. The reader gets good insight into the work process and some results are presented in a clear manner. Some of the details discussed here could however fit better in the *Method* chapter or at least be mentioned in the *Method* chapter beforehand. Interview questions should be listed in the *Method* chapter where you also could have some room to present how you developed these questions based on literature. User personas is mentioned in the *Method* chapter but it could use some additional introduction in that chapter before it is mentioned here.

Showing answers by respondents is very good as it provides a foundation for future implementations. These answers can however be translated from Swedish to English despite the language used by the respondent. Think about the availability and accessability of your thesis.

The user flow is well described and represented by a clear and very informative graph. The rest of the chapter follows this same pattern of well described details. After a heavy *Method* and *Background* chapter, the thesis would benefit from more usage and references to these chapters here. To show that you have used the concepts introduced would make these earlier chapters feel more relevant. This would also show that you have followed the User Experience design process accordingly.

Section 4.3 has a few bullets where connections to earlier chapter are very clear. You also tie back to incremental innovation which ties the chapters together very well. It is however unclear why some of the functions mentioned here are implemented. An example of one such function is the implementation of a profile page for users. Was this function requested by a user or did some literature inspire this function?

The respondent results presented are clear with a few details that could be refined. Explaining all graphs and diagrams before the results are presented gives a good introduction. Many details of how these diagrams work are however forgotten by the time the reader reaches them. Some details can me moved closer to where they are used or you can just remind the reader of details like the grading scales later in the chapter. The column charts would benefit from having the same Y-axis scales. In their current state they run the risk of being a bit misleading.

### 5 The second iteration

Changes done between implementations are clearly shown and explained. Some changes here are also missing explanations and references to user feedback and/or literature. Was the footer removed based on user feedback or literature? No feedback related to the footer was presented in the previous chapter. Was the colour theme changed based on feedback or colour theory? Tying these changes back to earlier chapters will give the thesis a satisfying flow and remind the

reader of earlier parts. This will also ensure the reader that your results are based on UX design and not changes due to personal preference. This is done very well regarding why the login button was changed. This is also done very well regarding your changes to some of the menu options.

Many of the clearly presented results that made *The first iteration* great are missing here. One example is the statement that respondents thought that Wikipedia has too much information in comparison to your prototype. How many respondents were of this opinion? Showing these clear results will make the user experiences clearer to the reader and help improve the thesis and make a good chapter better.

### 6 Discussion

The content here contributes with much value to the thesis. As this chapter includes conclusions this chapter could be renamed to *Discussion and Conclusions* to help a reader who has not decided to read your thesis in full yet. I would move some of the content here to provide a bit more structure to the thesis. Section 6.1 mentions that some fonts were changed despite no related user feedback. This information would fit better in the corresponding iteration chapters where other results are presented. Also mention what the basis of the change was if there was a lack of user feedback on the topic.

The chapter has some good connections to earlier chapters with some mentions of the visceral level and other contents from chapter 2. Tying back and summarizing the thesis even more will remind the reader and tie the thesis together further. Do not just mention that you identified a target group but remind the reader of what that target group was etc.

While much of the discussed results provide good insight some points discussed feel misleading. You mention that data shows that your users find your wiki more pleasurable than other wikis. Based on the results provided to the reader this seems to be based on one survey question. Only one iteration has these results displayed where *ease-of-use* and *navigation* have average values just below a neutral rating while *design* and *ability to find information* are just above a neutral rating. Is this point based on more questions or addition data not provided to the reader? You add to this discussion by pointing out that most users probably made comparisons to Wikipedia and that you therefore have created a wiki that is slightly better perceived than Wikipedia. Does this feel like an honest evaluation if you have no data on what your respondents made comparisons to?

The discussion can be continued by reminding the reader that this is all based on one question where respondents have expressed that it was hard to make comparisons. You should also remind the reader that you as authors did not gather any data on what wiki the respondents made comparisons to and steer the discussion into why future work should be conducted to explore this comparison further.

Apart from going against the research question, *Validity* and *Reliability* are well discussed and feel well related to the thesis.

