

Transforming Exchange-based Job Boards into Lasting Career Communities

Elfi Ettinger¹, Celeste Wilderom¹, and Rolf Van Dick²

¹Department of Information Systems & Change Management,
University of Twente, the Netherlands
{e.ettinger, c.p.m.wilderom}@utwente.nl

²Department of Social Psychology, University of Frankfurt, Germany
{van.dick@psych.uni-frankfurt.de}

Abstract. In this paper, we use a qualitative approach to explore which design aspects an e-recruiting platform requires so as to achieve active long-term participation of its users. Our study is based on a case study of an e-recruiting platform for Austrian engineers. We use interviews and ethnographic methods. Although, e-recruiting trends point towards niche e-recruiting and career community approaches, our results show that a mere niche approach is not enough to maintain an actively participating user base. Our findings suggest that users are more inclined to re-use the same e-recruiting platform throughout their career if the userbase is comprised of many other users who share a similar social identity and who had already developed offline ties with each other before registration. Hence, integrated online community and social network applications for specified user segments will enable users to maintain and transform their existing offline contacts for career purposes. The paper concludes with recommendations for e-recruiting research and practice.

Keywords: e-Recruiting, Career Communities, User Participation, Social Identity.

1 Introduction

Despite the vibrancy of e-recruiting services, large numbers of them fail (Feldman and Klaas, 2002; Lin and Stasinskaya, 2002; Bishop, 2006). One challenge e-recruiting services are facing is keeping the applicants' profiles up-to-date. This is especially important if recruiters can search in the applicants' pools. E-recruiting services also need to show their success through indicators such as high numbers of applicants visiting their sites and clicking on ads, high page impressions, the accuracy of the matching between job ads and resumes, and by their ability to quickly suggest appropriate candidates to recruiters (Smith and Rupp, 2004; Zhao et al., 2007). The e-recruiting market is still dominated by traditional job boards such as monster.com or hotjobs.com in most countries. Although, e-recruiting trends suggest that the future of e-recruiting belongs to niche recruiting portals (see for instance: beyond.com; topjobsites.com) and career networks (linkedIn.com, xing.com), it is difficult for e-recruiting companies to design socio-technical features that generate ongoing

participation from a larger fraction of its initially perhaps instrumentally oriented users (Szmigin et al., 2005; Bishop, 2007).

In this paper, we study what design aspects an e-recruiting platform would need to meet in order to achieve active long-term participation of its registered users. To guide us in answering this question, we connect the theoretical streams of e-recruiting and community identity. Based on a case study with in-depth interviews with users of a niche e-recruiting platform for engineers, we present the conditions required for users to eagerly participate in online career services. Interestingly, our findings indicate that it is not enough to simply create niche portals for specific applicants (such as engineers, lawyers) or branch segments (such as chemistry, pharmacy). What seems to have an influence on users' active long-term participation in niche portals is rather the opportunity to maintain communication with other professionals (in this study's case: engineers) who already know each other from their offline network or via friends of friends (FoF). Based on this paper's findings as well as our experiences in previous studies on e-recruiting (e.g., Khapova and Wilderom, 2006; Khapova, et al., 2007), we conclude with recommendations for e-recruiting research and practice.

2 Theory

The usefulness of networked online services has already been discussed in reference to e-recruiting. Butler (2001), for instance, describes that online career services may be seen as virtual social communities rather than only as instrumental career-move services. In this regard, Khapova (2006) argues that studies of online career services need to include the design principles of a traditional community as well as the incorporation of social network research, so as to understand the various ways people make use of online career services. Innovative online career services require more input on user participation (von Hippel, 2007; Khapova, 2006). Sustaining online services depend on people visiting the sites, participating in social interactions, and most importantly, enhancing the loyalty of users (Kim et al., 2004; Bishop, 2007). Although networks and communities are conceptualized and studied in many diverse ways (Knoke and Kuklinski, 1982; Castells, 2000; Van Dijk, 2005), many researchers agree that networked communities are defined on the basis of shared identity, interests, and commonality among their members (Turkle, 1995; Preece, 2000; Castells, 2004; Plickert et al., 2007). Parker et al. (2000) define career communities as self-organizing, member-defined social structures through which people draw career support. The career scholar Michael Arthur (Arthur et al., 1995) notes that "intelligent careers" in the knowledge economy would need to be reflected in such communities.

