

April 2016

# Identifying the Social and Technical Barriers affecting engagement in online Community Archives: A Preliminary Study of “Documenting Ferguson” Archive.

Kodjo Atiso

University of Missouri, keaww4@mail.missouri.edu

Chris Freeland

chris.freeland@wustl.edu

Follow this and additional works at: <http://digitalcommons.unl.edu/libphilprac>



Part of the [Library and Information Science Commons](#)

---

Atiso, Kodjo and Freeland, Chris, "Identifying the Social and Technical Barriers affecting engagement in online Community Archives: A Preliminary Study of “Documenting Ferguson” Archive." (2016). *Library Philosophy and Practice (e-journal)*. 1377.  
<http://digitalcommons.unl.edu/libphilprac/1377>

To understand factors affecting participation in online communities, it's important to understand the state of user-generated web content from a community perspective. New models of engagement have emerged in recent years as web technologies have grown more robust and interactive, enabling the large-scale collaborative editing of encyclopedic content, such as Wikipedia, and the addition of descriptive metadata by a community of users, such as Flickr Commons. Archivist Kate Theimer (2014) describes such "participatory archives" as:

*An organization, site or collection in which people other than the archives professionals contribute knowledge or resources resulting in increased understanding about archival materials, usually in an online environment.*

While many of these efforts are focused on past history, such as DIY History, online at <http://diyhistory.lib.uiowa.edu>, which encourages users to volunteer their time to transcribe materials such as Civil War-era letters, fewer are focused on gathering materials from recent and unfolding events. Besides Documenting Ferguson, one such is Our Marathon, online at <http://marathon.neu.edu>, which is focused on archiving digital media related to the Boston Marathon bombing in 2013.

## **2. Problem Statement**

As libraries have embraced collaborative technologies and the stewardship of user-generated content, practitioners in the digital library community have begun to establish participatory archives to gather digital media and digital ephemera related to emerging events. Washington University Libraries established the Documenting Ferguson repository to preserve and make accessible community-generated content that was captured and created following the shooting death of unarmed teenager Michael Brown in Ferguson, Missouri. Despite the altruistic intentions of the project, it has received fewer contributions compared with similar community archives, such as the Our Marathon site. Several factors may account for the low level of contribution, spurring the inception of this research project. To identify the social and technical barriers affecting participation in Documenting Ferguson, we have modeled and tested two research questions:

*Hypothesis 1: There are social barriers that are dissuading people from participating in the Documenting Ferguson web archive (H1).*

Possible factors affecting participation include a lack of awareness of the resource, lack of trust in the sponsoring organization, avoidance in participating due to personal beliefs, and lack of intrinsic motivating factors for contributing to and participating in the archive. To test this hypothesis, we have constructed a questionnaire based on existing methodology from Clary et al. (1998), to identify factors that motivate people to participate in an online community, as well as questions to address issues related to trust.

*Hypothesis 2: There are technical barriers in the Documenting Ferguson web site that are preventing an online community from forming (H2).*

Possible issues include a lack of appropriate features for engagement, gaps in functionality, and presence of usability issues in conflict with standard design principles. To test this hypothesis, we performed a usability study of the Documenting Ferguson web site.

### **3. Theoretical Framework**

This pilot project aims to identify factors that motivate users to participate in online community archives. Taken from an HCI perspective, related efforts have identified factors motivating participation in similar kinds of online communities, such as Wikipedia (Peddibhotla & Subramani, 2007; Nov, 2007), open source software development projects (Hertel, Niedner, & Herrmann, 2003), and Usenet newsgroups (McLure Wasko & Faraj, 2000). Others have taken a broader view of these interactions in context, describing a socio-technical network model (Kling, McKim, & King, 2003), and the formation of communities of practice (Wenger, 1998).

#### *3.2 Why do people participate in online communities?*

Understanding why people participate in an online community archive requires an understanding of their internal and external motivations. Peddibhotla & Subramani (2007) describe "other-oriented" motives (social affiliation, altruism, and reciprocity) and "self-oriented" motives (self-expression, personal development, and enjoyment) in their study of motivations driving users to

contribute to public document repositories, such as Wikipedia and Amazon.com reviews. McLure Wasko and Faraj (2000) highlight altruism, reciprocity, and sense of community gained through sustained online interactions as key motivations in Usenet discussion groups. Rafaeli & Ariel (2008) describe a user's sense of community "through membership, influence, integration, and fulfillment of needs, and shared emotional connection." Looking across these studies, common themes of altruism, reciprocity, and personal fulfillment via community engagement emerge.

