# **Usability Testing of a Facebook Brand Page**

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**Abstract.** Social networks, as a part of Web 2.0 technology, provide the technological platform for users to connect, produce and share content online. Availability of user generated content is encouraging companies to fully engage with their customers in order to enhance and enrich social media users' experiences. However, the usage of the social media platforms differs from the more traditional forms of a company's web presence, resulting in challenges of applying the traditional usability testing methods. In this paper we analyze this problem for the context of a Facebook brand page and propose applying an iterative usability testing approach over automatically collected data. From the discussion, we derive implications for usability and social media marketing.

Keywords: social networks, usability testing

# 1 Introduction

Social networks (SN) have a mediating effect between individuals and society in the virtual world. As such, they represent a natural technological platform for marketing, providing access to a large number of users. Companies, across all industries are starting to understand the possibilities of social media (SM) marketing. They have evolved their approach to their customers, offering contact or assistance on a personal level at any time through social network sites such as Facebook, Twitter, etc. (Gordhamer, 2009). However, how these platforms are being used, what their potentials are and how consumers interact, remains largely unknown and has yet to be addressed from different perspectives (Richter et al., 2011).

Availability of the user generated content of SM platforms is encouraging companies to fully engage with their customers in order to enhance and enrich SM users' experiences. However, the usage of the SM platforms differs from the more traditional forms of companies' web presence resulting in challenges of applying the traditional usability guidelines and methods to this new communication channel. Classic usability testing methods, involving few participants using a prototype, are limited when applied to SM. To contribute in this direction we try to answer the question: How to perform usability testing on a Facebook brand page?

### 2 Related Work

Usability can be defined as "the extent to which a product can be used by specified users to achieve specified goals in a specified context of use." The main usability principles, as described by Gould and Lewis (1985) are: (1) focus on users and tasks, (2) empirical measurement, and (3) iterative design. Furthermore, Dumas and Redish (1993) describe five characteristics of usability testing: (1) improving the usability of a product/service, (2) the participants represent real users, (3) the participants do real tasks, (4) observing and recording of participants activities, and (5) analysis of the data. Following the described steps should lead to early problem identification and generation of recommendations on how to solve these problems and ultimately improve the product/system.

The problem of usability testing has been studied in depth over different categories of websites. However, content on the social media platforms used for marketing purposes differs from the traditional web content in terms of representing a dialog between two involved parties, companies and individuals (Boyd and Ellison, 2008). Furthermore, social media platforms such as Facebook and Twitter leave little space for interface customization. For that reason, practitioners are beginning to address social media usability from a perspective of enhancing the content and activities. Based on the traditional usability study, Estes et al. (2009) have identified 85 usability guidelines grouped as (1) content, (2) frequency and timing, (3) voice and tone, (4) engaging followers and facilitating discussion, (5) profile information and design, and (6) promoting social network presence. Similarly, Fidgeon (2011) advises: (1) focusing on the users, (2) selecting the appropriate timing, and (3) creating content suitable for the medium. At the same time, he points out that due to the great diversity of different communities there are no guidelines that could guarantee the success in this new form of communication channel.

To overcome the described challenge, we propose an iterative usability testing approach based on the automatic data collection that could potentially lead to greater user satisfaction.

#### 3 Problem Definition

Usability testing usually involves usage scenarios in order to determine how people interact with the product. However, when applied to a Facebook brand page, the interaction assumes dialog between the members of the community and the company which could not be described in a form of a task. Furthermore, due to diversity of the online communities, social media guidelines embraced at the planning phase might not lead to the expected results. To overcome these challenges, we propose iterative usability testing that would enable strategy refinement in compliance with the actual characteristics and actions of the Facebook brand page fans. In the continuation, we describe the proposed method by answering the questions: (1) which data sources to use, (2) how to prepare the data for analysis, and (3) how often to analyze the data.

<sup>&</sup>lt;sup>1</sup> ISO 9241-11, http://www.iso.org/iso/catalogue\_detail.htm?csnumber=16883

### 4 Iterative Usability Testing of a Facebook Brand Page

**Data Sources.** There are two available sources of data describing the activities on a Facebook brand page: (1) Facebook Insights², and (2) Facebook Graph API³. Facebook Insights is a platform provided to Facebook page administrators to enable monitoring of the activities on the page. It provides information on users, such as demographics (gender, age, language, etc.) and number of fans, as well as details on the interaction with the page. Data collected through the Facebook Insights offers possibilities for analysis of the target audience characteristics. While the demographics data is useful, since it can't be obtained from another source, the interaction data provided by the Facebook Insights platform might not be accurate; for example, number of post views is defined as "the number of times people have viewed a News Feed story". This however can only be counted as the number of times the post appeared on someone's "wall" and there is no guarantee that the post was seen or read. For that reason, for the interaction evaluation we recommend implementing a tool that would gather the content shared on the Facebook brand page based on the Facebook Graph API.