Some researchers suggest that people use communities by merely adding internet contact to existing telephone and face-to-face contact, or by shifting their means of communication to the internet¹ (Wellman et al., 2002). Internet users have been found to join online communities for more than efficiency reasons. Ridings and Gefen

¹ Examples are facebook (www.facebook.com), myspace (www.myspace.com) or friendster (www.friendster.com).

(2004) identified friendship, social support, information exchange, and recreational as reasons for participation in online communities. According to social presence theorists (Biocca et al., 2003), the presence of other members (which can be complemented by offline interactions) may foster the ties of users to a specific online service. Hence, determinants of long-term sustainability of online career services may need to range from understanding how users judge online features, such as the quality of a career site's service, its system, and the provided information (DeLone and Mclean, 2003) to understanding offline features, such as the offline activities of users (Kim, 2000). Offline activities have been found to increase the solidarity and cohesiveness of virtual communities and strengthen the ties between members (Wellman and Haythornthwaite, 2002). A better understanding of the match between what is being offered (the supply) and (potential) users' interests will promote a stronger desire to participate and interact with other members, leading to shared feelings of belonging, responsibility, and commitment to the community (Kim, 2000). Academic studies investigating user needs in regard to offline and online activities of users' within niche e-recruiting services are rare. Thus, this paper may help in exploring users' view on effective design aspects of such online portals for the purpose of achieving long-term participation of its users.

3 Method

We conducted a qualitative case study of an e-recruiting platform for engineers. Since its establishment in 2005, the company has developed many partnerships with schools and companies across Austria and has obtained research grants for developing Web 2.0 technologies for e-recruiting services. The company actively collaborates with its users and customers in an effort to capitalize and distribute knowledge for system design improvements (e.g., von Hippel, 2007).

Given the exploratory nature of our study, we adopted a case-study design (Yin, 2003) with research methods that combine ethnography and in-depth interviewing. A case study is suitable when researching a contemporary phenomenon within its real-life context with multiple sources of evidence. Ethnography is a method that is frequently used to study the culture of users sharing a similar social identity (Boyd and Ellison, 2007). Hence, in order to better understand the users' needs in regard to such an online career network, the first author intensely emerged herself into the engineers' world which included numerous informal conversations with registered users and potential future users.

3.1 Sample and Data Collection

We randomly selected one registered user from each Higher Technical School (HTL) in Austria. He or she had a minimum of 3 years of work experience, and was interviewed by telephone. We also held numerous informal conversations with engineering students and teachers, especially during our visits to 7 career fairs throughout the year 2007. Also, agendas, copies of presentations and minutes from several staff meetings were compiled from the company developing the e-recruiting

platform. Email correspondence between registered users, system designers and service personnel was collected over a period of 6 months in 2007. We supervised 2 graduate students' projects related to this topic and we conducted a workshop with the system designers for the purpose of discussing how they create and utilize user-generated knowledge (Nonaka, 2007; von Hippel, 2007). The conversations with users were aimed at exploring collectively desired online design aspects as well as collecting their ideas for making use of online interactions with their fellow classmates to supplement their offline interactions. Each interview started by exploring how they found out about the e-recruiting platform, their evaluation of the webpage, and the appropriateness of questions asked in the resume forms, as well as their general online and offline job search behavior. A second set of questions were aimed at identifying users' shared needs and interests for active and long-term usage of the platform. While tracking, observing, and asking questions, we kept a record of field notes that enhanced the quality of later in-depth analysis. We also paid attention to Chatman's (1984) advice of establishing rapport with our informants so that they were more open and felt comfortable during our interactions.