The contents of Section 6.3 Conclusions are described as lessons learned from the project and feels more like reflections. This content is still relevant but would fit better in a chapter named Reflections. As the purpose and aim of the thesis feel unclear and since the current conclusions seem like reflections the thesis is currently missing relevant conclusions. By sorting out the issue

with the problem, purpose and goal, and by making it clear what you want to achieve with the thesis you will be able to draw relevant and clear conclusions that tie the thesis together. You have good results in order to do this.

Future work is discussed in a satisfying manner related to the construction of wikis. Some additions related to the actual research conducted would enhance this section further. You have mentioned good points to bring up here have in earlier chapters. Discuss these points here as well. Many issues are discussed in earlier chapters. This chapter is an excellent place to discuss how these issues can be resolved and how future research without these issues can provide better results.

Users found it hard to compare your wiki to others, and you found it hard to not guide users too much when they got stuck during monitored testing. Some good examples on future work could be to make a "normal" wiki with the same information as yours and have the respondents test the same tasks on both. This is sort of mentioned already which is very good. You can also find more literature on conducting interviews to get further insight into how to manage testers who get stuck. In earlier chapters you have already mentioned that you lacked respondents with disabilities. To include such respondents in future studies is an excellent point to include here.

### 7 References & Sources

The sources used in this thesis are at many places lacking. Only a few research papers are used and while some web resources are made by authoritative experts like Don Norman and Jakob Nielsen, many resources lack trusted enough authors.

The background section of the Chapter 1 *Introduction* mentions that students often give up due to a lack of wanted results. The source on this statement is a YouTube video. While the video is from a Ted-talk it is from a TedX-talk which almost anyone can give. The speaker Douglas does seem to have plenty on experience on the subject but there has to be better sources on the subject. Research papers, statistics or the like. The same applies to the remaining two sources in the section, are there no better sources on the subject than two web pages without listed authors?

Chapter 3.5.2 states that you aim to ensure a high quality of information gathered and that the original source is attempted to be located. One example of this not being the case is source 40 used when discussing colour theory in Chapter 2. The source listed is just a consultation firm and the web page used has the original source listed. Use this listed source instead.

Some web resources in Chapter 2 can be argued to be sufficient like articles from the Nielsen and Norman group or by the Interaction Design Foundation. Some resources are however more questionable. One example is source 14. An article from the UX planet does not have the same authority as a peer reviewed paper from the IEEE. The author Saadia Minhas is described as a UX Design Passionate and may have plenty of experience but should not be a source in a thesis of this kind. Interaction design and User Experience design are popular subjects and finding research papers by good authors should not be an issue. Good sources can be found by using the various databases and resources provided to you by KTH.

In Section 2.1.1, all information on the Design-, Implementation- and Evaluation phases are all cited by one source. This could be okay if it was a very authoritative source and if it is

clearly stated that these phases are all based on one source. An example of how this could be made clear is something along the lines of "The following phases are described according to the definition by Saadia Minhas in her article ...". This is very well done in Section 2.1.3 where Don Norman is mentioned and cited in this way.

Mapping, Signifiers and the final half of Feedback in Section 2.1.3 are missing sources completely. I would say these parts need sources. The second paragraph in Section 2.2 is also missing sources. The sources present here only seem to be related to one sentence about wire-frames. The second paragraph in Section 2.2.2 is missing sources. Section 2.4.1 only has sources for the first sentence in a big paragraph. You as students are not authoritative on these subjects and by adding proper sources you and your work becomes more trustworthy.

Chapter 3 Method talks a bit about how you conduct your research. Research about how to conduct research is a well explored subject and finding proper research papers on this topic should not be an issue. This chapter does have an increase in research papers and articles from scientific databases which is good. Some places still suffer from the usage of YouTube videos and blogs as sources. Section 3.3.2 has three paragraphs that are only cited by a YouTube video by Robert Barcik. With this much information based on one source you should give more credit in the text, much like what you have done with Don Norman in some sections. I would still look for a better source as YouTube is a questionable source in itself. I could not find any good information on Robert Barcik himself which does not make the source more reliable. Sampling techniques, which he discusses, are well explored. Use the resources provided by KTH to find some better sources on the subject.

This applies to many of the sources used in Chapter 3. Try to avoid blogs and web articles unless they are made by authors with authority on the subject. Using sources from the IEEE and other scientific publications will enhance your thesis and contribute to your trustworthiness throughout the entire thesis.