WHAT MOTIVATES SINGAPOREAN WIKIPEDIANS?

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Introduction. In this paper we focus on the people who make Wikipedia possible, the Wikipedians. Why do they bother? What motivates them? But as well as focusing on the actors, we want to focus geographically, looking at Singaporean Wikipedians in particular. Why have Singaporeans gotten involved with the project? Do their motivations differ from people elsewhere?

Method. An email survey was constructed and distributed to all those registered as Wikipedians in Singapore. Fourteen valid responses were collected representing a return rate of eleven percent.

Results. Singaporean Wikipedians tend to be young and predominantly male. Their initial activities on Wikipedia usually involve simple editing, but many have moved on to develop articles of their own. For the most part they are internally, rather than externally motivated. When asked whether they consider some Wikipedians more successful than others, most concurred. They believed that resources, technical expertise, and subject knowledge were key elements in achieving such success.

Conclusion. The findings suggest the existence of hidden barriers to entry that may need to be addressed by information professionals. They also augment other studies which have shown that Wikipedia's socio-technical structure is exceedingly important to its successful operation.

Introduction

Wikipedia has fast become one the most visited sites on the Internet. It has also spawned a great deal of debate. This controversy stems of course from Wikipedia's nature as a freely editable encyclopedia, the capability of which grants anyone the ability to add to the stock of knowledge anytime. Traditionalists argue that this represents a significant loss of quality control that makes it use inherently suspect. Others are more tolerant, seeing it as liberating medium. In this paper, however, we do not plan to engage in the argument over the accuracy or otherwise of Wikipedia. Instead we wish to focus on the people who make it possible, the actual Wikipedians themselves. Why do they bother? What motivates them? These are the questions to be posed here. But as well as focusing on the actors rather than their content, we also want to focus geographically, looking at Singaporean Wikipedians in particular. Long known as an island of pragmatists, why have Singaporeans gotten involved with the project? Do their motivations differ from those elsewhere?

Related Work

Understanding the motivations of Wikipedia contributors has not been as intensively studied compared to the accuracy of the online encyclopedia as a whole. This is not surprising. Whereas it is easy to download Wikipedia pages and even whole dumps of the site, persuading Wikipedians to take part in an academic study is much more difficult. Nevertheless a few studies have been carried out with Bryant et al. being one of the earliest (Bryant 2005). Using a combination of legitimate peripheral participation (LPP) theory and activity theory they analyzed telephone and email interviews conducted with nine Wikipedians in order to understand how Wikipedia users became Wikipedia content providers. LPP theory suggests that people become members of communities of practice by inhabiting at first a peripheral area of interaction in which they partake of many of the low-level tasks that contribute to the operation of the community as a whole. The categories used by activity theory to describe socio-technical systems were

then used as a framework for describing these changes in the particular case of Wikipedia. These authors discovered distinct differences between novice and expert Wikipedians. Novice Wikipedians were generally motivated just to find information, viewed Wikipedia as a random collection of articles, primarily confined themselves to minor editing, did not avail themselves of the talk histories and edit histories, and had little awareness of the complexity of social rules that Wikipedia has developed. Expert Wikipedians on the other hand, appeared motivated more by a vision of the common good, saw Wikipedia as a community, embraced a variety of editing and non-editing tasks, deeply integrated talk pages and edit histories into their repertoire of online activities, and became aware of the norms structuring Wikipedian interactions. They concluded by noting that "informants told surprisingly consistent stories of how they moved from the periphery to the center of Wiki-activity. These patterns suggest a new emerging genre, not only of information resource, but of collaborative activity" (Bryant et al 2005, n.p).

Joachim Schroer and Guido Hertel (2007) developed a web-based questionnaire which was completed by 106 contributors to the German Wikipedia to ascertain the effects of the nature of Wikipedian tasks and the social context of Wikipedia on the degree of participation. The Job Characteristics Model developed by Hackman and Oldham was used to test for the effects of task while the work of Klandermans on social movement motivation was used to test for those of social context. They found that the nature of tasks did have an effect on participation; namely that perceived task autonomy, significance of the task, and skill variety were positively correlated with heightened levels of participation. A perhaps more interesting finding concerned the social context of Wikipedia participation. Here, Schroer and Hertel examined two of the four factors that Klandermans saw as motivating participation in social movements; namely, the costs and benefits (to the individual), and social identification (feeling of belonging to a community). It was discovered that the overall balance between costs and benefits for individual Wikipedians was negative. Wikipedians, in other words, tended to think that the costs of their work outweighed the benefits they received. And there was no clear link established between social identification and participation.