3.2 Data Analysis

We first listened to all audio tapes of the 60 interviews and read all collected written documents. Then, we compiled narratives of the interviews and compared them with the content of the field notes, meeting minutes, email communications and presentation slides. Next, we identified broad themes in the data and reduced them to more precise categories (Miles and Huberman, 1994; Yin, 2003). We coded the collected data according to Riding's and Gefen's (2004) identified typology of reasons for joining online communities: information exchange, social support, friendship, and recreation. This first deductive analysis seemed functional as its four broad categories for joining online communities are based on reasons collected among a large number of different online communities representing many different segments. By systematically comparing the data (Strauss and Corbin, 1988), we noted patterns.

4 Results

Our findings suggest that users intend to use e-recruiting services on a continuing basis throughout their career if those services are complemented by community and social network applications aimed at specifically connecting users who share a similar social identity. We noted that engineers were very open in interacting with their fellow engineers: online as well as offline. These insights offer a fairly new network opportunity for transforming classical "job boards" to sustainable "career communities." Engineers identified a wide range of ideas that they want to share and exchange online with other fellow engineers. They predominantly intend to communicate online with offline known-fellow acquaintances from their schools or via extended networks (friends of friends). Interestingly, the interviewed engineers didn't seem to be keen on developing or maintaining a strong network with fully

unknown registered engineers. We found that most users found their jobs via personal relationships (such as knowing someone already employed by a certain company).

Engineers' impressions of the webpage and resume forms were largely positively evaluated and regarded as meeting users' needs. Some engineers had minor concerns with the length of resume forms or the support of uploading bigger file sizes. It appeared very important that the career site be clearly structured into sections for applicants and companies. Further, simplicity, easy navigation, quick loading of the pages, and perceived usefulness of the applications are important factors for re-using the service (see also David, 1989; DeLone and McLean, 2003). The possibility to adjust their own career profile to status of active or a passive job-seeker has been supported by many users. Importantly, system designers are challenged to create private (for friends) and public (for HR recruiters) spaces of the users' applicant profile so that trust is built by warding off the fear that personalized resume data might be abused.

As one engineer described: *"How can you make sure that my boss will not find my profile in the database?"* and *"Sure, I want my profile for friends to look different than my applicant profile."*

Fifty-six engineers reported that they would use an online career service in the long run if specifically targeted at engineers' needs. However, most of the interviewed users are not inclined to sign up at a general online job board that attracts many different job seekers. Jobs boards are seen as exchange-based career tools for finding a job when needed, but among them it is not desirable to connect online in such job boards with unknown users or to maintain active long-term membership in such portals. It also appeared that engineers prefer to fill out resume forms of corporate recruiting pages to general online job boards. Corporate pages are perceived as being more trustworthy than general job boards.

Integrated social network and community features within career services have been frequently found to make it easier to keep in touch with and follow their fellow classmates' career paths.

As one engineer noted: *"When I want to apply for a job in a different location in Austria, then it would be great to have some online search option to find out if any of my schools' graduates already work in the same area or company."*

Another engineer describes: *"It would be neat to see who of my friends have friends who work at BMW; you get a much more realistic picture of the company when getting advice from fellow-colleagues than trying to find out everything yourself."*

It appears that much social interaction in such portals may occur among pre-existing social ties. School or university ties seem to offer the foundation for continued online interaction in the engineering e-recruiting portal. Moreover, when people discover that they have similar problems, opinions and experiences, they may feel closer and have more trust (Preece et al., 2004). Consequently, if users have more trust, they are more likely to share sensitive personalized information that e-recruiting

services require from their users to enhance applicant search quality. It has been found that identifying users' shared interests for collective usage and sense of belonging is important for enhancing users' participation (Preece, 2001). We classified engineers shared interests into Riding's and Gefen's (2004) typology of reasons for participating in online communities. Besides information exchange (career info page on how to find jobs, how to prepare application documents, interview tips and info on training programs, links to continuing education, links to companies, sector info page, salary calculator etc.) we found that applications that support friendship (personal page with contact info, pictures, friends, hobbies, city groups, civil service, army groups) are important so as to sustain users' participation. Also, social support (sharing reports, sharing problems with each other, sharing music, games etc.) and recreation (work-climate index in different companies, events and activities across Austria, sports info) were identified as important for long-term active participation.