Perhaps the most intriguing study of user motivations is one taken from social psychology. In Clary et al. (1998), the authors identified, tested, and validated thirty statements that describe the factors that motivate people to volunteer. The resulting Volunteer Functional Inventory (VFI) contains thirty questions organized into six functional categories that reflect the psychological and social functions of volunteerism. Table 1 describes the functions and corresponding motivations.

Function	Motivation
Protective	Protecting ego from negative features of the self.
Values	Showing altruistic and humanitarian concern for others
Career	Career- related benefits
Social	Relationship with others
Understanding	New learning experiences and opportunities to exercise knowledge
Enhancement	Ego growth and development

**Table 1: Six functional motivations of volunteers (Clary et al., 1998).**

The Clary VFI instrument has been tested in other contexts, as it was adjusted to identify factors motivating Wikipedia editors to contribute to the site (Nov, 2007). In the Nov study, two additional categories beyond Clary's six were added: 1) fun and 2) ideology associating editing Wikipedia to open-source development. Results indicated fun & ideology ranked as the highest motivational factors, with career and social engagement as the lowest. This suggests that the Clary VFI is a

flexible instrument that can be readily adjusted to determine motivating factors in similar communities of practice, such as an online community archive.

### *3.3 Why don't people participate in online communities?*

While there is a substantial body of work describing why people participate in online communities, until recently there has been less focus on factors that may be dissuading or preventing people from participating in those same communities. In a recent study by Dillahunt (2014), the author explored how economic status affects participation in social networks; key findings include that people with little social capital, such as those in economically depressed communities, are challenged in building expansive social networks, and that site owners should “pursue opportunities to create technologies that better connect groups and individuals to those in authority.” Additional research in this area could help expand knowledge of the key barriers affecting participation in online communities and ways in which site administrators should work to bridge these social gaps.

A final consideration about gaps in participation should bear in mind the usability of any given system. More than 40% of users are dissuaded from reusing a system that malfunctions on their first use (Manning et al., 1998). When approaching the development of a community archive such as Documenting Ferguson, site administrators should perform usability studies to determine if there are intrinsic technical issues with the site that are stopping people from being able to contribute and participate.

## **4. Methodology**

We conducted a mixed-methods exploratory study consisting of a survey of users who have contributed content to the Documenting Ferguson web site, and a usability study of the Documenting Ferguson web site with students and faculty from the University of Missouri-Columbia community.

### *4.1 Questionnaire*

We identified social barriers to participating and contributing to a digital community archive (H1) by identifying factors motivating contributors to participate. We used methodology from Clary et al. (1998) to construct a survey that tests the six functions of volunteering on a 7-point Likert scale (Strongly Disagree to Strongly Agree), with appropriate edits to relate questions to the Documenting Ferguson context. The instrument contained five questions for each volunteer function tested, plus an additional set of questions relating to trust, for a total of 35 questions, ordered randomly. Table 2 shows the functions and a sample question for each. Appendix A describes the study questionnaire in full.

Function	Motivation	Sample Statement
Protective	Protecting ego from negative features of the self.	“Participating in documenting Ferguson helps me work through my own personal problems”
Values	Showing altruistic and humanitarian concern for others	“I feel compassion towards people in need”
Career	Career- related benefits	“Participating in Documenting Ferguson allows me to explore different career options”
Social	Relationship with others	“People I know share and interest in contributing to Document Ferguson”
Understanding	New learning experiences and opportunities to exercise knowledge	“I can learn more about social justice by

		participating in Documenting Ferguson”
Enhancement	Ego growth and development	“Participating in Documenting Ferguson makes me feel important”.

**Table 2: Functional motivations of volunteering following Clary et al. (1998), with sample test statements.**

To understand whether users of the Documenting Ferguson web site trust various aspects of the project, five additional questions were integrated into the questionnaire, also scored on a 7- point Likert scale, testing individual and community-level trust, with statements such as “I believe the content contributed to Documenting Ferguson will persist over time.” The survey was sent to the 44 users who contributed content to the Documenting Ferguson web archive; 13 responded for a response rate of 29.55%. This list of participants was generated in collaboration with the Scholarly Publishing unit at Washington University Libraries, which runs the Documenting Ferguson web archive. To ensure confidentiality and to keep within the boundaries of the accepted Terms of Privacy, an email inviting contributors to participate in the survey was sent from the Documenting Ferguson curator, describing the study and including a link to participate. No personally identifying information was passed into the survey or collected within, ensuring the privacy and anonymity of participants. Data was gathered and analyzed using Qualtrics survey tool.

