

CREATING A COMMUNITY BASE FOR WIKID; AN INDUSTRIAL DESIGN ENGINEERING wiki

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ABSTRACT

Even though almost all information that an industrial designer may need is available somewhere on the internet, finding specific information can take quite some time. Industrial designers constantly require information from a variety of sources, for example construction guidelines, emotional material properties, price estimations for components and a checklist for a specific design technique. Finding this kind of information during the design progress can seriously impact the time spend on designing. That is why we have been developing a tool for collecting design relevant information in such a way that it can be easily and quickly accessed by anyone, in order to meet the desires of industrial designers. This was the creation of WikID, the Industrial Design Engineering Wiki that aims to offer information in a compact manner, especially targeted at industrial designers (www.wikid.eu). Because WikID is based on the wiki-principle it relies on its users to fill it with data, and will therefore need a good community to ensure information is stored quickly and in an orderly fashion. This paper will explain how a community is usually created amongst different wikis, explore ways to speed up the community creation process, and report the lessons learned while attempting to build and speed up the creation of the community for WikID.

Keywords: Industrial Design Engineering Knowledge, Design Wiki, Community Base for Wikis

1 INTRODUCTION

Since the rise of the internet as a source of information it has become increasingly popular over time. While at first this appeared to be a great phenomenon, in time it became clear that even though almost all information that an industrial designer may need is available somewhere on the internet, finding specific information can take quite some time. Industrial designers constantly require information from a variety of sources, and unlike in any other profession, industrial designers require only basic and often general information. Finding this kind of information during the design progress can seriously impact the time spent designing. That is why we want to find a way to offer design relevant information in such a way that it can be easily and quickly accessed by anyone, in order to meet the desires of industrial designers. One of the initiatives was the creation of WikID, an Industrial Design Engineering Wiki that aims to offer information in a compact manner, especially targeted at industrial designers. Whilst Wikipedia already offers a lot of this information, there is a distinct difference between WikID and Wikipedia; Wikipedia aims to be an encyclopaedia, and therefore tries to be as complete as possible. WikID aims to be a design tool. It offers information in a compact manner tailored to its user group, being the Industrial Designers. Another initiative is for example the development of an inspiration database by Vergeest e.a. (2008).

2 PROBLEM AREA

Because WikID is based on the wiki-principle it relies on its users to fill it with data, and will therefore need a good community to ensure information is stored quickly and in an orderly fashion. This paper will explain how a community is usually created amongst different wikis, explore ways to speed up the community creation process, and report the lessons learned while attempting to build and speed up the creation of the community for WikID.

3 APPROACH

At first, after some literature study to see how communities are usually created amongst other wikis, the potential user base is estimated, and with that the viability of WikID. Secondly in the action research

a plan has been created based on the experience of other wikis to attempt to speed up the creation of an active community for WikID, the plan will be followed step by step and by close observation of the community the plan will be altered if necessary.

4 LESSONS FROM OTHER WIKIS

According to Meatball (Usemod-WikiLifeCycle, 2007), a community of active practitioners of online communities, a wiki goes through several stages in its life. Listed below are the first 10 stages:

1. Founding. This phase includes selecting, installing and configuring software.
2. Invitation: declaration of purpose.
3. Seed posting by founder(s) on several subjects to get starting mass.
4. Wiki community building: creation of a close knit group of pioneers, previously familiar with each other, at least by reputation.
5. Notable individuals: interesting individuals are found.
6. Behavioural norms are formed.
7. Metcalfe's law ("the value of a network is proportional to the square of the number of people using it") leads to explosive growth.
8. Unexpected behaviour arises.
9. When the community becomes so large that a user knows only a fraction of it, community standards and unwritten rules stop working. The group loses focus and things will fall apart.
10. Crossing the tipping point. This stage is characterized by the arrival of new members that have not been invited by former members.

The creation of a user base for a wiki is characterized by a relatively long period of seed posting to ensure there are enough articles for a potential user base to see the potential and use of a wiki. How long it takes for a wiki to become self-sufficient depends on the user base, if we look at Wikipedia (the most popular wiki) we see that it started with 0 articles but passed 1000 articles within a month (History of Wikipedia 2002). This extreme growth had several reasons: First of all Wikipedia was one of the first to use the wiki concept, and therefore sparked curiosity. Secondly Wikipedia promoted its concept on SlashDot, a very large technology news community. Since the community of SlashDot liked the concept and a lot of members had specialist knowledge, the growth of Wikipedia became explosive. Because of the explosive popularity of the Wiki concept, the internet is filled with wikis. Most of those wikis are still almost completely empty, and a user base is nonexistent. This leads to the conclusion that simply creating a wiki with a website will not generate the desired user base to ensure the wiki is viable on its own. Some other successful wikis have become so successful both by being launched within an already active community, and with a specific purpose. A great example of this is DocuWiki (DocuWiki 2008); DocuWiki focuses on documentaries and was launched at an active bulletin board about documentaries. Because its "mission" was clear and it was launched at an active community, DocuWiki was able to become viable. Another great example that shows how popular wikis are is WetPaint (Usemod-WetPaint 2008), wetpaint allows users to anonymously create and host a wiki page for free. It claims to have over 990,000 pages. The most successful wikis mentioned in this report are characterized by hard work behind the scenes; a lot of unsuccessful wikis found on the internet have become unsuccessful because they were left to manage on their own. Usually wikis require a period of roughly 2 years of seed posting by its founders (Usemod-SeedPosting 2008-07-02) to become successful.