5 Conclusion

This paper addresses which design aspects e-recruiting services are required so as to achieve active long-term participation of its users. We interviewed registered users in regard to their expectations, shared needs and interests as well as collectively reported requirements for long-term use of the platform. Our findings indicate that users are willing to bring their offline ties with them online into niche-based career communities. They are also willing to maintain these online ties if they have been properly connected within groups sharing a similar social identity offline (before entering the online career community). Hence, we support Boyd's findings (2008) that users of online communities are not necessarily looking to meet new people. Instead, the interviewed engineers primarily expressed interest in communicating with people who are already a part of their extended offline social network².

On a practical level, niche career platforms are advised to complement their traditional job posting services with social network and community applications so that users can find and connect each other. Our results suggest that e-recruiting portals require not only useful information sections on careers and continuing education, but should also encourage friendship and social activities of its users. The future is likely to belong to those providers that best understand their users' shared social identity and succeed in providing semantic technologies so as to enhance the users' online experiences. Finally, niche-providers are well-advised to stay in close touch with the potentially shifting needs of their active and most innovative (lead) users (von Hippel, 2007).

² Also, Ellison et al. (2007) suggest that www.facebook.com is used to maintain existing offline relationships or solidify offline connections, as opposed to meeting new people.

Similarly, according to recent research, 91% of U.S. teens who use social network sites do so to connect with offline or known friends (Lenhart and Madden, 2007).

References

- Arthur, M. B., Claman, P. H., DeFillippi, R. J.: Intelligent enterprise, intelligent career. *Academy of Management Executive*, 9(4), 7-20 (1995)
- Biocca, F., Harms, C., Burgoon, J. K.: Toward a More Robust Theory and Measure of Social Presence: Review and Suggested Criteria. *Presence*, 12(5), 456-480 (2003)
- Bishop, J.: Increasing participation in online communities: A framework for human-computer interaction. *Computers in Human Behavior*, (23)4, 1881-1893 (2007)
- boyd, d., Ellison, N. B.: Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), article 11 (2007)
- boyd, d.: Why youth (heart) social network sites: The role of networked publics in teenage social life. In D. Buckingham (Ed.), *Youth, Identity, and Digital Media* (119-142). MIT Press, Cambridge, MA (2008)
- Butler, B. S.: Membership size, communication activity, and sustainability: A resource-based model of online social structures. *Information Systems Research*, 12(4), 346-362 (2001)
- Castells, M.: *The Rise of the Network Society*. Second Edition. Blackwell, Cambridge, MA, USA (2000)
- Castells, M.: *The Power of Identity*, Blackwell, Oxford (2004)
- Chatman, E. A.: Field research: Methodological themes. *Library and Information Science Research*, 6, 425-38 (1984)
- Davis, F. D.: Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319-340 (1989)
- DeLone, W. H., McLean, E. R.: The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. *Journal of Management Information Systems*, 19(4), 9-30 (2003)
- Ellison, N., Steinfield, C., Lampe, C.: The benefits of Facebook "friends": Exploring the relationship between college students' use of online social networks and social capital. *Journal of Computer-Mediated Communication*, 12 (3), article 1 (2007)
- Feldman, D. C., & Klass, B. S.: Internet job hunting: A field study of applicant experiences with online recruiting. *Human Resource Management*, 41(2), 175-192 (2002)
- Khapova, S.: *Careers in the knowledge economy and web-based career support: New challenges and opportunities*. PhD thesis, Print Partners Ipskamp B.V., Enschede (2006)
- Khapova, S. N., Wilderom, C. P. M.: Computer-based career support. In J. H. Greenhaus G. A. Callanan (Eds.), *Encyclopaedia of Career Development* (191-193). Sage, Thousand Oaks, CA (2006)
- Khapova, S. N., Arthur, M. B., Wilderom, C. P. M., Svensson, J. S.: Professional identity as the key to career change intention. *Career Development International*, 12(7), 584-595 (2007)
- Knoke, D., Kuklinski, J. H.: *Network Analysis*. Sage, Beverly Hills, CA (1982)
- Lakhani, K. R., von Hippel, E. How open source software works: "free" user-to user assistance. *Research Policy*, 32(6), 923-943 (2003)
- Lin, B., Stasinskaya V. S.: Data warehousing management issues in online recruiting. *Human Systems Management*, 21(1), 1-8 (2002)