Another study of Wikipedian behavior was conducted by Christian Wagner and Pattarawan Prasarnphanich (2007). They emailed a survey to 140 of the most highly active Wikipedia editors, that is, those having over a hundred edits to their credit. Of these, close to thirty percent chose to respond. Wagner and Pattarawan wanted to test the hypothesis that Wikpedia's success is due to human altruism. They did so by asking three questions about motivation. In the first of these respondents were asked to classify their motivation as either individualistic in nature or more collaborative. Second, respondents were asked if they seek short or long term benefits from their contributions. And finally, respondents were asked if they believe that their work was capable of getting others to participate in Wikipedia in the future. Collaborative, long-term oriented and optimistic respondents were then seen as altruistic in nature while those demonstrating the opposite characteristics were labeled as selfish. In their findings, Wagner and Prasarnphanich found that individual motivations were largely absent from the responses. Instead the respondents tended to label themselves as collaborative in their motivations or as displaying a combination of individual and collaborative motivations. Similarly, when it came to the second question, respondents tended to avoid labeling themselves as motivated by short-time concerns and instead either opted for long-term or a combination of both. Finally, most of the respondents were optimistic about the ability of their work to get others to participate. They conclude that selfish motivations are generally absent from Wikipedia and argue that this is due to its technological design which "suppresses much … reputation and recognition building" and leads to "those with stronger selfish tendencies [to] self-select out of the Wikipedian community"

Method

The study looked at those registered as Wikipedians in Singapore. This category included 274 users. Of these, 127 displayed contactable email addresses. Using this information, a brief statement of research purpose and survey questionnaire was emailed to each. The survey was designed to provide qualitative data about:

- the various forms initial participation in Wikipedia takes

- how the character of participation changes over time

- the reasons why contributors continue to contribute

- and what, in their opinion, makes one a successful Wikipedian

Fourteen valid responses were received, giving a response rate of eleven percent.

Findings

In terms of demographics, the Wikipedians surveyed here are all relatively young. None has yet reached forty years. Seven are teenagers, with the youngest "14 going on 15", six are in their twenties and one in their thirties. In keeping with their ages we find that most list student as their occupation. One is a systems analyst, another is engaged in Singapore's two year period of army training and a third is unemployed. Almost all the respondents were male (twelve out of the fourteen).

The time that the respondents spent on Wikipedia varied from one hour to thirty hours a week, with the average being seven hours. Those employed outside school, not surprising, are at the low end of that range (one hour per week each). The respondents were asked if their commitment to Wikipedia had changed over time. The vast majority declared that it had not, but of those for whom it had (four respondents), the change was always a reduction of time spent with Wikipedia. Two of these respondents actually quit contributing altogether.

By far the most common way for the transition from Wikipedia consumer to Wikipedia producer (or Wikipedian) to take place was, according to the respondents, the discovery of mistakes (vandalism or unintentional) while browsing. Half indicated that editing in this way allowed them to enter the Wikipedia community. One recollected that "I was browsing through Wikipedia and discovered inaccuracies. I therefore felt an urge to correct them" (Respondent #7) while another noted that vandalism did the trick for him: "I was browsing through an article when I saw some vandalism which I undid, leading me to register" (Respondent #9). The remainder of the respondents, however, came to contribute to Wikipedia by two different routes. The first was a need to find a creative outlet for themselves. Expressing this motivation one Wikipedian recounted how she wanted a page on her favourite actor (Respondent #10) while another was looking for a place to write and work collaboratively with others (Respondent #11). Curiosity was the final route to Wikipedian status. For these respondents Wikipedia was like a toy or puzzle to be explored, with editing entries part of the process of discovery (Respondent #5; Respondent #8).

If the process of editing is an important rite of passage for many Wikipedians, it is also key to Wikipedia's health and long-term growth. Understanding the criteria that Wikipedians use to establish the need for an edit is therefore an important task. Most respondents claimed that factual errors and spelling or grammar mistakes were key triggers for editing. Fewer instances of editing were due to formatting, policy (on copyright or bias for example) or vandalism problems. A small number of Wikipedians seemed rather free in their criteria. One suggested that "if you just see a typo or anything just edit. If you have anything to add, go ahead. That's the concept of a wiki" (Respondent #11) while another merely declared that he edited "what I see is necessary" (Respondent #14). Others were at pains to justify their decisions. One respondent (#9) constantly used adjectives to heighten the egregious nature of the error (for example, "blatant copyright infringement" or "downright fallacious") and thereby justify editing changes. Another appealed to the authority of Wikipedia officialdom by referring to Wikipedia policy or the organization's <u>Manual of Style</u> (Respondent #7).