#### *4.2 Usability Study*

Our second hypothesis is based on the premise that there are technical barriers in the Documenting Ferguson web site (H2) that are preventing an online community from forming and actively participating in the site. To test the hypothesis, we conducted a usability study with five University of Missouri-Columbia students who had not previously contributed content to the Documenting Ferguson site. Participants completed an exploratory, lab-based usability test using the Morae platform with five tasks that tested main components of the site, including, 1) Browse, 2) Search, 3) Contribution, 4) Sharing items within the collection via social media, plus a fifth task relating to their 5) General impressions of the site. Participants were also asked free- form questions after

the study, including what interests users about the site, what would make them interested in contributing, would users have any concerns sharing content from the site, are there technical or economic issues affecting contribution, and are there features to be added or removed? Participants were required to appear in person for the think-aloud interview so that user reactions to the tasks could be captured using the Morae software. Appendix B describes the usability study prompts and tasks in full.

Age	Documenting Ferguson Contributors ( <i>N</i> =13)	Usability Study Subjects ( <i>N</i> =5)	Total Participants ( <i>N</i> =18)
18-24	0	20	5.9
25-44	66.7	80	70.6
45-64	33.3	0	23.5
65-74	0	0	0
75+	0	0	0
Gender			
Female	58.3	60	58.8



Male	14.7	40	41.2
Race			
American Indian or Alaska Native	0	0	0
Black or African American	25	60	35.3
Native Hawaiian or Pacific Islander	0	0	0
White	75	40	64.7
Ethnicity			
Hispanic/ Latino	0	0	0

**Table 3: Participant demographics, segmented into those who have contributed to the Documenting Ferguson site, those who participated in the usability study, and mean of both.**

## 6. Findings

### *6.1 There are social barriers that are dissuading people from participating in the Documenting Ferguson archive (H1).*

Results of the contributor survey and usability study suggest that there are social barriers preventing participation in Documenting Ferguson. Comments made during the think-aloud usability study indicate a main social barrier as being a lack of awareness of the site. None of the five usability study participants had heard of the Documenting Ferguson web site before joining the study. Further, all participants questioned the purpose of the site and its intended audience, and wanted to read that information prominently on the homepage before feeling comfortable about contributing. However, the survey also uncovered that there are strong factors motivating people to contribute to Documenting Ferguson, especially related to humanitarian values, suggesting that the barriers identified are not absolute. The questionnaire tested the psychological and social functions of volunteerism present in the Documenting Ferguson web site, as well as factors affecting trust, using methodology from Clary et al. (1998). Table 4 shows the ordered results of

the mean value for each function as indicated by contributors to the Documenting Ferguson web site.

Function	Motivation	Contributors Mean
Values	Showing altruistic and humanitarian concerns for others	6.44
Understanding	New learning experiences and opportunities to exercise knowledge	5.1
Social	Relationship with others	4.72
Enhancement	Ego growth and development	3.68
Career	Career- related benefits	3
Protective	Protecting ego from negative features of the self	2.544

**Table 4: Factors motivating contributors' participation in Documenting Ferguson, ranked by mean.**

These data demonstrate that for those who have contributed to the Documenting Ferguson web site, they are motivated by factors relating to Values (6.44), Understanding (5.1), Social (4.72), Enhancement (3.68), and less so by factors relating to Career (3), and Protective (2.544). On issues relating to trust, which were tested via five additional statements distributed randomly throughout the questionnaire, findings show that participants trust that the materials in Documenting Ferguson will persist over time (*mean* 5.67) and will be responsibly used and cited (5.47), that no harm will come to them as a result of participating in the site (5.27), and that the organizations behind Documenting Ferguson are working in the community's best interest (5.2). However, the site does not help participants trust others (3.4).