5 THE VIABILITY OF WIKID

Before starting to develop WikID it has to be certain there is a need for an industrial design engineering wiki. According to previous research (Olieman et al., 2008) there is a great need for this kind of wiki amongst industrial designers. Since WikID will be launched at the faculty of Industrial Design Engineering (IDE) at the Delft University of Technology (DUT) some estimates can be made as to what the size of the potential user base might be. According to previous research (Olieman et al., 2008) about 1 to 2% of all users usually contribute to a wiki. In WikID's targeted user group there are roughly around 3500 industrial designers that have gotten their degree at the Delft University of Technology, there are approximately 1600 students at the same faculty, and there are about 5000 designers from other design schools in the Netherlands. Therefore it is estimated there are around 10,000 industrial designers and

design students in the Netherlands. That would result in a total potential active user base of around 100 to 200 people. This should be enough for a successful national launch.

6 ACTION RESEARCH: LAUNCHING A WIKI

In the Action Research a different approach to research was used. Normally a wiki takes about 2 years to become self sustaining. However it is interesting to see whether this process can be speed up. In order for a wiki to become self sustaining there has to be an active community base present. For WikID a launch plan has been created that should not only guarantee WikID is announced in the most efficient way, but also allows moderators to alter the plan based on community observations. The first two stages of the launch plan are designed to get WikID ready for opening; the following two step is designed to allow for community observation.

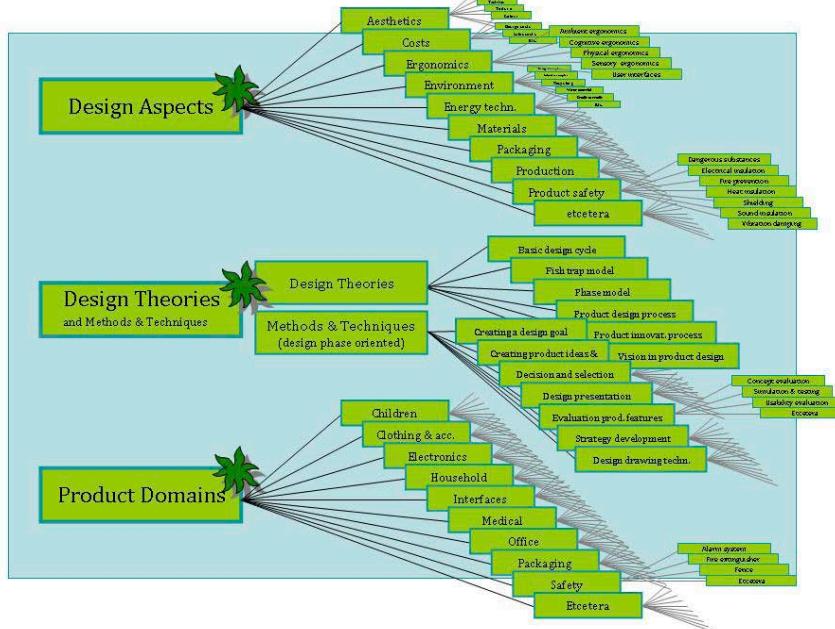
1. Core-version WikID
2. Debugging
3. Pioneer Phase / Prelaunch
4. Launch (national and global)



vital

1.1 Core-version WikID

In the core version of WikID all the



systems have been implemented.

The tree structure that allows users to browse WikID in search of inspiration has been implemented. This structure is the result of former studies (see Vroom et al 2006) and consists of three main entrance structures: 1) Design aspects (in fact a checklist for the list of require-

ments); 2) Design theories, methods & techniques (which are oriented according to design phases). This structure is in fact a design methodology study guide); 3) Product domains (knowledge about use environments, other products in an area etc.). These three entrance structures are elaborated in tree structures (figure 1).

The main page has been created, the basic functions of *mediawiki*, a software kit that comes with the basic tools to create a wiki, are working and there are around 100 articles (mostly stubs) already present.

6.1 Debugging

Even though WikID is almost ready to be opened to the first group of users, the first task ahead is to

debug the system. Whilst this is mostly a technical phase, it contains some elements relevant to the community. During the debugging phase several help pages and getting started pages are created in order to ensure users will be able to work with WikID without any initial training. This is important since requiring initial training will lower the potential user base. Help pages are created on all the basic steps needed to create or edit pages on a wiki: Getting started; Quick Reference; Text Formatting; Links; etc.

