

CS 846 - Software Documentors' Mindset

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1 PROBLEM BEING SOLVED

Software documentation is an essential part of being able to learn and share information about how to use the many new and emerging technologies. Creation of such documents can be tedious and time-consuming including the aspect of decision-making surrounding content and presentation. With documentation being so costly, the authors pose the question: why and how do people voluntarily contribute software documentation online?

2 NEW IDEA

The authors approached this problem using a study split into 5 parts: First, they directly invited documentors from three different platforms for a semi-structured interview, these platforms being Github, Youtube, and WriteTheDocs, a documentation centric community. The semi-structured interview consisted of more open ended free flowing discussions around the interviewee's journey into documentation and their creation process where the respondents were allowed to steer the conversation to whatever they may consider relevant. The qualitative analysis of the interviews quickly revealed three dimensions of focus: motivation, topic selection techniques, and styling techniques. These three dimensions were

then utilized for the following interviews as well as in later analysis. After the interviews the authors card sorted by each dimension and grouped related considerations into one of five mindsets: professional development, prioritizing personal boundaries, novelty and value addition, growth and visibility, and content-oriented. Finally, to validate their findings, the authors designed a questionnaire for the interviewees to respond to where they were asked to what extent they agreed to having experienced the provided mindsets as well as providing space for feedback in the end for other mindsets and additional comments.

Towards the end of the paper the authors discuss some results from the validation questionnaire. Firstly, because the mindsets found were neither exhaustive nor mutually exclusive, some documentors displayed more than one mindset in their creation process and additionally some additional mindsets respondents provided either did fall in the cracks of definitions or due to how intentionally vague the descriptions of mindsets were, the definitions of mindsets differed between the author and the respondents. Further, many documentors discussed difficulties around pursuing considerations as well as their strategies to mitigate these issues. Some of these included difficulties around understanding their audience for a Growth and Visibility mindset and coping with the high workload of creating videos for those with a Prioritize Personal Boundaries mindset.

3 POSITIVE POINTS

I think the topic is very interesting. I believe this topic few would have explicitly thought about before, that being the differences in documentation style being attributed to several archetypes of mindsets as defined by motivation, topic, and style.

I quite liked the validation step of sending a questionnaire to validate findings as well as providing a feedback section that provides an avenue for further research and comments.

I liked the variety of platforms that the respondents used. Youtube, Github, and WriteTheDocs provide content in different forms and introduces different viewpoints to the study.

4 NEGATIVE POINTS

Unfortunately the scope of the study is very narrow. There were only 26 respondents. This is further diluted due to the respondents being split by platform, experience in programming and documentation, as well as technologies covered.

As noted in the reflection by the authors, because the mindsets aren't exhaustive and are intentionally vague, mindsets that respondents have defined in their minds can easily fall through the gaps of how they interpret the mindset categories, even if the authors intended the motivations to fit one of the mindsets by their own definition.

5 FUTURE WORK

I would love to see if research can be done on how fragmented documentation is. One of the mindsets discovered is Novelty and Value Add that is motivated by inadequate current documentation and even through this study three different platforms were covered to look for documentors. From personal experience it can be very difficult to find specific documentation for certain things and can take a lot of scouring different platforms to find an answer.

Because of the lack of quantitative results in this paper I would be curious to see if there is a correlation between what platform is being used for the documentation and the mindsets of the documentor. I would expect for example that those on Youtube would be more likely to focus on Growth and Visibility.

6 RATING

4/5. I think the topic is really interesting and it seems to support the previous works as listed in the paper. Unfortunately there is little supporting evidence, especially due to the smaller scope, but the results could very well be used as a foundation for further research.

7 DISCUSSION POINTS

What is your experience when looking for documentation to answer a question? How does your process change depending on the question?

Is it feasible to have a central documentation repository by technology as to streamline the search process?

Do you think that the mindset categories would change significantly depending on what population of people are asked? In another way, are many of these mindsets only relevant because they asked volunteer documentors?

8 IN-CLASS DISCUSSION

Starting with my point on the experience on looking for documentation, we discussed that it really depends on what you are looking for. As an example, with windows problems the official windows website is too not useful in that it has too little detail whereas a forum like Reddit may be better suited for this. Towards a more software oriented view, LLMs are a good resource as they tend to coagulate knowledge from the internet but of course looking at the sources themselves is important.

An interesting point to consider from all this is the impact of the uptick in LLM usage as a search tool on the amount of blogs

and perhaps some of the motivations listed in this paper such as "inadequate current documentation". LLMs may be able to both fill in the gaps between sources of documentation as well as improving the search process.

As a small nitpick on the methodology of the paper, the documenters are referred to as volunteers however, Youtube, one of the chosen platforms of study, can provide monetary motivation for creators on their platform. It could be to the point that the work is less voluntary and more like a profession. However, we agree that although it is always a blurred line this definition disparity does not impact the results of the paper.