*6.2 There are technical barriers in the Documenting Ferguson web site that are preventing an online community from forming (H2).*

Results of the usability study suggest that there are technical barriers preventing users from contributing content and from engaging with the site and other contributors. Key limitations include difficulties with the process of uploading content to the archive and retrieving accurate results from search. In full, participants completed five tasks:

#### *Task 1: General Impressions*

Starting from the homepage for the Documenting Ferguson website, participants were asked to indicate their general impressions of the site. All participants generally had a good impression of the site, including repeated favorable mention of the dynamic “Documenting Ferguson” header graphic on the page, but there were concerns raised relating to usability and HCI issues. First, four out of five participants (80%) raised aesthetic concerns with the home page; specifically, they indicated the large amount of whitespace (shown as gray in the site design) on either side of the center content block. Another concern raised was the organization of content on the homepage. Participants indicated that the page was overly wordy and text-heavy, lacking a clear statement of purpose and intention. A final concern was on the profile of the project team, which is listed as text on the homepage. Participants indicated that a short profile about the team members and their pictures would show who is behind the site.

#### *Task 2: Contribute an image to the collection*

In this task, participants were asked to add an image to the site. All but one participant was able to complete this task with accuracy, for a success rate of 80%. However, users raised an important usability concern about a lack of consistency in the state of the web site and inconsistent use of the browser’s Back button. Clicking the “Contribute Media” button opens up a new browser window to add the content, which does not have a link back to the Documenting Ferguson home page, and the browser’s Back button is non- functional. Clicking the “contribute” link within the homepage text does not open a new window; instead it simply advances to the same contribution page, but within the same browser window, so the browser’s Back button functions as expected. Users were confused about the different user experiences for the same contribution function, and recommended both consistency in function as well as providing prominence to the site’s contribution features.

#### *Task 3: Determine if there were protests at a Cardinals baseball game*

Successful completion of this depended on the user's ability to find specific information using the search features of the site. Participants were asked to determine if there were any protests at a Cardinals baseball game. Participants could have completed this task within one search for the term "cardinals," which would have returned the image at <http://omeka.wustl.edu/omeka/items/show/8558>, describing a contributor's experience holding a protest sign at the Cardinals' home game on Sunday, September 21, 2014. However, none (0%) of the participants were able to successfully complete this task. All used the search box on the home page to perform this task, but used different search terms, including "baseball," which appeared to return a number of results unrelated to the protest at the game; however, those results were tagged with the term "baseball" and did in fact discuss baseball protests. Although participants indicated that completing this task was difficult and not straightforward, and none were able to return the successful result, all were able to locate and use the search box on multiple attempts, suggesting either an issue with the site's search indexing or user error in information retrieval.

#### *Task 4: Share an image via social media*

In this task, participants were asked to share an image on social media. All participants (100%) were able to complete this task, but they indicated the social media icons on the page were hidden and not visible enough to users. Secondly, one participant indicated that since Facebook is most popular among the social media sites listed, it should be first on the list of icons. Additionally, participants suggested not only being able to share an image via social media, but to include this feature on the homepage itself as a way of sharing the entire site.

#### *Task 5: Determine who added the first image to the archive*

In this task, participants were asked to locate the first image added to the archive. Successful completion of this task could be completed in 3 steps, by first clicking on "View Collection," then "Browse by Date Added (Ascending)," and then the thumbnail for the first image in the list, <http://omeka.wustl.edu/omeka/items/show/8262>. However, this was another task that none (0%) were able to accomplish. Most participants clicked on "View the Collection," and were then unsure why they were seeing items starting from November 29, 2014. While users noted the ability to browse by date, tag or map, none took the appropriate action to complete the task.

### *Usability study summary*

Across the study, the tasks relating to Search and Browse took twice as long to complete compared with the other tasks, and participants made more errors. Table 5 summarizes results.

Basic usability	Usability Study Task	Success Rate
Basic Usability	Provide your general impression of the website	5/5(100%)
Contribute	Add an image to the archive	4/5 (80%)
Search	Determine if there were any protests at a Cardinals baseball game	0/5(0%)
Share	Share and image from a collection on Facebook or Twitter	5/5(100%)
Browse	Determine who added the first image to the archive	0/5(0%)

**Table 5: Usability study task success rate.**

### **7. Scope/delimitations and limitations of the project**

A primary limitation to denote for this study is the relatively small sample size for both the questionnaire and the usability study. There are only 44 contributors to the Documenting Ferguson web site; of those, only 13 participated in the questionnaire determining motivating factors, for a response rate of 29.55%. This sample size is fairly narrow, and describes only the factors that motivated users to participate in Documenting Ferguson. To truly determine broad factors that motivate people to participate in online community archives, the questionnaire should be run across users of other online community archives and compared with statistical analyses to determine areas of similarity across user communities. Further, the usability study was limited to five participants, which is enough of a sample to give meaningful feedback to the Documenting Ferguson design team, but is insufficient for determining trends in usability deficits in online community archives.