Many Wikipedians move on to establishing their own articles. Of this study's respondents nine went on to build articles and eight were successful (according to one respondent (#10), her article was removed because it did not adhere to Wikipedia's article template). Not surprisingly, Singaporean topics were predominant (four of the respondents declared that they produced articles with this focus). Literature and entertainment were two other areas that attracted attention. When asked why they decided to produce an article of their own, respondents mentioned things like the existence of a gap in Wikipedia's knowledge base and the intrinsic importance of the topic. Three respondents mentioned both these factors as being responsible for their work. Three others felt that the existence of a gap was incentive enough for them while one mentioned only the importance of the topic as a reason to write. One respondent reported that his article was the product of a curiosity about the Wikipedia technology and what it could do (Respondent #5), while another noted that he was "inspired to create articles based on interesting things that I read in the newspapers" (Respondent #7). Creativity coupled with an "urge to contribute" seems also to have motivated the final respondent (#8) to produce his work. Three respondents gave reasons why they do not at present have an article of their own. One has already been mentioned; her article was deleted (Respondent #10). The other two respondents gave different reasons for their lack of participation. One argued that "almost everything I search for is already there" (Respondent #4) while the other stressed her lack of subject knowledge as a reason (#13).

Only two of the fourteen respondents had stopped contributing to Wikipedia at the time of the survey, raising the question of what makes Wikipedians stay with Wikipedia over the long-term? The res-

pondents gave a number of reasons for continuing to participate in the project ranging from intrinsic motivations such as "it has benefited me a lot" (Respondent #2) to extrinsic motivations to improve the world. One respondent declared, for example, that he contributed out of "a desire to share knowledge and contribute to the community" (Respondent #9). If we divide the responses on the basis of these two categories we find that seven gave intrinsic reasons for staying, two stressed external reasons and another two gave both kinds of reasons.

The respondents were asked if they felt that some Wikipedians were more successful than others. Almost all indicated that there were indeed differences, although a few were not sure or suggested that success was relative and self-defined. For example, one respondent wrote that: "Possibly … [but the] level of being successful is subjective, in my opinion" (Respondent #5). Of those who believed that differences definitely existed the larger number (five respondents) indicated that resource availability was crucial. Time was seen as especially important, but some viewed the attitude towards research crucial. Successful Wikipedians were, one respondent noted "prepared to do proper research [including] reviewing print material" (Respondent #7). A slightly smaller number thought that technical skills (both hard and soft skills related to the management of Wikipedia) and subject knowledge was key. Others believed that writing ability was important with one respondent going further to argue that "experience in Academic Writing" (Respondent #9) was necessary for the successful Wikipedian. Two other reasons were noted. The first was a passion for the project ("fanatical commitment" (Respondent #3)) and the second political savvy ("it's all about politics" (Respondent #14)).

When asked what people could do to become better Wikipedians, by far the most (six responses) believed that developing a better understanding of how Wikipedia works would be useful. This included not only overtly technical things like "how to revert vandalism" (Respondent #1), but also an awareness of the culture that makes Wikipedia possible: "one needs to be have an appreciation of the collaborative nature of Wikipedia" (Respondent #7) and "most importantly, [learn the] MANNERS of contributing new information" (Respondent #10). Only three responses included subject knowledge among the things that newcomers could improve on. One respondents merely declared "just do more research!" (Respondent #12). Another wrote that the trick was to "edit more articles … and make sure they're correct" (Respondent #13).

Discussion

A number of things are striking about the findings. The first are the demographics. Almost all the respondents are male and all are young. This suggests that there may well be cause for concern over the nature of Wikipedian knowledge production. If, as most now believe, knowledge is constructed and takes on a perspective given to it by the social location of the producer, then the dominance of young males in producing Wikipedian knowledge about Singapore is potentially troubling. What Wikipedia would tend to represent would be a view of Singapore seen by young males. Other voices including women and older people in general would be diminished, if not completely silent as a result. Of course, one could argue that since Wikipedians do not engage in the production of original knowledge this is not really a valid concern. But such a claim is misleading. While Wikipedians might not engage in actively creating new knowledge, they must necessarily filter the knowledge they discover while researching, selecting certain knowledge claims and rejecting others. They act, in other words, as gatekeepers. Secondly, Wikipedia has an image of being a medium accessible and amendable to all. On prima facie evidence this is certainly the case. The only admitted criterion is access to a computer with an Internet connection and while even relatively prosperous Singapore has a digital divide, it is a not a chasm. However, if there are other, more hidden selection criteria at work then there would be grounds for concern. This is ground for future research, although this study would suggest that one selection criteria may be time. Time was seen by many of the Wikipedians as a key resource that successful players had access to. Full-time jobs and the various other commitments that arise as one gets older would suggest that the need to invest copious amounts of time is a factor that might limit access to the role of Wikipedian for many. If this is the case it behooves information professionals to devise means to ameliorate the situation, perhaps though education in how to establish good Wikipedia articles.