1.2 Pioneer Phase / Prelaunch

Before launching WikID there is a need for a pioneer group at first for several reasons:

- Observation of the first user base in order to establish any shortcomings of WikID in advance.
- Seed posting; in order for WikID to be successfully launched it is necessary it contains a good amount of starting articles, so new users have a reason to visit WikID.
- Debugging; it is likely there are still technical shortcomings on WikID that have not yet been noticed. The Pioneer Group can be a great way to find these problems in advance.
- Feedback; some decisions for WikID have been made based on both research and personal ideas, such as the use of templates. Are these decisions actually in the best interest of first time wiki users?

As a pilot, we will first try and shape ten members of the pioneer group into active members by trying several methods to improve their activity. As said earlier, some 1000 people are needed to ensure a starting active community of around a dozen people (1–2%). Because of this decisions have been made to prelaunch WikID within the Delft faculty of IDE to end up this prelaunch phase of WikID with a dozen of active users. In order to ensure there is a form of supervision on both the content and the community we need a moderation system. Meatball suggests spreading several aspects of power over a group of people is the best way to ensure a moderation system on a wiki (Usemod, June 27th 2008). This system has already been ensured by making sure the current group of moderators are the five persons currently responsible for the WikID project. With this group (consisting of both students and staff), the notion of abusing power has been largely disabled.

The screenshot shows the homepage of the WikID website. At the top, there's a large 'WikID' logo with a stylized orange and white circular icon. Below it, the text 'THE INDUSTRIAL DESIGN ENGINEERING WIKI' is displayed. On the right side of the header, there's a 'Log in / create account' link and a 'fudelft' logo. The main content area starts with a 'Welcome to WikID, the Industrial Design Engineering wiki' banner. Underneath, there are three main boxes: 'Most popular pages', 'Most active users', and 'Browse by category'. The 'Most popular pages' box lists 'Main Page' (5,001), 'Visual aids' (421), and 'Bachelor design guide' (404). The 'Most active users' box lists 'Jelierse' (1,107), 'Amoleman' (275), and 'Eddypedy' (264). The 'Browse by category' box lists various design-related topics. To the left, a sidebar contains links for 'NAVIGATION', 'BROWSE BY', 'WIKID TOOLS', 'SEARCH', and 'TOOLBOX'. To the right, another sidebar provides information for 'First Time Using WikID' and 'Statistics'.

By giving staff members the opportunity to become familiar with WikID in advance, offering them special privileges to protect pages (Jelierse e.a., to be published in 2009) and help ensuring the information on WikID is correct, a group of users is created that are essentially half-mods; they have more rights than “normal” users, but are not as powerful as actual moderators (at least not initially, it’s highly imagin-

able that at some point in time more rights will be shifted to these halfmods depending on WikID’s needs). After launching WikID amongst staff members and given them the opportunity to acquire extra

privileges, WikID is launched amongst students with an announcement on BlackBoard. After the first week emails have been send out containing a newsletter and several questions needed for feedback. The feedback made clear that some of the pioneers were not sure where to begin when creating a page. Some respondents pointed out that they were having problems understanding the *mediawiki* syntax. Whilst this is a phenomenon that should be taken into consideration it is a problem that is common when introducing new software solutions. It is expected that these problems will disappear over time..

1.3 Launch

When the prelaunch has been a success, and a stable starting community has formed, WikID is ready to be launched on a national level. The Delft faculty of IDE has tight ties with other Industrial Design Engineering educational institutes in the Netherlands, which makes it possible to have a high level of control over the national launch. When WikID has been launched nationally, and the user base is under control, WikID is ready to be launched globally. It will be nearly impossible to retain the same level of control over the global launch as was possible with the prelaunch and the national launch, which makes having a well ordered moderating system even more important. WikID should only be launched globally if it is able to manage on its own since it will be impossible to manage WikID with the current regional moderating system when launched globally.

7 CONCLUSION

As became clear in the prelaunch phase, it is hard to get people to contribute to WikID. Since only about 1 to 2% of all users become active users, at least 1000 people are needed to get an active pioneer group of around 10 people. In order to ensure such a large group WikID is prelaunched amongst staff members and students of the Delft faculty of IDE, since that means over a 1000 people are contacted. In order for such a launch there is a need for some sort of moderation system. That is why staff members might acquire advanced rights so that they can serve as a form of moderators in their area of expertise. The current WikID team, which consists of five people (3 students and 2 staff members) are the system's moderators.

8 DISCUSSION

It is common to spend about 1 to 2 years seed posting by the founders of a wiki. A wiki needs information for it to become popular, so there might be a good chance WikID will not launch any faster despite of our efforts. It has been suggested in some of the feedback that people are not sure what they would gain by contributing to a Wiki. Several methods of rewarding, such as highlighting the work of active members, have been mentioned, and it might be interesting to see whether such a reward system is viable, and will increase the number of active users. Another way is trying to better facilitate contributions. One way is by offering a tool for modifying general information on Wikipedia into design relevant information in WikID. Thereto a tool is already created and available in WikID (Jelierse et al., to be published in 2009). We are working on guidelines on design relevancy in our recent studies to assist the contents selection when using this tool. Furthermore we keep on seed posting and will launch WikID further in 2009.

Finally it has been mentioned there are other ways to spread power amongst users. It might be interesting to spend some effort in finding the optimal system for WikID once it becomes self-sufficient.

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