Second, the questionnaire was adapted from Clary et al. (1998), which assessed the motivations of volunteers through development and use of a thirty-question survey called the Volunteer Functions Inventory (VFI). Our study followed similar methodology from Nov (2007) and adapted those questions for use in the Documenting Ferguson context, but a limitation of our adaptation is that it was not validated through a cross validation as was the VFI.

A final limitation of the project is a lack of quantitative and comparative data about the size and growth of the Documenting Ferguson collection versus related archives such as Our Marathon. These data were difficult to gather for both technical and policy-based reasons. Both Documenting Ferguson and Our Marathon were built using the open source digital exhibition platform Omeka. While fairly feature-rich for end-user functions, it does not have a full suite of administrative reporting tools, so gathering contribution data requires custom scripting and database-level access. Further, because these are not public datasets, each organization's privacy policies need to permit research use of contributor data; both Documenting Ferguson and Our Marathon describe and define research use of the materials within the collection, but neither site addresses how data collected about participants will or will not be permitted for research use. Addressing these issues required a level of coordination and collaboration that became out of scope for this pilot project.

## **8. Implications for Design**

### *8.1 Implications from survey of motivating factors*

The strong presence of motivating factors relating to Values (*mean value 6.44*) suggests the people who have contributed to Documenting Ferguson have done so based on their own humanitarian and altruistic intentions, and are not motivated to participate so they can get ahead at work, as with motivations related to Career (3), or as a way of offloading feelings of guilt they may have about being more fortunate than others, as with motivations related to Protective (2.544). This differs dramatically from similar studies that have tested motivations for participating in open source software development projects, where Career-related motivations ranked significantly higher (Hertel et al., 2003).

Continuing to explore the low ranking of Protective functions, it's important to note that the questionnaire statement that received the lowest mean score (1.82) across the board was, "Participating in Documenting Ferguson is a good escape from my own troubles." This anhedonic response differs from findings from Hertel et al. (2003), where a main motivating factor for open source software developers is "fun." Participants in Documenting Ferguson are not doing so to feel better about themselves, nor are they receiving that response from the site.

On issues relating to engagement, an additional question was included in the questionnaire to ask, for those who had contributed, why did they stop? As expected, responses included statements that users had contributed all the materials they had in their first upload. Surprisingly, two users mentioned that they didn't know they could keep uploading for related events, suggesting that additional messages to users encouraging them to keep adding content could generate additional contributions.

## *8.2 Implications from usability study*

Even though participants stated the web site design and function was generally good, observing them carefully through the tasks indicated otherwise. In review, it came to light that there are key usability issues in conflict with Nielsen's interface design heuristics (1994b), including:

- *Aesthetic and minimalist design* – Users noted that the site content is contained within a fixed center panel with wide margins of whitespace on either side. Users also found the site's homepage to be too wordy and lacking key information about the project's purpose and scope.
- *Consistency and standards* – This principle states that users should not have to wonder whether different terms or actions have the same meaning within the platform. In our study, users found inconsistent actions resulting from clicking on three different links labeled with some variation of the term "contribute." Site administrators should work to ensure proper labeling consistency across functions.
- *Visibility of system status* – This principle states that the system should always keep users informed about what is going on through appropriate feedback within reasonable time. During the contribution task, not only did users encounter inconsistent experiences depending on which link

they clicked, they also lack tips and indicators as to how many steps there are in the contribution process and where they are within that process.

- Help and documentation* – When users became challenged in the usability tasks, they looked for system help or other documentation to gain a deeper understanding of the site’s form and function. Since the main goal of the site is to archive user-contributed content, site administrators should work to integrate help statuses and other prompts into the site, including the creation of an instructional video outlining the steps to contribute.

## **9. Conclusion**

With an understanding of study results, we offer the following recommendations to improve the Documenting Ferguson web site, drawing from results of both the contributor questionnaire and the usability study to provide a suite of comprehensive recommendations.