Many of the respondents noted that they became Wikipedians after finding errors in articles they were browsing. This supports Bryant's study (2005) which found that Wikipedians tend to generally start as information consumers, browsing for the facts that they need, then noticing errors that at some point they feel compelled to rectify. Bryant ties this progression in tasks to the LPP theory of learning and argues that that the ease of starting is one the factors explaining Wikipedia's ability to attract enough volunteers to enable its rapid growth. This system, however, is precisely what detractors of Wikipedia criticize the most, arguing that an encyclopedia which anyone can edit anytime they feel like it

is open to abuse and inherently untrustworthy. Calls for reform have been made even within the Wikipedian community. Most recently, the German Wikipedia project has introduced the notion of "flagged revisions" in which edits can no longer be made spontaneously, but must be checked by a designated authority (Cohen 2008). What this new system amounts to is a dilution of the novice's first Wikipedian experience. Instead of easily and relatively unobtrusively entering the community, the user will have to negotiate with a filtering mechanism before getting any tangible benefit (that is, the satisfaction of seeing one's change appear on the screen). It will be interesting to see the effect this has on the participation of novices, but Bryant's study and our own suggest that such a system must be approached with caution.

The issue of tangible benefits leads us to another interesting aspect of the survey, the motivations for individuals to participate as Wikipedians. For the purposes of analysis, we divided the range of motivations into external and internal varieties and found that the external variety appeared in the accounts of the respondents most frequently. These findings are not the same as reported in Wagner and Prasarnphanich (2007) who found that most of their respondents gave both internally and externally motivated reasons for why they participated in Wikipedia. Very few gave only internally motivated reasons. It is also counter to Schroer's and Hertel's finding that Wikipedians tended to consider the cost of participating higher than the benefits (Schroer & Hertel 2007). Most of the Singaporean Wikipedians gave internally motivated reasons only. What does this suggest? A note of caution is perhaps needed here first. The sample of Singaporean respondents amounted to only eleven percent of the total and it was essentially self-selected. For this reason it is not possible to make general claims. On the other hand, it could be argued that altruistic people would be more likely to take the time to fill out the survey form and so should be over-represented in the sample! Regardless of the position one takes here, it suggests another avenue for future research. Is the Singaporean Wikipedia community less altruistically motivated than other communities? If we look at a survey conducted in 2006 by the National Volunteer and Philanthropy Centre in Singapore, we can find some evidence that volunteers in Singapore are in general more internally than externally motivated. For the 2006 survey, the Centre ranked the five highest scoring reasons given for volunteering. These were (from highest ranked to lowest): "ability to give back to society", "personal sense of well-being", "self-enrichment", "gratitude from recipient", and "ability to practice unused skills" (NVPC 2006). Of these, only the first can be considered an externally-oriented motivation. The others focus on the feelings and needs of the volunteer instead and so are internally motivated reasons for contributing. This is, of course, a very limited analysis, but it certainly suggests an avenue for future research.

Conclusion

In this paper we have presented data from an email survey of fourteen Wikipedians. We found that demographically they are all relatively young and predominantly male. Most started to form a Wikipedian identity through the simple task of editing spelling, grammar or factual errors they found while browsing. Quite a number have since moved on to develop their own pages on topics focusing primarily on Singapore, but also literature and entertainment topics. For the most part they are motivated to participate by internal rather than external reasons so that altruism is not a key factor in determining whether they contribute. Instead they consider Wikipedia a means to obtain satisfaction of a personal and private nature. When asked whether they consider some Wikipedians more successful than others, most concurred. They believed that resources, technical expertise, and subject knowledge were key elements in achieving such success. Our findings suggest that great care must be taken not to upset the existing social mechanisms that serve to encourage new members to relatively painlessly become Wikipedians. And it sets out several future research directions, namely, the exploration of national/cultural differences in motivation to participate in Wikipedia as well the hidden barriers to entry that may block certain groups from joining the Wikipedia community.

References

Bryant, S. L., Forte, A. and Bruckman, A. (2005). Becoming Wikipedian: Transformation of participation in a collaborative online encyclopedia. In *Proceedings of the 2005 international ACM SIGGROUP conference on Supporting group work* (pp. 1-10). New York : ACM Press.

Cohen, Noam. 2008. Wikipedia tries approval system to reduce vandalism on pages. *New York Times*, July 17.

NVPC (National Volunteer & Philanthropy Centre) (2006). *Individual giving survey 2006*. Retrieved 24 March, 2008 from http://www.nvpc.org.sg/Library/Documents/ResearchReports/IGS%202006.pdf.

Schroer, Joachim and Guido Hertel. 2007. *Voluntary engagement in an open Web-based encyclopedia: Wikipedians and why they do it*. Retrieved 10 July, 2008 from http://opensource.mit.edu/papers/Schroer_Hertel_Wikipedia_Motivation.pdf.

Wagner, C. and Prasarnphanich, P. (2007). Innovating collaborative content creation: The role of altruism and wiki technology. In *Proceedings of the 40th Hawaii International Conference on System Sciences* (pp. 18-27). IEEE Computer Society.

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