The Facebook Graph API provides access to the Facebook social graph via a uniform representation of the objects in the graph (e.g., people, pages, etc.) and the connections between them. Upon a query, the data can be returned as a *Page* object containing connections such as Feed, Posts, Photos, etc. A *Feed* connection represents a list of all *Post* objects shared on the "wall" containing the following relevant information: (1) post content, (2) post type, (3) posting user, (4) likes, (5) comments, (6) application used for posting, (7) creation time and (8) time of last interaction. Data gathered through the Graph API offers possibilities for quantitative and qualitative analysis with relevance to the usability guidelines referring to the content shared on the social media platform (Pletikosa and Michahelles, 2011, 2011a). Furthermore, it provides insights into the users' reaction in terms of posting time (Momentus Media, 2011).

**Normalization of the Data.** Both of the data sources provide numbers as an absolute measure of the interaction represented through the number of comments, likes, clicks, views, etc. However, these numbers are related to the total number of users at the observed moment. For that reason, when analyzing the interaction data we recommend normalization of the data with the number of fans at the moment, as described by Pletikosa and Michahelles (2011a).

**Iteration Frequency.** In terms of the iteration frequency there are no many existing guidelines on what should be the optimal frequency of testing and refinements of the usability. Dubach Spiegler (2011) proposes two levels of iteration (1) tactical and (2) strategic control. High-level metrics related to moderator and user activities as a part of the tactical control should be assessed daily in the initial phase of the Facebook brand page, and not less than weekly once the page is in its operationally mature phase. Deeper analysis should also be performed on a regular interval to support strategic control. Since Facebook Insights offers monthly aggregated data, for easier

<sup>&</sup>lt;sup>2</sup> Facebook Insights, http://www.facebook.com/help/?page=1030

<sup>&</sup>lt;sup>3</sup> Facebook Graph API, http://developers.facebook.com/docs/reference/api/

integration of the proposed data sources we suggest the iteration frequency of one month for data gathered for strategic control.

#### 5 Discussion and Conclusions

In this paper we have presented a method for usability testing of a Facebook brand page. We have addressed two relevant questions: (1) how to overcome the problem of data collection in the social media context where the traditional controlled usability testing might not lead to the expected results, and (2) how often should the usability testing be performed in order to enable timely reaction to the possibly changing rules of communication in this noisy medium. The described approach contributes in two directions: usability testing and social media marketing. From the usability perspective of usability testing it provides a methodology suitable for Facebook as a social media platform which overcomes the discussed challenges. From the social media marketing perspective, this paper provides insights into how usability concepts and guidelines could be integrated with a company's social media marketing strategy for a Facebook brand page. Issues identified by Estes et al. (2009) overlap with those elaborated in the work of Dubach Spiegler (2011). This indicates that social media marketing practitioners could learn from existing knowledge in the field of usability and user-centered design.

## References

- Gordhamer, S.: 4 ways social media is changing business. Mashable.com, http://mashable.com/2009/09/22/social-media-business (2009)
- 2. Richter, D. Riemer, K., vom Brocke, J.: Internet social networking: Research state of the art and implications for Enterprise 2.0. Business & Information Systems Engineering (2011)
- 3. Gould, J.D., Lewis, C.: Designing for usability: key principles and what designers think. Commun. ACM 28 (3), 300-311 (1985)
- 4. Dumas, J.S., Redish, J.C.: A practical guide to usability testing. Norwood, NJ: Ablex Publishing Corporation (1993)
- Fidgeon, T.: Social media usability: content & activities. Spotless Interactive, http://www.spotlessinteractive.com/articles/usability-research/usability-testing/social-media-content-and-activity.php (2011)
- 7. Estes, J., Schade, A., Nielsen, J.: Streams, Walls, and Feeds: 109 Design Guidelines for Improving Notifications, Messages, and Alerts Sent Through Social Networks and RSS. Nielsen Norman Group Report, http://www.nngroup.com/reports/streams (2009)
- 8. Pletikosa Cvijikj, I., Michahelles, F.: Understanding Social Media Marketing: A Case Study on Topics, Categories and Sentiment on a Facebook Brand Page. 15th MindTrek Conference and the International Academic Conference (2011)
- 9. Pletikosa Cvijikj, I., Michahelles, F.: A Case Study of the Effects of Moderator Posts within a Facebook Brand Page. 3rd International Conference on Social Informatics (2011a)
- 10. Momentus Media: Engagement & Interaction A scientific approach to Facebook marketing. Momentus Media Whitepaper, http://momentusmedia.com/blog/?p=899 (2011)
- 11. Dubach Spiegler E.: Applications and Implications of User-Generated Content in Retail, PhD Thesis, ETH Zurich (2011)