*Recommendation 1: Raise awareness.* None of the five usability study participants were aware of the Documenting Ferguson web site before beginning the study. This suggests that while the events in Ferguson have received national attention, the Documenting Ferguson site is still largely unknown outside of the library and archive community. Site managers should continue raising awareness through outreach and marketing campaigns in ways that reflect the motivating factors present in the site. Special awareness-raising efforts should be made within Ferguson to ensure proper representation in the archive. Additionally, contributors should be reminded through e-mail messages from the site that they can add new materials as they continue to participate in community events, which are still occurring.

*Recommendation 2: Actively seek involvement of the Ferguson community, and highlight their contributions.* Participants of the usability study questioned what percentage of the contributions were from Ferguson residents, and wondered how a site meant to archive the activities of a social movement based around a community of people could have true impact if few of those contributions were from residents. The authors recommend continued outreach with the Ferguson community to promote awareness of the resource and to increase contributions, and then to feature those contributions on the site. One such possibility might be a targeted event like an “upload-a-thon” or similar, held at the Ferguson Public Library, where project members could assist



participants in uploading content to the site. Considerations should also be made to add community members or representatives to the project's steering committee.

*Recommendation 3: Appeal to motivating factors.* This follows recommendations from the Clary study, which advises organizations seeking volunteers to “strategically promote their organizations in ways that speak to the abiding concerns of the volunteers they seek to recruit” (1998). The questionnaire revealed that contributors are motivated to do so based on feelings of altruism and a desire to gain and share knowledge, so these messages should be the primary ones carried throughout all marketing campaigns and outreach. The current promotional flier for Documenting Ferguson features a call to action of “Don’t let these images be lost to history,” encouraging people to contribute materials for archival and preservation purposes. While an important message that certainly resonates with those working in preservation communities like libraries and archives that appeal does not directly translate to the motivating factors present in the site. Instead, appeals and calls to action should amplify the motivations of altruism, humanitarian response, and sharing and gaining knowledge that are present through messages such as, “Share Your Photos, Share Your Story,” “Call for Assistance: Your Photos Needed,” “Contribute to the Conversation” or similar. Further, partnering with organizations that also promote social justice and humanitarian concerns would help reinforce those messages to potential contributors.

*Recommendation 4: Build trust through transparency in purpose and representation.* Based on feedback gathered from the think-aloud portion of the usability study, users want to have a better understanding of the purpose of the site and the people operating it. Usability study participants noted that the text on the home page is too dense, and that a clearer statement of purpose is needed. Of particular interest, questions were raised over the cultural and racial diversity among the team members listed on the main page of the Documenting Ferguson web site. Where there is currently a list of names, users concerns could be allayed by putting a picture of the Documenting Ferguson team members showing the diversity of the team, which is 41.7% African American and 66.7% female.

*Recommendation 5: Enhance the contribution features of the site.* If the overriding goal of the Documenting Ferguson web site is to archive digital media, more emphasis should be given to the contribution features themselves. Based on feedback from the usability study, potential

contributors would be aided by the inclusion of breadcrumb navigation showing where users are in the contribution process and the ability to exit out at any time, as well as the addition of instructional videos that describe not only how to contribute, but why. To address the issues raised during the usability study about the multiple functions of the term “Contribute,” a recommendation would be to centralize all functions through a prominent and singular “Contribute” button or link, which then took users to a page describing the different ways of contributing media to the archive.

*Recommendation 6: Refine site aesthetics and design.* Minor adjustments in the site’s home page would help the site appear more professional and modern. Steps should be taken to make the site adhere to responsive design principles, eliminating the broad expanse of whitespace that users noted. Also, content on the homepage should be streamlined to promote the purpose of the site and reasons why people should participate.

*Recommendation 7: Account for research use of contributor data in privacy policies.* There are currently no provisions in the Documenting Ferguson Terms & Conditions describing research use of contributor information. There is language included that covers the use of a contributed object that permits it to be used “for educational, research, and promotional purposes outside of the Project, in perpetuity and in all media formats,” (Washington University Libraries, 2014) but nothing that explicitly addresses what information about contributors Washington University Libraries would share for educational and research purposes. As this is a collection intended for scholarly use, clear statements about usage of materials and contributor metadata are required.