- Lenhart, A., Madden, M.: Teens, privacy & online social networks. Pew Internet and American Life Project Report. Retrieved Jan 31, 2008 from http://www.pewinternet.org/pdfs/PIP_Teens_Privacy_SNS_Report_Final.pdf (2007, April 18)
- Nonaka, I.: The Knowledge-Creating Company. *Harvard Business Review*, 85(7/8), 162-171 (2007)
- Parker, P.: Career communities. Doctoral thesis, University of Auckland, New Zealand (2000)
- Parker, P., Arthur, M. B., Inkson, K.: Career communities: a preliminary exploration of member-defined career support structures. *Journal of Organizational Behavior*, 25, 489-514 (2004)
- Plickert, G., Côté, R. R., Wellman, B.: It's not who you know, it's how you know them: Who exchanges what with whom? *Social Networks*, 29(3), 405-429 (2007)
- Preece, J.: *Online Communities*. John Wiley & Sons Inc., New York (2000)
- Preece, J., Nonnecke B., Andrews, D.: The top five reasons for lurking: Improving community experiences for everyone. *Computers in Human Behavior*, 20(2), 201-223 (2004)
- Ridings, C., Gefen, D.: Virtual Community Attraction: Why People Hang Out Online. *Journal of Computer-Mediated Communication*, 10(1), article 4 (2004)
- Smith, A. D., Rupp, W.T.: Managerial challenges of e-recruiting: extending the life cycle of the new economy employees, *Online Information Review*, 28(1), 61-74 (2004)
- Strauss, A., Corbin, J. *Basics of qualitative research: Techniques and procedures for developing grounded theory*. (2nd Ed.) Sage, Thousand Oaks, CA (1998)
- Szmigin, I., Canning, L., Reppel, A. E.: Online community: Enhancing the relationship marketing concept through customer bonding. *International Journal of Service Industry Management*, 16(5), 480-496 (2005)
- Turkle, S.: *Life on the screen: Identity in the age of the Internet*. Simon & Schuster, New York (1995)
- van Dijk, J.: *The Network Society: Social Aspects of New Media*. Sage, Thousand Oaks, CA (2005)
- von Hippel, E.: Horizontal innovation networks—by and for users. *Industrial and Corporate Change*, 16(2), 293-315 (2007)
- Wallace, J. E.: Organizational and professional commitment in professional and non-professional organizations. *Administrative Science Quarterly*, 40, 228-255. (1995)
- Wellman, B., Haythornthwaite, C.: *The Internet in everyday life*. (Eds.) Blackwell, Oxford (2002)
- Wellman, B., Boase, J., Chen, W.: The networked nature of community on and off the Internet. *IT and Society*, 1(1), 151-165 (2002)
- Yin, R. K.: *Case Study Research: Design and Methods*. Third Edition, Sage, Thousand Oaks, CA (2003)
- Zhao, D., Rosson, M. B., Purao, S.: The future of work: what does online community have to do with it?. *Proceedings of the 40th Annual Hawaii International Conference on System Science*, IEEE Computer Society Press (2007)