*Recommendation 8: Continue testing through needs assessments and additional usability studies.* Recognizing that this preliminary study was fairly limited in both size and scope, the authors recommend that Documenting Ferguson site administrators perform further needs assessments to determine what information users are requesting from the site, or what research questions they are trying to answer in using the site. Additional usability tests will help as well, as the use of more than one research instrument helps ensure the quality of data (Savin-Baden & Major, 2012). The project team recommends use of a second usability study using an eye-tracking tool, which tracks where a user looks and for how long, showing the user’s heat map, gaze plot, and areas of interest.

In conclusion, this pilot study has helped illuminate the factors motivating individuals to contribute to online community archives. In working to identify issues that may have been preventing users

from engaging with the Documenting Ferguson site, we have identified both social and technical barriers that prohibit use of the site, as well as motivating factors that encourage contributions to the site. The questionnaire has helped identify why people have contributed content to the site, mostly being driven by a desire to work for social justice and other altruistic intentions, while the usability test has shown that the site suffers from a lack of awareness and has key technical limitations that impede its growth. While the findings suggest that there are not hedonistic or fun reasons to participate, as with other online communities, from a humanitarian perspective that is a satisfying message. We must remember that the collection of digital materials contributed to Documenting Ferguson originates from the shooting death of an unarmed teenager. The site is not intended to be fun; it is a solemn collection documenting an inciting incident and subsequent protests that have launched a national dialogue, and as such, the resulting site needs to represent the solemnity of the matter and reflect its importance in American history.

## References:

- Clary, E. G., Snyder, M., Ridge, R. D., Copeland, J., Stukas, a, Haugen, J., & Miene, P. (1998). Understanding and assessing the motivations of volunteers: a functional approach. *Journal of Personality and Social Psychology*, 74(6), 1516–1530. doi:10.1037/0022-3514.74.6.1516
- Dillahunt, T. R., Street, S. S., & Arbor, A. (2014). Fostering Social Capital in Economically Distressed Communities, 531–540. doi:10.1145/2556288.2557123
- Hertel, G., Niedner, S., & Herrmann, S. (2003). Motivation of software developers in Open Source projects: an Internet-based survey of contributors to the Linux kernel. *Research Policy*, 32(7), 1159–1177. doi:10.1016/S0048-7333(03)00047-7
- Kling, R., McKim, G., & King, A. (2003). A bit more to it: Scholarly Communication Forums as Socio-Technical Interaction Networks. *Journal of the American Society for Information Science and Technology*, 54(1), 47–67. doi:10.1002/asi.10154
- Manning, H., McCarthy, J.C. and Souza, R.K. (1998). Why most Web sites fail. *Forrester Research: Interactive Technology Series*, 3(7).
- McLure Wasko, M., & Faraj, S. (2000). “It is what one does”: why people participate and help others in electronic communities of practice. *The Journal of Strategic Information Systems*, 9(2-3), 155–173. doi:10.1016/S0963-8687(00)00045-7
- Nielsen, J. (1994b). Enhancing the explanatory power of usability heuristics. Proc. ACM CHI'94 Conf. (Boston, MA, April 24-28), 152-158.
- Nov, O. (2007). What motivates Wikipedians, or how to increase user-generated content contribution. *Communications of the ACM*, 50(11), 60–64. doi:10.1145/1297797.1297798
- Peddibhotla, N. B., & Subramani, M. R. (2007). Contributing to Public Document Repositories: A Critical Mass Theory Perspective. *Organization Studies*, 28(March), 327–346. doi:10.1177/0170840607076002
- Rafaeli, S., & Ariel, Y. (2008). Incentives for Participating Online: Motivational Factors

Contribution in Wikipedia. *Psychological Aspects of Cyberspace: Theory, Research, Applications*, 243–267.

Savin-Baden, M., and Major, C. (2013) *Qualitative Research: The Essential Guide to Theory and Practice*. London: Routledge.

Theimer, K. (2014, April 3). The Future of Archives is Participatory: Archives as Platform, or A New Mission for Archives. Retrieved from ArchivesNext: <http://www.archivesnext.com/?p=3700>

Washington University Libraries. (2014). *Documenting Ferguson Terms & Conditions*. Retrieved from <http://omeka.wustl.edu/omeka/contribution/terms>

Wenger, E. (1998). Community of Practice: a Brief Introduction. *Learning in Doing*, 15, 1–7. doi:10.2277/0521663636